

AGRINDUSTRIAL DESIGN

1ST PRODUCT AND SERVICE DESIGN SYMPOSIUM AND EXHIBITION ON AGRICULTURAL INDUSTRIES:
OLIVE OIL, WINE AND DESIGN

TARIMA DAYALI SANAYİLERDE TASARIM

TARIMA DAYALI SANAYİLERDE BİRİNCİ ÜRÜN VE HİZMET TASARIMI SEMPOZYUMU VE SERGİSİ:
ZEYTİNYAĞI, ŞARAP VE TASARIM

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2006

Frank Bates... tarafından
kütüphanemize bağışlanmıştır.

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SYMPOSIUM PROGRAM

	DAY 1 April 27, 2005	DAY 2 April 28, 2005	DAY 3 April 29, 2005	
	Conference Hall	Conference Hall	A1	Conference Hall
09:00	REGISTRATION	KEYNOTE 2 Nihat Aktan* "Creating Design and Quality in Wine"	KEYNOTE 3 Ken Friedman "Wine and Oil, Bread and Salt"	
09:30	OPENING Can Özcan Tevfik Balcıoğlu Atilla Sezgin Ekrem Demirtaş	MODERATOR: Alex Velasco	MODERATOR: Can Özcan	
10:00		F. Dilek Himam	Turgut Var, Melike D. Kaplan, Öznur Yurt	WORKSHOP by Lida Hujic
10:30	KEYNOTE 1 Ezio Manzini "New Food Networks: Agriculture, Food and Design towards a Multi-Local World"	Şölen Kıpöz	Turgut Var, Öznur Yurt, Melike D. Kaplan	WORKSHOP by Lida Hujic
11:00	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	
11:30	MODERATOR: Markus Wilsing	MODERATOR: Can Özcan	MODERATOR: Manfred Milz	MODERATOR: Tunçdan Baltacıoğlu
	Tunçdan Baltacıoğlu, István Kerepeszki, Öznur Yurt	Hüsnü Himam*	Şebnem Timur, Özlem Er	Tolga Uysal, Frank Bates
12:00	Figen Korel, Banu Özen, Figen Tokatlı	Zekeriya Şimşek*	Mine Hemamcioğlu Turan	Burcu Pınar, Frank Bates
12:30	Lia Krucken	Melih Pabuçcuoğlu*	Bahar Kürkçü	Melek Akın, Nissim Levy, Frank Bates, Kamil D. Altı, Altan Candır
13:00	Suzan Boztepe		Alexis Şanal	
13:30	LUNCH	LUNCH	LUNCH	
14:30	MODERATOR: Şölen Kıpöz	MODERATOR: Tunçdan Baltacıoğlu	MODERATOR: Markus Wilsing	
	Pwinn Rujikietkhomjon	Deniz Deniz	István Kerepeszki, Frank Bates, Tolga Uysal	
15:00	Alpay Er, Özlem Er, Can Özcan	Mine Ertan	Anna Meroni	
15:30	Gül Özkan, Frank Bates	Arzu Vuruşkan	Ece Arıburun	
16:00	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	
16:30	MODERATOR: Hakan Ertep	MODERATOR: Şölen Kıpöz		
	Tunçdan Baltacıoğlu, Melike D. Kaplan	Lida Hujic	Hüseyin Bekçi* "Studies of Design and Decoration-Ornamentation"	
17:00	Ralph Lawrence			
17:30	Stuart Medley	Seçil Şatır, Serdar Tolun*	PANEL Ken Friedman, Nihat Aktan, Maryse Posenaer Erkip, Tunçdan Baltacıoğlu, Tevfik Balcıoğlu	
18:00		Melek Akın, Frank Bates, Gökhan Efecan		
18:30			* These presentations will be done in Turkish and there will be simultaneous translation in the Conference Hall	
19:00	WELCOME COCKTAIL	SEVİLEN - TARIŞ DINNER (Sevilen Vineyard House)		
20:00				

DAY 4 - April 30, 2005
TRIP to the House of Virgin Mary, Ephesus and the Village of Şirince.



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We would like to express our appreciation to the contributions of many people and institutions those supported the whole process of the symposium.

We are particularly grateful to Ekrem Demirtaş, the President of the Board of Trustees and Prof. Dr. Atilla Sezgin, the Rector for their valuable support and encouragement. We also would like to thank to Levent Gökçeer, the General Secretary; Nergiz Filiz, the Registrar and Asst. General Secretary; Umut Sönmezdağ, the Director of Technical Services; Tunçdan Baltacıoğlu, the Dean of the Graduate School of Social Sciences and the Head of the Department of Logistics Management; Banu Barutlu, the Director of the School of Foreign Languages; Buket Kesimal, the Academic Coordinator of Italian Language; Firuz Özçekici, the Director of Firuz Catering; and the staff of Izmir University of Economics, especially the staff of the Faculty of Fine Arts and Design for their efforts in facilitating the symposium work.

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We also would like to express our gratitude to Markus Wilsing, Şölen Kipöz, Hakan Ertep, Alex Velasco, Manfred Milz and Tunçdan Baltacıoğlu, who were the moderators of the Symposium.

Finally we are grateful to the scientific committee members, symposium participants, exhibition participants and assistant students, without their support this symposium could not be realised.



INTRODUCTION

Despite this is titled as "introduction", it is more like the very last words of a very long waiting for the majority, and preparation for a very few who were left alone with all the paperwork, editing, image processing, text decoding, finance, and etc., etc. But what was the event all about? Wine, which is much more valuable if properly aged, and olive which has a tree that can survive with patience even for thousands of years. So I would like to thank who participated with passion and waited for these proceedings with patience.

On 27-29 April 2005, Izmir University of Economics, Faculty of Fine Arts and Design, Department of Industrial Design organized AGRINDUSTRIAL DESIGN "1st International Product and Service Design Symposium and Exhibition on Agricultural Industries: Olive Oil, Wine and Design" symposium and exhibition at Balçova Campus of Izmir University of Economics.

Designers, producers, researchers and educators studying specifically on agricultural and geographical identity based products and services, wine and olive oil in the first case, were aimed to be brought together to constitute an international information and design platform sharing economical and scientific values.

The keynotes of the symposium were Prof. Dr. Ezio Manzini from Polytechnic University of Milan, Italy; Prof. Dr. Ken Friedman from Norwegian School of Management, Norway; and Prof. Dr. Nihat Aktan, retired academic from Turkey. In addition to these, 36 scientific papers from Turkey, Italy, New Zealand, England, Brasil and Thailand were presented, at the end of which a closing panel including Prof. Dr. Ken Friedman, Prof. Dr. Nihat Aktan, Prof. Dr. Tefik Balçioğlu, Prof. Dr. Tunçdan Baltacıoğlu, Maryse Posenæer Erkip and Hüseyin Bekçi had been held.

During the symposium, the universities and the companies exhibited their projects and products. The universities were Izmir University of Economics - Department of Industrial Design with Tarih Olive Oil, Izmir University of Economics - Department of Fashion Design, Istanbul Technical University - Department of Industrial Product Design with "Anadolu Cam" Glass Company, and Izmir Dokuz Eylül University - Department of Textile. The companies were ELDA Marketing and Commerce with "Efe Rakı", TARIŞ with Tarih Olive Oil, Sevilen Wines, Yazgan Wines, ALVISUAL - Visual Communication Systems with "Aion" Olive Oil, Külahçioğlu Wine Coolers, and Gusto Magazine.

The issues discussed at the symposium were:

- The role of design in agricultural industries (packages, labels) to develop value-added products and services
- Design, R&D and Project Management in agricultural industries
- Sustainability and ecologically applied designs in agricultural products and services
- Developing distinct brand-identity and reflecting the geographical identity to the products and the services of agricultural industries

- Industrial applications in agriculture and food sectors: standard-ready products, relationship between fast-food and design
- Exporting strategies, retail sale and e-business in terms of contemporary marketing methods, and their relationships with design

During the closing panel; design, and agricultural products and services were evaluated with economical, academic and industrial points of views. The sectors of label, glass-bottle, packaging and food-drink gave messages to each other.

In all and all, Agrindustrial Design Symposium was a success, and it was supposed to be the first of the series of Agrindustrial Design Symposiums. It was also a good experience for the staff and students of the young department of industrial design who did their best to make it happen as good as possible. Thank you for sharing then, and thank you for sharing now and whenever you look at this publication.

A. Can ÖZCAN
Symposium Coordinator



KEYNOTE SPEAKERS

Ezio Manzini

New Food Networks: Agriculture, Food and Design Towards a
Multi Local World

Yeni Beslenme Sistemleri: Çoklu Yerel Bir Dünyaya Doğru Tarım,
Gıda ve Tasarım

Ken Friedman

Wine and Oil, Bread and Salt

Nihat Aktan

Şarap Üretiminde Tasarım ve Kalite Yaratma
(*Creating Design and Quality in Wine*)



NEW FOOD NETWORKS: AGRICULTURE, FOOD AND DESIGN TOWARDS A MULTI-LOCAL WORLD

KEYNOTE SPEAKER: Ezio MANZINI

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A beautiful olive grove

"That's a beautiful olive grove". That's what they still often say in Tuscany, where I live, when they want to speak well of an olive grove. Beauty is still considered by many to be the most concise way of expressing the quality a field should have. A beauty that obviously also includes its productivity, but does not stop there. A beautiful olive grove must be productive but it must also be looked after just like, or even more than, a garden.

A beautiful olive grove is the result of a variegated series of activities ranging from pruning and caring for the trees themselves, to tending the meadowland around them, to the constant clearance of the irrigation canals and the upkeep of the dry stone walls that hold the terraced hillside. The frequency with which these different activities are repeated varies from annual tasks, like pruning, to lifelong labor that will effect generations to come, as in the maintenance of dry stone walls.

A beautiful olive grove marries individual interest and collective advantage. The cultivator does something for himself, but he also carries out a fundamental social task in managing two common goods of great importance to the whole community: the hydrogeological system and the quality of landscape. In so doing he produces socialized economic value since the landscape he helps to maintain, in the case of Tuscany and similar places, is one of the main driving forces behind the tourist economy.

A beautiful olive grove produces good olive oil. An oil that not only looks good, smells good, tastes good and is nutritionally good; the olive oil this field produces is also a good social operator. As the product of a process shared by the whole local community, it becomes a topic for conversation and, as such, contributes to social regeneration.

Cultural fossils or seeds for the future?

A beautiful olive grove as pictured here, and its world of supporting values, is an inheritance that reaches us from long ago. In many parts of the world these values and customs may by now be seen as "cultural fossils": the remains of a bygone world. In other places they may be seen as limits on development: part of what must be left behind, if we are finally to enter the modern age.

In these notes we shall try to show that we can, or maybe must, think differently. Our beautiful olive grove with its value system and supporting customs can be seen in a completely different way: not as cultural fossils, not as limits on development, but on the contrary, as "seeds for the future". A thing from the past, but that could develop on new ground giving rise to new possible futures.

Before discussing these issues further, I would like to add another introductory consideration. The arguments supporting the prospect outlined have been drawn mainly from experiences in the North of the world: social and cultural contexts where, with rare exceptions such as the Tuscan hillside we started with, this way of thinking and doing has by now been almost totally overrun by the new ideas on productive efficiency and by the destructive pervasiveness of market culture. It is clear that in these contexts the prospect indicated, although feasible, is objectively speaking difficult to achieve since it involves reviving discontinued traditions that are on the way to becoming extinct. On the other hand, it should be stressed that this same prospect, if acknowledged in time, is far more likely to be successful in those areas of the planet, mainly the South and East of the world, where such values and customs as we are describing are still solid and potentially vital.

A huge paradoxical machine

Let's leave the Tuscan hillside with our olive grove and look down, towards the valley bottom and the world as a whole. What we see dominating is an agro-food system that works like a huge paradoxical machine. A perverse system that does not resolve the problem of hunger, yet at the same time has made obesity one of the greatest plagues of our time. Furthermore, to achieve these results, it acts as a powerful waste-layer consuming resource, impoverishing land and reducing diversity, both genetic and cultural.

How is it possible that such a paradoxical situation has developed and is considered by (almost) everybody as acceptable? It's a long story. The agro-food system we know today is the application, in agriculture, of ideas and organizational methods that we could nowadays call "out-dated industrial", but which seemed for many years to be successful formulas. Such ideas and organizational models have led us to see fields as industrial areas, plants and animals as machines, and food as goods to be standardized and trivialized....at all costs: at the cost of degrading the ecosystem, erasing age-old patterns of social organization, wisdom and expertise, ultimately to the detriment of the health of those very consumers who were to be the beneficiaries.

Faced with the emerging problematical issues inherent in this way of conducting things, the prevailing attitude in the past, and still widespread, is that all this is a necessary evil: the price to pay on the altar of growth (in the so-called developing regions of the world), or of economic survival (in areas of long-standing industrialized agriculture). However, nowadays things are changing. The manifest visibility of environmental problems; diffusion of epidemics in breeding farms and human illnesses associated with bad eating habits; aversion to genetically modified organisms; evidence that, in spite of the quest for efficiency, said to be sought at all costs, a large part of humanity is still suffering hunger... Together, these phenomena have gone beyond the point where the crisis in our industrial agro-food model can still remain hidden.

The emergence of new ideas and new possibilities

Stimulated by the crisis in the dominant model, other new ideas are emerging about how a sustainable industrial agro-alimentary system might look: new ways of thinking on the sense of land cultivation and food production that no longer respond only to the logic of economic productivity, but are recognized as one of the most profound expressions of human action in relation to the individual, society and nature. This is a new way of seeing things

that implies a new idea of industry, economy and society; a society where cultivating a field means first of all taking care of "mother earth", looking after the most precious good that humanity has at its disposition now and for future generations. This is a society in which the production, preparation and consumption of food is considered at the same time a response to a necessity, a quest for pleasure and a form of social rapport; profound activities that go well beyond simply nourishing our biological machinery and that should be conceived and actuated as part of a more general framework. This wider framework we today know by the name of "transition towards sustainability".

It is not among the aims of these notes, nor in the capacity of the writer, to draw the complex picture of how these emerging ideas may turn into a new general development model, or indeed how a fully sustainable agro-alimentary model might work. On the other hand, since the transition towards sustainability is a social learning process, no-one would really be capable of doing so.

The emerging ideas proposed here are a contribution to this vast collective learning process, undoubtedly an incomplete contribution, but maybe a useful one in indicating some of the characteristics of the evolution in progress, and particularly in underlining those most relevant to what we are interested in, i.e. to what, hopefully, design can do.

Agriculture, food and design

The history of design is traditionally linked to the history of industry. Up to now its role in agriculture has been minimal as also in food, or rather gastronomy. It has always been said that agriculture and gastronomy are a world apart from industry and so, almost by definition, a world apart from design.

Nowadays, however, there is more and more talk of a possible meeting between design and food system. The expression "food design" has become a buzz word (though so far its meaning is far from clear). All this may seem to prove beyond doubt that agriculture is now industrialized and that food has become, to all intents and purposes, an industrial product like any other.

Following this line of reasoning, design could be seen as yet another agent driving us towards a full industrialization of this field of human activity. This is a legitimate way of thinking proved by numerous examples, but does it really have to be like this? Is industrialization as presented so far really the only feasible proposition and all that can be seen on the design horizon? The reply we are suggesting here is "no", and for various reasons.

It is true that design was born with industrial society and carries deep within itself the concepts, value systems and ways of doing things, characteristic of the early stages of industrial development. However, industrial society has already changed and is still changing rapidly. Industry itself has changed design with it, or even before it, being in itself as one of the drivers of industrial change. It follows that if design nowadays can and must have a role in agricultural cultivation and food production, this should arise out of a profound awareness of the crisis in the dominant economic and cultural model, and out of a recognition of its possible role as co-promoter of different, promising agricultural and food systems that can become real steps in the direction of sustainability.

This does not mean that design must deny its nature of industrial actor (i.e. of being one of the main drivers in the industrial culture definition). It means that it can and must collaborate to redefine the very concept of industry itself. Especially, as far as we are concerned here, it means collaborating on the consolidation of an agriculture, a food industry and a distribution system capable of moving in the opposite direction to what has been the prevailing trend until now; which once again produce "beautiful" fields, "beautiful" conversion machinery, excellent products and new links between town and country; which at the same time encourage the conditions for making food into a profound shared culture and a moment for building up social relations.

Stratified reality

The contemporary agricultural/food system can be described as a stratified reality. A macro-system where different behavior, agricultural ethos and food culture exist side by side. Here we shall focus on 4: *the traditional system, classic agro-business, experiential agro-business and social experimentations*. This stratified reality is the context where design is operating and choosing its own options.

- **The traditional system.** In different ways from region to region we still find forms of organization and traditional lore underlying the contemporary agro-food system, which reach us from the depths of rural history. This stratification of the system is what remains of pre-industrial agriculture, of its learning, its organizations and its local and seasonal food circuits. As we have been able to observe, this underlying strata can be presented from region to region either as a still vital, living tradition or as what remains of a disappearing system.

This subsystem as it is presented today does not make demands on design. If and when it does, as we shall see, it means that it is already turning into another style of existence, which we shall discuss later. This underlying stratum is threatened and often overwhelmed by what we can call the dominant agro-industrial system.

- **Classic agro-business.** This is the agro-food system organized by archaic industrialization formulas as discussed previously. It leads to mass production, and consumption, by agricultural firms and breeders, which we call industrialized because they are mechanized "chemicals" and, more recently, "bio-technologies". This is the dominant component of the current food and agricultural sector in industrialized countries and, considering the major dynamics in action, tends also to be so in those not yet industrialized.

The classic agro-industrial system places equally classic demands on design: agricultural machinery, product packaging, apparatus and equipment for food preparation and communication strategies for an undifferentiated public (hooked by low prices and a profusion of alluring advertising).

- **Experiential agro-business.** This is the component of the agro-food system which is most highly influenced by the most forceful logic of the moment, and whose primary objective is to research and promote the exceptionalness of experiences that products and services bring (or should bring). This research has found in food, and the places where food is produced, a

privileged application field (as is obvious, given the peculiarly sensorial and experiential nature of food and its typical places of production).

With the emergence of this growing, new component of the agro-food system over the last few decades, new demands have emerged for design relating to product identity and place of origin, to the conception of new sale and restaurant services, even to the planning ex-novo of new food products as applications of design of/for experience (this is the application field of *food design* in its strict sense). Given the importance of this issue, we shall return to it later.

· **Advanced agro-business.** This is the side of the contemporary agro-food system that lays its bets on technological solutions to the growing environmental and social problems. It tries to respond industrially to the huge demand for controlled, organic food products. Advanced agro-business is the expression in agriculture of the most interesting shapes that industry is taking. It entails the extensive application of organic and biodynamic cultivation methods, and the use of advanced *minimal food processing* systems. DOP (*produced by guaranteed production process*) and IGP (*of guaranteed geographical origin*) labels can be seen in the same light, as a legal representation of the idea of advanced agro-business.

It requires considerable design capacity to see the food industry as an advanced industry with these characteristics. Obviously this is true on a technical and organizational level, but it is also true on a cultural and communicational plane. It gives rise to an as yet embryonic demand on design: an industrial design for advanced industry orientated towards such a "sensitive" production area as food. Again we shall come back to this later.

· **Social experimentation.** This is the latest and most dynamic layer of the agro-food system and as yet of unknown outcome. It is the mover of some of the major dynamics, such as the spread of networks, the demand for "natural" foodstuffs and, more generally, the quest for sustainable solutions. It is these macro-tendencies as a whole that give rise to the social experimentation we are referring to. They are experiments that come from both the demand side (such as collective purchasing groups) and from the supply side (the Slow food organization, organic product networks). We also refer to them as "creative communities" because they are mostly the outcome of individual and collective self-organization inventing new ways of resolving a problem or opening up a new opportunity.

Except for a few special cases, these social experiments have not yet expressed a clear, deliberate demand for design. However, in my opinion, it is precisely on such projects that design should focus its attention in order to play its potentially constructive role in promoting a sustainable agro-food system. The reasons for this conviction will be the subject of the following paragraphs.

I would now like to describe in greater detail the role design can play in the two latest layers of the agro-food system: experimental agro-business and social experimentation.

The spectacularisation of food and place

Experiential agro-business is the way in which the emerging service and experience economy is taking shape within the agro-food system.

One prerogative of this phenomenon is the importance attributed to the diversity of products and places of production. All this implies an inversion of tendency with respect to the standardization policy offered and imposed by the classic industrial model, which is undoubtedly positive. However, this potentially positive shift has been more than counterbalanced by a series of negative implications that can be synthesized in the expression: "the spectacularisation of food and agriculture".

In practice the process runs like this: the service and experience economy in its present form has to be constantly refueled with "fresh" cultural and social resources able to trigger a strong emotional response, in other words, able to create a spectacle. These fresh resources are often drawn from the pool of knowledge, customs and characteristic local places that the traditional system (or rather, what remains of the traditional system) intrinsically possesses. In itself this would not be a bad thing, if using these resources provided an opportunity for their regeneration. However, this is not the case: their spectacular use tends rather to turn them into empty images behind which lies nothing of what they really were.

In the absence of any profound reflection on the identity of places, communities or their products (and in the absence of any sensitivity towards issues relating to the sustainable use of physical and social resources) the experience and service economy leads us to treat food, community and local identity as though they themselves were products to be promoted and consumed. The result is that typical local products are transformed into commercial brands, and places of production and producer communities turned into theme parks and the characters that populate them. Furthermore, any genuine public interest is reduced to its most hedonistic dimension (as in most television programs on the subject, which are conceived in such a way that they can be seen as a sort of food pornography).

These dynamics, as interesting at their outset as they are disheartening in their practical consequences, are counterbalanced by the extraordinary activities of Slow Food. I shall come back to this in the following paragraphs. First however, we must briefly consider how design has confronted today's dominant tendencies: what has it done and what could/should it do?

Post-spectacular design?

We have already mentioned how the experiential agro-industrial system has placed clear, high demands on design. Demands to which designers have generally responded by adapting their own ideas and habits to the new necessities. In other words they have adapted themselves to the behavior and thinking of the service and experience society.

In so doing, updating their "classic" competences (product and communication design) and adjusting their more innovative ones (like strategic and service design), designers have started to play a significant, active role in the emerging agro-food system. Having said this we should add, to my regret, that this significant, active role has not so far lead them to any profound reflection on the meaning

of what they have been doing. Except in exceptional cases (which certainly exist), designers have gone uncritically into the service and experience economy, themselves joining the main forces driving towards this spectacularisation.

To get out of this role governed by the thinking currently dominant in economics and the media, designers should ask themselves some more profound questions about the sense of the experiences they are proposing. It is a difficult reflection, but is facilitated by the existence of an extraordinary phenomenon for comparison. That of Slow Food. This is an organization that has successfully shown us all that it is possible to link sensorial experience with the safeguarding and valorization of characteristic products, together with the knowing and organizational forms they spring from. In this way it is playing an extraordinarily important role (first in Italy, but now on a worldwide level) in the safeguarding and regeneration of such a precious common good, as is the cultural variety of local food production.

Looking at Slow Food "as a designer", in my opinion what we can see is the most positive example of strategic design, of service design and of experience design applied to the world of agriculture and food (and this even though, to my knowledge, until a few years ago, none of its promoters had had any thing significantly to do with the designer community). Slow Food teaches us that it is possible to carry out a design activity that goes beyond the spectacular consumption of what remains of a precious historical heritage of knowing, flavors, places and social customs. *Post-spectacular design* able to promote identity and generate significant experiences, without entailing their transformation into empty images and rapid consumption; able to make of this activity an occasion for regenerating our traditional heritage, matching it to the most advanced technological and organizational possibilities (*advanced agro-business* as mentioned earlier) and able to turn it into seed for a sustainable future.

In order to explore the implied possibilities it is useful to go a step ahead and take up the theme of social experimentation and its possible implications for design.

Design and social experimentation

The issue has already been introduced in a previous paragraph: the spread of network systems, the widespread demand for "natural" foodstuffs, and the quest for sustainable solutions have given rise to new ways of thinking and doing. This is happening both on the side of demand and of supply.

Let us consider in particular the implications of the spread of network organization so much talked about over recent years. This phenomenon has led to a huge increase in connectivity (i.e. in the number of meaningful interactions concretely possible). In turn, the high level of connectivity achieved has served as an enabling platform for new forms of organization where the network is not only a technical infrastructure, but is also becoming a powerful new organization model that breaks vertical hierarchies and generates horizontal, un-intermediated, potentially peer-to-peer solutions.

All this enables us to imagine a new family of organizations, at the same time decentralised and open towards wider systems; an organizational model that leads us to redesign from scratch consolidated ways of doing things, traditionally based on low-connectivity systems. Clearly the radical adoption of network

models is not in itself a solution to the social and environmental problems we are faced with today (even Al Qaeda and certain paedophile organisations are based on the intelligent application of network organisation models and on use of the horizontal communication technology available today). In spite of this these organisation models, and the technology that makes them possible, present interesting and promising opportunities.

What has been said so far is of general value i.e. it is relevant to any kind of activity. However, its potential value is even greater if the activities in consideration relate to the agro-food system.

A multi-local system

The spread of the Internet has brought certain relevant and potentially generative issues with it: ideas that are also capable of generating new ideas in operational areas far apart from those that produced them: the *network economy*, *open source systems*, *peer-to-peer organisations*. Can all this be translated in some way to the agro-food system? What could we understand from the expression "food-network?"

This question still does not have a clear, detailed answer. However, some partial answers have already emerged in the social experiments talked of in previous paragraphs.

Let's consider activities like fair-trade purchasing groups, organic markets in cities (*farmer markets*), new producer/consumer relationships (such as "adopt a tree" or "vegetable season tickets") ... but we can also remember the success of fair-trade and its ability to show in a concrete way that direct, fair relations are possible between producers and consumers even when far apart. Let's link these activities, which are mainly centred on the issue of virtuous un-intermediating, with those related to the valorisation of local products. Once again, Slow Food activities come to mind: from the diffusion in Italy of the "presidi dello Slow Food", local organisations aiming to protect specific local products, to the extraordinary initiative of *Terra Madre*, whereby thousands of little agricultural, animal husbandry and fishing communities all over the world, have been identified and networked together, united by their possession of specific production and food know-how.

If we try to see these and other similar promising cases as a whole, a new vision of the agro-food system emerges (maybe even a new vision of the world!). What appears is the image of a multi-local system. A "world" endowed with an extensive variety of places and communities; communities with their own individual identity, but open and well-disposed towards contact; local communities with a high connective potential, in peer contact with other local communities, with whoever and whenever useful, just as in peer-to-peer organisations on the Internet.

We see a multi-local system in a network economy where the number of knots and links available is more important than the single knots and where basic knowledge, like knowing about food and its production, is a common good accessible to communities in the same way and within the limits of the sustainable use of any common good. A multi-local system able to orientate the development of advanced agro-business, steering it more clearly towards sustainability.

The new food networks

If the vision outlined is to become feasible and the multi-local, agro-food system is to become a reality for the majority, communities of producers, consumers and producer-consumers need to consolidate and "make themselves visible". They must be able to show their products, skills, needs and wishes and their willingness to do something towards satisfying them. There must be a platform, an infrastructure, that gives them the real possibility of making contacts, of presenting their offers, of building relationships that are not only economic, but are also neighbourly and, where appropriate, of solidarity.

In my opinion, the agro-food system lends itself to being re-organised in this way. The experiences we have discussed, though minority experiences, tell us that this is possible. Furthermore, food and land are two fundamental elements for the lives of everybody. It is possible to develop interest and movement around them on a wider scale. When talking of them we can talk about necessity and pleasure, about past and future. Knowledge and skills that risked being forgotten can be revived around them. Food can help rediscover the quality of local and seasonal products, but it can also lead to the enjoyment of products from far away that are produced by a familiar, friendly community and so, as the Slow Food slogan says, are "good to eat and good to think".

All this can rise from society's base, as forms of self-organisation, but designers too can take part in this virtuous process. They can bring their specific skills to assist in community building, improving visibility, making communication channels more fluid, implementing enabling platforms that make the activities of these communities more diffused and effective. From here, bringing their skills in the field of *experience design* into play, they can contribute to the promotion of food networks where aesthetic and sensory qualities also circulate: freed of the tendency towards spectacularisation, indeed aesthetics and sensory perception are fundamental dimensions in any human relations and the more so if the object of these relations is something as profound and important as food.

In conclusion, in the language of agriculture, designers can collaborate in working the ground on which seeds of the new and those of ancient cultures can really germinate and grow into the plants of a sustainable food and agricultural future. A future where there are beautiful olive groves, with all the wealth of meaning implied in that expression.



YENİ BESLENME SİSTEMLERİ: ÇOKLU YEREL BİR DÜNYAYA DOĞRU TARIM, GIDA VE TASARIM

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TÜRKÇEYE ÇEVİREN: Buket KASALI

Güzel bir zeytin bahçesi

"Güzel bir bahçe". Yaşadığım yer olan Toscana'da bir zeytin bahçesini övmek için hala bu kelime kullanılır. Bir çok kişiye göre güzellik ölçütü hala bir bahçenin sahip olması gereken niteliklerin ifadesi için kullanılan en kısa yol olarak kabul edilir. Bu güzellik kavramı elbette verimliliği de kapsar, ama bununla sınırlı değildir. Güzel bir zeytin alanının hem verimli olması hem de gerçekten bir bahçe kadar -hatta daha fazla- bakımlı olması gerekir.

Güzel bir zeytin alanı, zeytinlerin budanması ve özen bakımından, bahçeyi çevreleyen arazinin bakımına, su kanallarının sürekli olarak temizlenmesine, meyilli arazideki harçsız duvarlara kadar bir dizi faaliyetin sonucudur.

Bunlar, her birinin sonucu farklı zaman dilimlerinde ortaya çıkan faaliyetlerdir: Kimileri budama gibi her yıl yapılan, kimileri de harçsız duvarlar gibi bakımı on yıllarca devam eden bir sürece yayılan, gelecek nesillere bırakılan bir yatırım olan faaliyetlerdir.

Güzel bir zeytin alanı, bir çok farklı amacın sonucudur: Ailece tüketilecek iyi bir mahsul elde etme isteği, satıştan elde edilecek gelir, iyi yapılmış bir işin verdiği kişisel tatmin ile belirgin bir sosyal baskının gereklerini yerine getirmek bunlara örnek olarak verilebilir. Zira bizim ülkemizde bir zeytin alanının bakımsız kalması, sosyal açıdan kabul edilmesi imkansız bir durumdur.

Güzel bir zeytin alanı, sosyal bir avantajla kişisel çıkarları bağdaştırır: Zeytin ağacı diken kişi kendisi için bir şeyler yapmıştır, ama aynı zamanda tüm toplum için büyük önem taşıyan iki ortak servete de sahip olur ve yönlendirir: Arazinin hidrojeolojik kapasitesi ve çevrenin kalitesi. Ayrıca sosyal açıdan ekonomik bir değer de üretmiş olur; zira çevrenin güzelleşmesi -tıpkı Toscana'da ve diğer benzer yerlerde olduğu gibi- ekonomi ve turizmin en önemli itici güçlerinden biridir.

Güzel bir zeytin alanından iyi zeytinyağı elde edilir. Bu, sadece üretim ve besin değeri açısından iyi demek değildir. Bu alanda üretilen zeytinyağı sosyal atken olarak da faydalıdır: Tüm yerli halkın paylaştığı bir süreç sonucunda ortaya çıkan ürün, mükemmel bir sohbet konusu olur. Böylece sosyal ilişkilerin canlanmasını sağlar.

Kültürel fosiller mi yoksa geleceğin tohumları mı?

Güzel bir zeytin alanı, şu andaki haliyle ve onu destekleyen dünyanın değerlerine göre bize antik bir zamandan kalan bir mirastır. Dünyanın bir çok yerinde bu değerler ve davranış şekillerinin artık "kültürel fosiller" olarak görülmesi mümkündür:

Geçmiş bir dünyaya ait olan, artık tükenmiş olan fosiller. Başka bazı yerlerde ise gelişmenin karşısındaki engeller olarak kabul edilebilirler: Modern çağa girmek için aşılması gereken bir engel olarak görülürler.

Bu notlarda, başka türlü düşünmenin mümkün olduğunu, hatta belki de gerekli olduğunu göstermeye çalışacağız. Bahsi geçen "güzel zeytin alanı" ile onu destekleyen somut uygulamalar ve değerler sistemini farklı bir açıdan görmek de mümkün: kültürel fosiller değil, gelişimin önünü tıkayan engeller değil, tam tersine "geleceğin tohumları". Bize geçmişten gelen, ama yeni bir alanda gelişip gelecekteki muhtemel yapıtların yolunu açabilecek bir şeyler.

Bu konuların detayına girmeden önce, bir başka bilgi daha vermek istiyorum. Burada anlatmaya çalışacağımız konular özellikle dünyanın kuzey bölgelerinde yaşanmış tecrübeler sonucunda edinilmiş bilgilerdir: Oralarda sosyal ve kültürel bağlamda, nadir bazı istisnalar dışında -çıkış noktamız olan Toscano gibi- bu düşünce ve eylem tarzı artık neredeyse tamamen yerini üretim verimliliği konusundaki yeni fikirlere ve ticari kültürün yıkıcı istilasına bırakmış durumda. Bu açıdan baktığımızda, şu anda bahsedilen fırsatların -uygulanması mümkün olsa da- nesnel anlamda zor olduğu açıktır; zira artık bitmiş ve yok olmanın eşiğine gelmiş gelenekleri tekrar hayata geçirme çabası söz konusudur. Ama aynı anlatım içinde -eğer zaman içinde değeri bilinirse - o bölgelerde, özellikle dünyanın güney ve batı bölgelerinde çok farklı olasılık ve fırsatların ortaya çıkabileceğinin altını çizmek gerekir. Bu bölgelerde, sözünü ettiğimiz değerler ve davranış şekilleri halen güçlü ve potansiyel olarak önemli geleneklerdir.

Dev bir çelişki makinesi

Toscana bölgesini ve kendi zeytin alanlarımızı bırakıp ülkemize ve dünyaya bir bütün olarak bakalım. İşte o zaman, dev bir çelişki makinesi gibi işleyen bir "besin-tarım" sisteminin hakim olduğunu görürüz. Bu, hem açlık sorununu çözemeyen hem de obeziteyi çağımızın en büyük sorunlarından biri haline getiren bir sistem. Üstelik, bu sonuçlar elde edilirken kaynakları tüketen, toprağı fakirleştiren ve çeşitliliği azaltan çok güçlü bir "çölleştirme" etkeni olmaya devam ediyor. Hem genetik hem de kültürel çeşitlilik giderek azalıyor.

Peki ama böyle çelişkilerle dolu bir durum nasıl herkes tarafından kabul edilebilir hale geldi? Bu uzun bir hikaye. Bugün bildiğimiz haliyle tarım-besin sistemi, eski tarz endüstriyel olarak ifade edebileceğimiz ama uzun yıllar boyunca başarı formülleri olarak kabul edilen organizasyon yöntem ve fikirlerinin tarıma uygulanması sonucunda oluşmuştur. Bu organizasyon model ve fikirlerine göre tarlalar sanayi alanları, bitki ve hayvanlar makine, besinler ise standart ve basit bir mal olarak kabul ediliyordu. Ne pahasına olursa olsun. Yani eko-sistemlerin bozulması, asırlardan beri devam eden sosyal organizasyon bilgi ve şekillerinin yok olması ve son olarak -teoride bu ekonomik ve üretim modelinden faydalanması gereken- tüketicilerin sağlığı pahasına bu yöntemler uygulandı.

Bu davranış şeklinden kaynaklanan problemler ortaya çıktığında ise, geçmişte hakim olan ve bugün hala yaygın olarak devam eden eğilim, bütün bunların kabullenilmesi gereken kusurlar olduğunu savunmak oldu: Büyüme sürecinde (gezegenin hala "gelişmekte olduğu" varsayılan bölgelerinde) veya (bir süreden beri endüstriyel sanayi yöntemlerinin kullanıldığı bölgelerde) ekonomik olarak ayakta kalabilmek için ödenmesi gereken bir bedel olarak kabul edildi. Ama bugün işler değişiyor. Çevresel sorunların gözle görülür

hale gelmesi. Hayvan yetiştirme alanlarında salgın hastalıkların yayılması ve kötü beslenmeden kaynaklanan insan hastalıkları. Genetik olarak değişen organizmalara duyulan tepki. Her şeyi göze alarak yapıldığı iddia edilen verimlilik araştırmalarına rağmen, insanlığın büyük bölümünün hala açlıkla mücadele ettiği gerçeği. Tüm bu olayların bir araya gelmesiyle artık son yıllarda tanıdığımız endüstriyel tarım-besin modelindeki krizin artık gizlenemeyecek duruma geldiği aşığı aşıldığını gördüm.

Yeni fikirlerin ve yeni olanakların ortaya çıkışı

Baskın modelde yaşanan krize karşılık olarak uygun bir endüstriyel tarım-besin modelinin nasıl olabileceğine dair yeni ve farklı fikirler ortaya çıkmakta. Tarlaların ekimi ve gıda üretimi ile ilgili yeni düşünce tarzları geliştiriliyor. Amaç sadece ekonomik verimlilik değil; bunlar aynı zamanda insanların bireylere, topluma ve doğayla bağlantılı davranışlarının en derin ifade tarzı olarak da kabul ediliyor. Yeni bir endüstri, ekonomi ve toplum fikrini kapsayan yeni bir bakış açısı. Tarla ekiminin her şeyden önce "toprak ana"ya -yani insanlığın kendisi ve gelecek nesiller için en değerli kabul ettiği şeye- itina göstermek anlamına geldiği bir toplum. Gıdanın üretimi, hazırlanması ve tüketimi aynı zamanda bir ihtiyaca cevap vermek, bir keyif arayışı ve bir sosyalleşme şeklinin gündeme getirilmesi olarak kabul edildiği bir toplum. Kısacası derinliği sadece biyolojik makinemizin beslenmesinin ötesine geçen, çok daha genel bir tablonun bir bölümü olarak kabul edilen ve gerçekleştirilen faaliyetler. Bu, bugün "desteklenebilir tarza geçiş" olarak adlandırabileceğimiz bir sistem olarak ifade ettiğimiz geniş kapsamlı bir tablo.

Bu konuşmanın amacı, oluşmakta olan bu fikirlerin nasıl yeni bir gelişim modeli haline gelebileceği konusunda kapsamlı bir tablo çizmek değil, zaten bu benim kapasitemi de aşar. Tamamen uyumlu bir tarım-besin sisteminin işleyişinin nasıl olacağı konusu da öyle. Diğer taraftan, desteklenebilir kavramlara doğru geçiş sosyal bir algılama süreci olduğundan, bunu hiç kimsenin gerçekten yapması mümkün değil.

Dolayısıyla burada bahsedilen, oluşmakta olan fikirler, sadece bu müşterek öğrenim sürecine birer katkı olarak kabul edilebilir. Bu kesinlikle kısmi bir katkı ama belki de mevcut gelişimin bazı özelliklerini göstermek açısından faydalı olabilir. Özellikle de bizi ilgilendiren konuyla bağlantılı olanların altını çizmek açısından. Yani tasarımın bu konuya muhtemel katkıları..

Tarım, gıda ve tasarım

Tasarım tarihi, geleneksel olarak endüstrinin tarihi ile bağlantılıdır. Tarım alanında ve gıda alanındaki -daha doğrusu gastronomi alanındaki- varlığı şu ana kadar oldukça mütevazı idi: tarım ve gastronominin endüstriden uzak olduğu söylenirdi. Dolayısıyla bunlar tanım olarak tasarımdan oldukça uzakta yer alırdı.

Ama bugün, tasarım ile besin süreçlerinin bir araya gelmesi ihtimalinden giderek daha sık ve daha yaygın bir şekilde bahsediliyor. (Anlamı şu ana dek kesin olarak netleşmemiş olsa da) "food design" ifadesi çok yaygın hale geldi. Bütün bunlar artık tarımın endüstrileşmiş olduğunun ve gıdanın her açıdan diğerleri gibi endüstriyel bir ürün haline geldiğinin kesin bir kanıtı gibi görünebilir.

Bu düşünce tarzını takip edersek, tasarımı bugün insani faaliyetlerin bu alanını tam bir endüstrileşme sürecine doğru iten etkenlerden biri

olarak görebiliriz. Bu haklı bir düşünce tarzı olur; sonsuz örneklerle de desteklenebilir. Ama gerçekten böyle mi olması gerekir? Endüstrileşme şu ana kadar tasarım için uygulanabilir tek perspektif ve tek hareket alanı mıdır? Burada vereceğimiz cevap: Hayır. Bunun çeşitli nedenleri var.

Doğru: Tasarım endüstri toplumuyla birlikte doğmuştur ve kültürel mirasında endüstriyel gelişimin ilk aşamasının uygulama şekilleri, değerlendirme sistemleri ve kavramsallaştırma gibi unsurları barındırır. Ama sanayi toplumu artık değişti; üstelik hızla değişmeye devam ediyor. Endüstri kavramının kendisi değişti. Onunla birlikte hatta ondan önce design da değişti; zira design, endüstrideki değişimi harekete geçiren güçlerden biriydi. Buna göre, eğer design'ın bugün tarlaların ekilmesi ve gıda üretiminde bir etkisi varsa, bu baskın ekonomik ve kültürel modeldeki krizin bilincine derin bir şekilde varılmasından ve çeşitli tarım-gıda sistemlerinde itici güç olarak kendi muhtemel rolünün bilincine varılmasından kaynaklanır. Yani bunlar, desteklenebilir bir sisteme doğru atılan somut adımlar olarak kabul edilebilir.

Bu, tasarımın kültürel doğasını ve endüstri için proje bazındaki önemini reddetmek anlamına gelmez. Aksine, endüstri kavramının yeniden tanımlanması için kullanılabileceğini, hatta kullanılması gerektiği anlamına gelir. Özellikle de, bizi en çok ilgilendiren yönüyle, tarım, besin endüstrisi ve dağıtım sisteminin şu ana kadar geçerli olanın tam tersi bir yöne gidebilmesi için işbirliği yapılması mümkün olabilir. Yeni "güzel alan"ların, üretim tesislerinin yaratılması, mükemmel ürünler ve şehir ile kırsal kesim arasında yeni bağlantı sistemleri. Aynı anda gıdanın derin bir kültüre sahip olması ve gıda ile ilgili sohbetlerin yeni bir sosyalleşme anı olabilmesi için uygun koşulların hazırlanması gerekir.

Gerçeğin katmanları

Günümüzdeki tarım-besin sistemi çok katmanlı bir gerçeklik olarak ifade edilebilir. Farklı uygulamaların, farklı tarım ve besin kültürlerinin yer aldığı bir makro-sistem. Biz burada bunlardan dördünü inceleyeceğiz: geleneksel sistem, klasik tarım işleri, deneysel tarım işleri, sosyal denemeler. Bu çok katmanlı gerçeklik, tasarımın kullanılıp kendi seçimlerini yapması gereken koşulları anlatır.

• **Geleneksel sistem.** Bugünkü tarım-besin sisteminin kökeninde, bölgeden bölgeye değişen şekillerde hala -çiftçilik tarihinin derinliklerinden gelip bize kadar ulaşan-geleneksel bilgi ve organizasyon şekillerine rastlıyoruz. Sistemin katmanları, endüstri öncesi tarımdan kalanlar, eski bilgileri organizasyonlar, yerel ve bölgesel gıda dolaşımı gibi. Daha önce gözlemlene fırsatı bulduğumuz gibi, bölgeden bölgeye bu derin katmanlar hala yaşayan ve önem taşıyan bir gelenek olarak karşımıza çıkabilir. Bazı yerlerde ise yok olmanın eşiğindeki bir sistemin kalıntılarından ibarettir.

Bu alt-sistemin bugünkü durumu, design konusunda dolaysız sorular içermez. Bu tür sorular olduğu takdirde, daha sonra göreceğimiz gibi, başka bir oluşum şekline dönüşmekte olduğu anlamına gelir. Bunu da daha sonra anlatacağız. Bu derin katman bugün baskın tarım-endüstri sistemi olarak tarife edilebileceğimiz olgu tarafından alt edilmiş ve çoğunlukla ezilmiş durumda.

• **Klasik tarım işleri.** Bir önceki paragrafta sözü geçen, eski sanayileşme formüllerine göre organize edilmiş tarım-gıda

sistemidir. Bu sistem, büyük miktarda gıda üretim ve tüketimine yöneliktir; endüstriyel olarak ifade edilen tarım ve hayvancılık tesislerinde gerçekleştirilir. Endüstriyel olarak tanımlanmalarının nedeni yüksek oranda mekanik, kimyasal ve yakın zamanda bio-teknolojik üretim süreçleri içermeleridir. Bugün endüstrileşmiş ülkelerdeki tarım ve besin sektörünün baskın olan unsurlarından biridir, mevcut dinamikleri dikkate aldığımızda, henüz hakim olmadığı bölgelerde de yaygınlaşacağını söyleyebiliriz.

Klasik endüstriyel-tarım sistemi, tasarım konusuna klasik sorularla yaklaşıyor: tarım makineleri, ürün ambalajları, besin hazırlıklarında kullanılan aletler ve cihazlar, ilgisiz olan halkın dikkatini çekmek için iletişim stratejileri (düşük fiyatlar ve dikkat çekici reklamlar).

• **Deneyisel tarım işleri.** Besin-tarım sisteminin bugün daha dinamik olma eğilimindeki yaklaşımlarından en fazla etkilenen unsurudur; burada ilk hedef ürün ve hizmetlerin getirdiği (veya getirmesi gereken) deneylerin istisnalarını araştırmak ve geliştirmektir. Bu araştırma gıdada ve gıdanın üretildiği yerlerde öncelikli bir uygulama alanı bulmuştur (gıdanın kendine özgü duyumsal ve deneysel doğası ve tipik üretim yerleri nedeniyle bu anlaşılabilir bir durum).

Son yıllarda tarım-besin sisteminin bu yeni ve gelişen unsurunun ortaya çıkması ile birlikte, ürünlerin kimliğine ve geldikleri yere, yeni satış ve restorasyon hizmetlerine ilişkin yeni tasarım talepleri de ortaya çıktı. Bu durum, tecrübelerle göre tasarım konseptlerinin uygulanması gibi yeni gıda ürünlerinin tekrar tasarlanmasına kadar devam etti (bu, en kısa tanımla food design'ın uygulama alanıdır). Bu konu çok önemli olduğundan, daha sonra buraya geri döneceğiz.

• **Gelişmiş tarım işleri.** Bugünkü gıda-tarım sisteminin, kartlarını artan çevresel ve sosyal problemlerin çözümü üzerine oynayan yüzüdür. Kontrollü ve biyolojik gıda ürünleri konusundaki büyük talebe cevap vermeyi amaçlar. Gelişmiş tarım işleri, endüstrinin almakta olduğu ilginç şekillerin tarımdaki ifadesidir. Biyolojik ve biyo-dinamik yetiştirme yöntemlerinin ve gıdaların ön işleme veya minimum işleme (minimal processing) tabi tutulduğu sistemlerin geniş oranda kullanılmasını gerektirir. "DOP" ve "IGP" markaları bu açıdan, gelişmiş tarım işleri fikrinin "normlara" uygun olduğunu gösteren markalar olarak kullanılabilir.

Gıda endüstrisini şu anda hatırlattığımız özelliklerle gelişmiş bir teknoloji olarak kabul etmek için çok fazla tasarım yeteneğine ihtiyaç vardır. Bu söylenenler tabi ki teknik ve organizasyon açısından geçerli, ama aynı şeyleri kültürel ve iletişimsel olarak da söylemek mümkün. Dolayısıyla, henüz başlangıç aşamasında olsa da, yeni bir tasarım talebinin ortaya çıktığı söylenebilir: gıdada gelişmiş ve daha "hassas" bir üretime yönelik bir endüstri için endüstriyel tasarım. Bu noktaya da daha sonra tekrar değineceğiz.

• **Sosyal deneyimler.** Bu, tarım-gıda sisteminin en yeni ve en dinamik aşamalarından biri, üstelik muhtemel sonuçları henüz kesin olarak bilinmiyor. Bu kavram şebeke sistemlerinin yaygınlaşması, "doğal" ürünlere olan talep ve daha genel olarak, uygun çözümlerin araştırılması gibi daha büyük bazı dinamiklerin sonucunda ortaya çıkmıştır. Bu makro-eğilimlerin bütününden yola çıkıldığında, burada değindiğimiz sosyal

denemelerle karşılaşmaktayız. Burada hem talebin yönlendirmesiyle (toptan satın alan gruplar gibi) ya da arzın yönlendirmesiyle (Slow food'u savunanlar, organik ürünlerin dağıtım ağları) ortaya çıkan girişimler söz konusu. Bunlara "yaratıcı gruplar" da diyebiliriz çünkü büyük ölçüde bir problemi çözmek için veya yeni bir fırsat açmak için yeni yollar yaratan bireysel veya kolektif birimlerin oto-organizasyonundan kaynaklanan sonuçlar söz konusu.

Bazı özel durumlar haricinde, burada bahsettiğimiz sosyal denemelerde halen net ve bilinçli bir design talebi dile getirilmiş değil. Her şey bir yana, benim görüşüme göre, tasarımın özellikle bu konulara dikkatini yöneltmesi gerekiyor. Bugün kabul edilebilir bir tarım-gıda sisteminin geliştirilmesindeki yapıcı rolü böylece gerçekleştirebilir. Bu görüşün sebeplerinden ilerleyen paragraflarda bahsedeceğim.

Şimdi tasarımın tarım-gıda sisteminin en yeni iki unsuruyla ilgili rolünden daha detaylı olarak bahsetmek istiyorum: Deneyisel tarım işleri ve sosyal denemeler.

Gıdanın ve mekanların temsili

Deneyisel tarım işleri gelişmekte olan hizmet ve tecrübe ekonomisinin tarım-gıda sistemi çerçevesinde şekillenme tarzıdır. Bu olayın bir ayrıcalığı, ürün çeşitliliğine ve üretim yerlerinin özelliğine verilen önemdir. Bütün bunlar klasik endüstriyel modelin önerdiği ve sunduğu program onaylama sistemine göre eğilimlerde bir sapma olduğunu gösteriyor. Ve bu da kesinlikle olumlu bir durum. Ama potansiyel olarak olumlu olan bu durumun, bir dizi olumsuz etken nedeniyle dengesi bozulmuş durumda, bunları şu ifadeyle özetleyebiliriz: "Gıdanın ve tarımın temsil edilmesi".

Uygulamada işler şöyle yürüyor: Hizmet ve tecrübe ekonomisi, şu ana kadar olduğu gibi, sürekli olarak heyecan veren "taze" kültürel ve sosyal kaynaklardan beslenmek zorundadır. Yani bir tür gösteri söz konusudur. Genellikle bu taze kaynaklar geleneksel sistemin (daha doğrusu geleneksel sistemden geri kalanların) yaradılışından itibaren sahip olduğu bilgi, davranış şekilleri, yerel özellikler gibi unsurların kökeninden elde edilir. Bütün bunlar düşünüldüğünde, bu kaynakların kullanımı onların tekrar doğuşu için bir fırsat olabilseydi, hiç fena olmazdı. Ama gerçek böyle değil: Gösteriş amacıyla kullanımları, bu kavramların içini boşaltıp, bir zamanlar sahip oldukları özelliklerin hiç birini kapsamayan içi boş unsurlar haline getiriyor.

Sonuç olarak yerlerin, toplulukların ve ürünlerinin kimliği hakkında derin bir yansıma olmadığı için (ve fiziksel ve sosyal kaynakların uygun kullanımı ile ilgili problemlere gerekli hassasiyet gösterilmediği için) hizmet ve tecrübe ekonomisi gıda, topluluk ve mekanların kimliğini sanki reklamı yapıp tüketilecek ürünlerin ta kendisiymiş gibi muamele eder. Sonuçta tipik ürünler ticari markalara, üretim alanları ve üretici toplulukları birer oyun parkına ve buradaki figüranlara dönüşür. Ayrıca halkın bu konulara gösterdiği ilgi mümkün olan en hedonistik (hazcı) boyutlara (soyut bir yeme ve içme kavramı) ve steril bir gıda kavramına (konuyla ilgili televizyon yayınlarının büyük bölümünde olduğu gibi, ele alınış şekilleri açısından bir tür gıda pornografisi olarak tarif edilebilir) indirgenir.

Başlangıçta ilginç görünen ama pratik sonuçları rahatsız edici olan bu dinamiklerin karşısında dengeleyici bir unsur olarak, olağanüstü Slow Food faaliyeti var. Bu konuya daha sonraki paragraflarda geri

döneceğim. Ama öncelikle tasarımın nasıl bugün baskın olan eğilimlerle karşılaştırılmış olduğuna kısaca değinmemiz gerekiyor: şu ana kadar ne yaptı, ne yapabiliirdi/ ne yapmalıydı.

Gösteri sonrası bir tasarım mı?

Deneysel gıda-tarım sisteminin tasarımıyla ilgili çok net ve güçlü soruları olduğunu daha önce söylemiştik. Bunlar genel olarak tasarımcıların kendi fikir ve tarzlarını, ihtiyaçlara göre uyarlayarak cevapladığı sorulardı. Bunlar, hizmet ve tecrübe toplumunun dayattığı uygulama ve düşünme şekilleriydi.

Bu şekilde davranarak, kendi klasik yeterliklerini güncelleyerek (ürün ve iletişim tasarımı) ve yerine daha yenilikçi olanları kullanarak (stratejik design ve hizmet tasarımı gibi), tasarımcılar, doğmakta olan yeni tarım-gıda sisteminde aktif ve önemli bir rol oynamaya başladılar.

Bunu söyledikten sonra, kendi açımdan üzüler eklemem gereken bir şey var: Tasarımcıların bu aktif ve önemli rolleri şu ana kadar uygulamalarının yapmakta oldukları iş üzerinde gerçek ve derin bir yansımaları olmasını sağlamadı. Bazı istisnalar dışında (ki bunlar tabii ki var), tasarımcılar eleştirip soru sormadan hizmet ve tecrübe ekonomisine dahil oldular; böylece kendileri daha önce bahsettiğimiz gösteri sürecinin en önemli itici güçlerinden biri haline geldiler.

Bugün baskın durumdaki ekonomik-medyatik mantığın esiri olan bu rolden çıkabilmek için tasarımcıların amaçladıkları tecrübelerin yönü hakkındaki sorulara daha derinlikli olarak yaklaşmaları gerekiyor. Bu zor bir düşünce tarzı olsa da, gerçekten olağanüstü bir olgu ile karşı karşıya olmaları, onların işini kolaylaştırabilir: Slow Food olgusu. Bu, herkese duyumsal tecrübelerin koruyucu tecrübelerle bağlantılı olabileceğini, tipik ürünlerin, tatların ve buradan doğan organizasyon şekillerinin korunması ve değerlendirilmesinin mümkün olduğunu göstererek başarılı olan bir organizasyon. Bu şekilde (önce İtalya'da ve şimdi tüm dünyada) yerli gıda üretiminin kültürel çeşitliliği gibi önemli bir ortak değer korunması ve yaşatılması için son derece önemli bir rol üstlenmiş durumda.

Tasarımcı gözüyle Slow Food hikayesine baktığımızda görülen şey bence stratejik design, hizmet design'ı ve tarım ve gıda dünyasında uygulanan tecrübelerin tasarımı gibi konuların en olumlu örneklerini görmek mümkün (benim bildiğim kadarıyla birkaç yıl öncesine kadar, bu konuda çalışanların hiçbirinin tasarımcı topluluğuyla önemli bir bağlantısı olmamıştı). Slow Food gerçekten bize tatlar, kokular, yerler ve sosyal uygulamalarla ilgili değerli ve tarihi bir mirastan geri kalanların olağanüstü bir şekilde tüketiminin ötesinde bir tasarım faaliyetinin uygulanmasının mümkün olduğunu öğretiyor. "Gösteri sonrası tasarım" hem kimlik oluşturmali hem de önemli tecrübeler oluşturmali, ama bütün bunlar boş ve hızlı tüketilir birer imaj haline gelmemeli. Aksine, bu faaliyet geleneksel mirasın canlandırılması, en gelişmiş teknolojik ve organizasyon imkanlarıyla buluşturulması (daha önce bahsi geçen gelişmiş tarım işleri gibi) için bir fırsat olmalı ve en başında söylediğimiz gibi uygun bir geleceğin tohumları atılmalıdır. Bu göstergelerin içerdigi ihtimalleri keşfedebilmek için bir adım ileri atıp, sosyal deneme ve bunların tasarım konusuna olası katkıları konusunu tekrar ele almak faydalı olur.

Tasarım ve sosyal denemeler

Bu konuya daha önceki bir paragrafta değinmiştik. Şebeke sistemlerinin yaygınlaşması, "doğal" gıda talebinin artması, ekolojik açıdan sürdürülebilir çözüm arayışları, yeni düşünce ve davranış tarzlarının ortaya çıkmasına neden oldu. Üstelik bu konuda hem arz hem de talep açısından bir denge vardı.

Özellikle son yıllarda çok bahsi geçen şebeke dağıtım içeriğini inceleyelim. Bu olay bağlantılarda büyük bir artışa neden oldu (yani somut olarak idaresi mümkün olan önemli etkileşim yöntemlerinin sayısı). Bağlantı düzeyinin artması ise, şebekenin sadece teknik bir altyapı değil, yeni ve güçlü bir organizasyon modeli haline geldiği yeni organizasyon şekilleri için uygun bir platform oluşturdu. Dikey hiyerarşileri kıran ve yatay, ortalama ve potansiyel olarak eşitlikçi çözümler üreten bir organizasyon modeli.

Bütün bunlar aynı zamanda merkezden uzak ve daha geniş kapsamlı sistemlere açık organizasyon gruplarını düşünmemizi sağlıyor. Son derece güçlü, geleneksel olarak bağlantı oranı düşük sistemlere dayanan davranış şekillerinin temelden başlayarak yeniden oluşturulmasıyla sonuçlanan bir organizasyon modeli. Şebeke tarzı sistemlerin kullanımı kendi başına bugün karşı karşıya olduğumuz sosyal ve çevresel problemlerin çözümü olamaz (El Kaide ve birkaç pedofil organizasyonu da şebeke usulü organizasyon modellerinin akıllıca uygulanmasına ve mevcut yatay iletişim teknolojilerinin verimli olarak kullanılmasına dayanır). Yani bu organizasyon modelleri ile bunları mümkün kılan teknolojiler, ilginç ve ümit verici fırsatlar da sağlayabilir.

Şu ana kadar söylediklerimiz genel kapsamlıydı, yani herhangi bir tür faaliyete uygulanabilirdi. Ama eğer dikkate alınan faaliyetler gıda-tarım sistemi ile ilgiliyse, bizim için daha muhtemelen daha değerli sayılabilir.

Çok yöreli bir sistem

İnternet'in yaygınlaşması, bazı kayda değer ve potansiyel olarak yaratıcı temaları da birlikte getirdi: bunlar kendilerini üreten işlevsel ihtiyaçların dışında da yeni fikirler üretebilecek kapasitedeydi: "şebeke ekonomisi, open source sistemleri, peer-to-peer organizasyonları". Bütün bunlar bir şekilde tarım-gıda sistemine yansıtılabilir mi? "Gıda şebekesi" ifadesi ne anlama gelir?

Bu soruların net ve kesin cevabı henüz verilmiş değil. Ama daha önceki paragraflarda bahsi geçen sosyal tecrübelerin gerçekliğinin ışığında bazı kısmi cevapların ortaya çıktığı söylenebilir.

Dayanışmacı satın alma grupları (fair purchasing groups) gibi girişimleri, şehirlerdeki organik marketleri (farmer markets), üreticiler ile tüketiciler arasındaki yeni ilişki şekillerini ("bir ağaç diki", veya "abonelik" gibi) düşünelim... ama aynı zamanda dürüst ve dayanışma içinde yapılan ticaretin başarısını ve -birbirlerinden uzakta olsalar da- üreticiler ile tüketiciler arasında direkt ve dayanışmacı bir ilişkinin mümkün olduğunu somut bir şekilde gösterme kapasitesini de düşünelim. Öncelikli olarak "erdemli aracılık" konusu üzerine yoğunlaşan bu girişimlerin, yerli ürünlerin değerlendirilmesi ile ilgili girişimlerle bağlantısına bakalım. Burada yine Slow Food girişimlerini düşünmemiz gerekiyor: Tipik ürünlerin korunmasından olağanüstü Toprak Ana (Terra Madre) girişimine kadar.. burada bütün dünyadaki binlerce küçük köylü, besici ve balıkçı belirlenip bir şebeke oluşturuldu; üretim ve gıda konusundaki bilgilerine göre gruplar oluşturuldu.

Eğer bu ümit verici olayları ve benzerlerini bir bütün olarak görmeye çalışırsak, ortaya çıkan sonuç tarım-gıda sisteminin yeni bir vizyonu olur (hatta belki dünyanın yeni bir vizyonu!). Gerçekten "çok yörelî" bir sistemin görüntüsünün ortaya çıkmakta olduğunu görürüz. Geniş bir yer/topluluk bileşiminden oluşan bir dünya. Kendi kimliklerine sahip olan, ama dışarıyla temas etmeye de hazır yer/topluluklar. Dış dünyayla bağlantı açısından potansiyeli yüksek olan ve ihtiyaç duyulan zaman ve kişiye göre diğer yer/topluluklarla bu temasları gerçekleştiren yer/topluluklar. Tıpkı internet'teki "peer-to-peer" organizasyonlarda olduğu gibi.

Şebeke ekonomisinin ortaya çıktığı çok yörelî bir sistem; burada bağlantı noktalarının boyutlarından çok, bu noktaların sayısı ve mevcut bağlantılar önemli. Burada sonuç olarak temel bilgiler - tıpkı gıdayla ve gıda üretimiyle ilgili olanlar gibi- tüm toplulukların ulaşabileceği ortak değerler haline gelmeli; tüm ortak değerlerde olduğu gibi kullanım yöntem ve sınırlarını kendilerine göre belirleme olanakları olmalı. Gelişmiş tarım işlerinin gelişimini yönlendirip onu daha net bir şekilde (çevresel açıdan) sürdürülebilir duruma getirebilecek çok-yörelî bir sistem.

Yeni besin şebekeleri

Şu ane kadar çizdiğimiz tablonun uygulanabilir olması için, çok yörelî tarım-besin sisteminin çoğunlukçu bir gerçeklik haline gelmesi için, üretici, tüketici topluluklarının dayanışma içinde olup "gözle görülür" hale gelmeleri gerekir. Yani kendi ürünlerini, yeteneklerini, kendi ihtiyaç/istaklerini ve bunları karşılamak için gerekenleri yapmaya hazır olduklarını göstermeyi bilmeleri gerekir. Ve onlara gerekli temasları kurabilecekleri, takliflerini sunabilecekleri, sadece ekonomik değil, yakınlık ve dayanışma bağları da kurabilecekleri bir platform, bir altyapı olması gerekir.

Benim görüşüme göre tarım-gıda sisteminin bu şekilde tekrar düzenlenmesi gerekiyor. Bahsettiğimiz tecrübeler, henüz azınlıkçı olsalar da, gerçekleştirilmesi imkansız şeyler değil. Ama hepsi bu değil. Besin ve toprak, hepimizin hayatındaki iki temel unsur. Bunların etrafında daha geniş kapsamlı çıkar ve seferberlik düzeyleri oluşturulabilir. Geçmiş ve gelecekle ilişkili. Bunların etrafında, unutulma riskiyle karşı karşıya olan bilgi ve yeteneklerin yeniden doğması sağlanabilir. Gıda, yerel ve mevsimsel ürünlerin tüketim kalitesini tekrar keşfetmemizi sağlayabilir, ama aynı zamanda uzaklardan gelen ve tanıdık ve dost bir topluluğun ürünü olduğu için -tıpkı Slow Food sloganındaki gibi- "yemesi de güzel, düşünmesi de güzel" bir etki yaratabilir.

Bütün bunlar bir oto-organizasyon şekli olarak toplumun alt kesimlerinden başlayarak ortaya çıkabilir. Ama bu ardemli süreç içinde designer'lar da yer alabilir. Kendilerine özgü yetkinlikleriyle toplumsal oluşum, görselliğin iyileştirilmesi, bağlantı kanallarının geliştirilmesi, bu toplulukların faaliyetlerini daha etkin ve daha yaygın hale getiren platformların oluşturulması süreçlerine katılabilirler. Ve bu noktadan başlayarak, design tecrübesi alanında kendi yeteneklerini de ortaya koyarak estetik ve duyumsal özelliklerin de yaygınlaştığı besin şebekelerinin oluşturulması ve geliştirilmesi için katkıda bulunabilirler. Gösteriş yapma eğiliminden kurtulunca, estetik ve duyumsallık insan ilişkilerindeki her sistemin iki temel boyutunu oluştururlar. Hele bu etkileşimin nesnesi gıda gibi derin ve önemli bir şeyse.

Sonuç olarak, tarımsal bir dil kullanarak tasarımcılar tohumların ekileceği ve antik kültürlerden izler taşıyan topraklar üzerindeki çalışmalara katkıda bulunabilir, çevresel açıdan uyumlu bir tarım ve

besin geleceğinde bitkilerin yetiřme ve büyüme sürecinde aktif bir rol üstlenebilirler. Hala güzel zeytin bahçelerinin olduđu, bu ifadenin taşıyabileceđi tüm güzellikleri içinde barındıran bir gelecek.



WINE AND OIL, BREAD AND SALT

KEYNOTE SPEAKER: Ken FRIEDMAN

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...Well, why wine and oil, bread and salt? I started with the title "What wine and oil tell us", and then I started to read the abstracts for the papers and I realized that there were dozens and dozens of themes flowing through the entirety of the conference. And I started to restructure this in my mind and I said to myself what kinds of issues or what kinds of themes does the conference hold? And then in my mind the title expanded: "Wine and oil, bread and salt." And I will tell you why. It has a lot to do with food, with cultures and with the feelings that people have. About food, about the culture of food, about the narrative of agriculture, and about how we feel about growing things, doing things, world and life.

..."What do wine and oil have to tell us?" part is kind of an interesting you have heard some of this already. Oil: We have been producing and eating olive oil for 6000 years and wine is not much younger: About 5000 years and in fact wine production began in Anatolia, not so far. Although I heard yesterday that what we call modern wine really did begin to the 1800s and truly modern wine till about 30 years ago. Of course the great advance of the 1800s was Louis Pasteur and the discover of the pasteurization. What was then true for all of these thousands of years, all of these millenia, is that wine and oil had been basic foods of civilization. This is a really important thing, to reflect on.

...Basic foods of civilization. Everything that we eat, everything that we do when we talk about growing things and eating things touches an existential core of our being as human creatures. And these issues, these attributes, these aspects of how things function are vital to how we feel. And when we talk about the kinds of issues that become important to us as designers, and this is what I will talk about a little bit later. When we talk about the kinds of things that become important to us as designers, we have to be asking what kind of world do we want to build as designers, because that is what we do. Designers are world-builders. Herbert Simon's great definition of design: "To design is to conceive a preferred state, a state that we prefer over against an existing state and create a course of action to move us from there to here", and this then raises powerful questions because the question is not simply "How should we do this?" The question is what do we choose to do and why? Let's think a little bit back to some old kinds of issues. Before we talk about how and why, I am gonna talk a little bit about wine and oil. There is a reason for it, whenever we get involved in any kind of design we have to understand the cultural anchor, the routes, the meanings that the things we work with, how could be. Yesterday one of the things that I liked very much about the keynote was the fact that our speaker talked about designing wine. And of course he is quite right. You actually design wine, you design things that you consume. You do not design the things you grow but you design the foods you make from them. You design the rituals, the ways you consume them.

...The story of wine is an old story and it is part of the history of our relationship with food. Some of the oldest narratives in human history involve wine and oil. So let's listen to some of these stories: If you look back, the earliest stories that you can find in every culture have to do with two or three things. So what does wine mean then? Wine is a divine gift from the earth. It is the union of earth and heaven in a way, pressed into liquid form, blood, sacrifice, but sacrifice in union, of blood substitute, a life elixir; it represents food and joy, it represents time, memory, commemoration, celebration, but it also has a flip side as all things in life do: Drunkenness, intoxication, loss of control, sin, anger -you know that great line "He is trampling out the vintage where the grapes of wrath are stored" from the great Steinbeck novel "The Grapes of Wrath"- seduction, falling, stupidity. It is a blessing and it is a blessing that can be abused.

...What makes wine important? What makes these stories important is the whole issue of significant symbols. What is a significant symbol? This is an idea, anchored in the work of the sociologist George Herbert Mead going back to Wilhelm Dilthey. A significant symbol is significant because it has cognitive meaning and affective meaning, that is, it is both intellectual and it is emotional. When we draw on significant symbols we do two things, we draw on common experience and we build shared culture with each other and this is why again wine and oil are significant symbols. Significant symbols are significant because they invoke existential commitments, they illicit it and they engender it, it builds on what we believe, whom we are, what we share and it hopes to create what we believe, whom we are. It is action-oriented because it is embodied and embedded in lived behaviour. Conceptual and emotional life worlds arise through significant symbols.

...Now oil has a very similar kind of history. Let's look just a little bit at oil. Once again, it has a series of backgrounds: You anoint with oil, it is a natural product, gift to the earth, distilled creation. Lots of stories about oil, the stories of the lamps, it is commodity and it is a life product. And this is an interesting issue I will come back to it in a minute. You light with it: The world's first industrial design product was made for oil: An oil lamp (Feuerlampe) again made around the first century. They were mass manufactured, distributed around the entire Mediterranean and the world's first trademark was the trademark of the company that made these lamps. And you still dig them up in archeological sites all around, all around. So it is oil connected to the world's first branded product, one of the world's first industrial design products, one of the world's first mass manufactured products.

...Now, what does this mean to us? If we talk about what wine and oil tell us we have links to an ecology of meanings. A multiplicity, a pluralism of notes and tones, and all of these ring a lot of bells for us. When we toast with wine there is a kind of linked ceremonies of all kinds ranging from these very strange, mystical, powerful toasts Captain Ahab's and his whaling mates in Moby Dick to the communion ceremony, to wedding ceremonies, linked to blood and spirit, activating culture through significance. Where does this bring us? It brings us to an interesting point. Because this is the question about design. How do we use design to activate cognitive and affective value in this case of wine and oil? To do this we must understand what wine and oil tell us and work in the plural frames of culture.

...Wine design. That is the design of wine itself and this is interesting, because I have often said I have been slowly doing a

taxonomic research study on number of design fields and kinds of designs there are, and so far I have identified with my friend Terry Love from Australia over 650 different fields of design until this week. I have got a new one now, because I have never thought about it: We can design wine. There is a general science of design I have talked about Simon's definition and wine certainly fits that. Here we design for health effects, for hygiene, for food chemistry, the relation among components, taste in the final product.

...Generative agriculture, re-generative. The good relationship between technology and public good. Wine and oil offered new forms for agribusiness, traveling culture, opportunities to create generative industry, re-generative industry, models that Ezio calls and global network, and I had to say yes to this, this was the other reason.



ŞARAP ÜRETİMİNDE TASARIM VE KALİTE YARATMA

DAVETLİ KONUŞMACI: Nihat AKTAN

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Şarap üretiminde tasarım, tüketici beklentisini karşılamak amacı ile bağ yetiştiriciliğinden, üzüm üretimine ve şarap üretim tekniklerinden, şarabın sunumuna kadar gerçekleştirilen prosesler zinciridir. Bu proseslerin uygunluğu ve mükemmeliyeti, ancak tasarımın başarılı olması ile sağlanır.

Aynı anda dört mevsimin yaşanabildiği Anadolu; iklimi, arazi yapısı ve toprak karakterleri ile asmanın, özellikle şaraplık üzümlerin yetişmesi için çok elverişlidir. 29 farklı uygarlığın yaşadığı Anadolu'da Türkler şarap üretiminde başarılı tasarımları ile çok ileri teknikler uygulamışlardır. Osmanlılar döneminde zaman zaman yaşanan kesintilere karşı Anadolu insanı şaraptan hiç vazgeçmemiştir.

Özgürlük ve bağımsızlık savaşımızın başarılmasından sonra, ulusal kalkınma ve yenilenme hareketi içinde şarap üretimi de hemen yerini almıştır. Yüce önderimiz Mustafa Kemal ATATÜRK ülkenin uygun bulunan bütün bölgelerine modern şarap evleri kurdurmuş ve bu işletmelerde görev alacak teknik elemanları ileri ülkelere göndererek, kaliteli şarap bilimcilerinin yetişmesini sağlamıştır.

Bir yandan da Anadolu'nun kaliteli üzüm çeşitleri yeniden canlandırılmış ve ayrıca yüksek kaliteli yabancı şaraplık üzüm çeşitlerinin, getirilen yabancı uzmanların katkıları ile Anadolu'nun uygun bölgelerine adaptasyonları yapılmıştır.

1950 yılından itibaren başlayan ve 1980 yılından sonra giderek derinleşen karşı devrim hareketleri ile şaraba karşı gerici tavırlar artmıştır. Özellikle son yıllarda şarapçılığın gerilemesi için yapılabilecek ne varsa açıkça uygulamaya konmuştur. Bütün bu olumsuzluklara karşı Anadolu adeta direnmekte, engellemelere karşı modern bağ alanları kurulmakta ve şarap evleri birbiri arkası üretime girmektedir. Artık Anadolu bizlere yeniden nefis üzümler ve şaraplar sunmaya başlamıştır.

Tanrılar, dinsel ritüeller ve mitolojiler ile iç içe girmiş olan şarap, Mezopotamya ve Akdeniz'den ayrı düşünülemez. Şarap Anadolu'da her zaman önem kazanmıştır.

Mitolojilere ve din kitaplarına konu olan şarabın tanrısal bir esin kaynağı olduğuna da her zaman inanılmıştır.

Hristiyanlıkta ise şarap kutsal bir nitelik kazanmıştır. Hz. İsa son akşam yemeğinde ekmeği 'bu benim etim', şarabı da 'bu da kanım' deyip, havarilerine dağıtmıştır. Bundan sonra Hristiyanlığa kabul edilme merasimlerinde şaraba banılmış ekmek yenmesi adet haline gelmiştir.

Kutsal olan ve bu kadar önem kazanan şarap nedir?

Şarap, taze üzüm veya şırasının etil alkol fermentasyonu ile meydana gelen hafif alkollü bir içkidir. Fermentasyon ise, şarap mayalarının şıradaki şekerleri alkole dönüştürme olayıdır.

Şarapta kalite yaratmak bağda başlar. Kaliteli şarap ancak sağlıklı ve yüksek kalitedeki üzümlerden üretilir. Bu nedenle bağcılıkta ve üzüm üretiminde yapılacak tasarımda şu hususlar sırası ile dikkate alınır.

1.Bağ bölgelerinin sınırlarının çizilmesi: Bağ bölgelerinin karakterleri, bölgeye uyum sağlayan üzüm çeşitlerinin cinsleri ve ne kadar miktarda yetiştirileceği göz önüne alınarak bağ alanlarının yer ve sınırları belirlenmelidir.

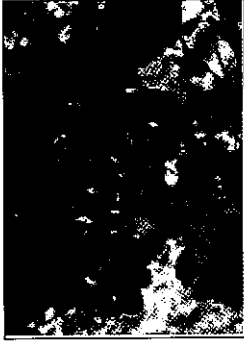
2.Bağın toprak yapısının incelenmesi: Toprak analizleri yapılarak toprağın yapısı belirlenmeli ve buna göre gereken besin elementleri, asmanın dikilmesinden önce tamamlanmalıdır. Kireç ve mineral yönünden zengin topraklar tercih edilmelidir.

3.Bölgenin iklim faktörleri: Güneşlenme gün sayısı ve saati, yıl içindeki dağılımı ile yağış miktarı ve yıl içindeki dağılımı incelenmelidir. Asma, kışları ve bahar aylarında yağışlı ve çok soğuk olmayan, yazın ise yağışsız ve bol güneşli bir iklimde iyi sonuç verir.

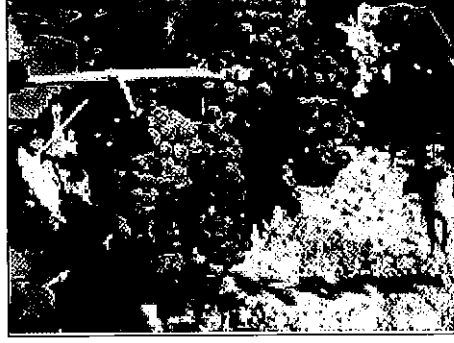
ÜZÜM ÇEŞİTLERİ

Şaraplık üzüm çeşitlerinin sayısı iki bini aşmaktadır. Ancak bütün ülkelerde kabul gören üstün kaliteli üzüm çeşitleri birkaç tanedir.

-KIRMIZI ÇEŞİTLER:



Pino Noir



Shiraz (Syrah)



Cabernet Sauvignon



Merlot

-BEYAZ ÇEŞİTLER:

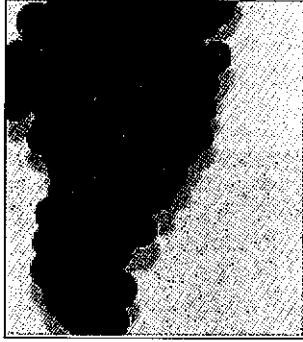


Chardonnay



Sauvignon Blanc

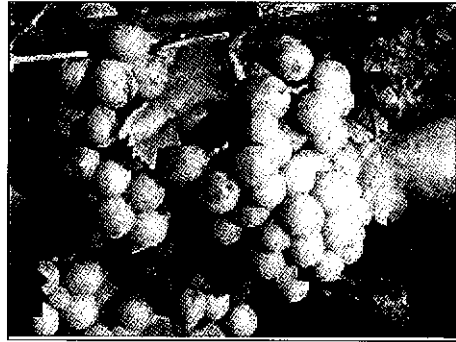
Bunlardan başka uluslararası ünü olmasa da her ülkenin kendine ait üstün özellikli çeşitleri vardır. Ülkemiz dünyaca ünlü bu üzüm çeşitleri ayarında, hatta bazıları daha üstün olan, çok kaliteli şaraplık üzüm çeşitlerine sahiptir. Boğazkere, Öküzgözü ve Kalecik Karası kırmızı çeşitleri ile Bornova Misketi, Emir ve Narince beyaz üzüm çeşitlerinin tanıtımları yapılabilse ülkemize büyük çapta ekonomik katkı sağlanabilir. Bunun için önemli ölçüde devlet desteği gerekir. Bu da bugün için mümkün değildir. Köstek olanlardan destek beklenebilir mi?



Boğazkere



Öküzgözü

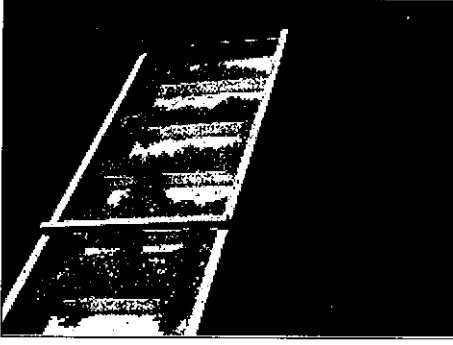


Bornova Misketi

ŞARAP ÜRETİMİ

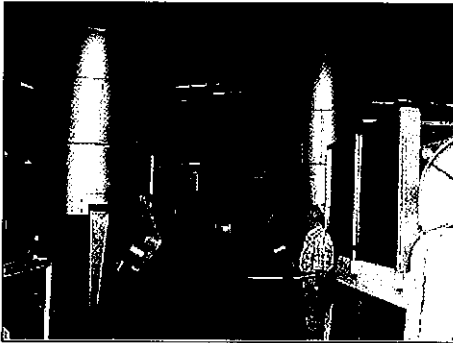
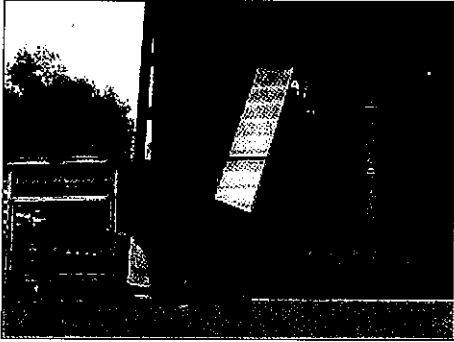
Şarap üretiminde hedef; bağcılıkta sağlanan başarı ile elde edilen üstün kaliteli üzümlerden, kalite kaybına uğramadan, üstün karakterli şarap yaratılması olmalıdır.

Tam zamanında ve uygun şekilde hasat edilen üzümler, kısa mesafedeki şarap evine zedelenmeden özen ile taşınmalıdır. Taşıma kapları delikli, havalanabilir, 15-20 kg. kapasiteli ve temizlenmesi kolay olan plastik malzemelerden üretilmiş ve her zaman temiz durumda olmalıdır.



ŞARAP EVİNDE UYGULANAN İŞLEMLER:

- Ayıklama,
- Üzüm tanelerinin sap ve çöplerinden ayrılması ve tanelerin bu işlem sırasında parçalanması,
- Beyaz üzümlerin preslerde sıkılarak şıranın elde edilmesi,
- Kırmızı üzüm kabuklarındaki renk maddesinin şıraya geçirilmesi (cibre fermentasyonu),
- Kırmızı üzümlerin cibresinin preslerde sıkılması.



FERMANTASYON:

Beyaz üzümlerden hemen ve kırmızı üzümlerden cibre fermentasyonu sonunda elde edilen şıra, fermentasyona terk edilir. Kırmızı üzümlere uygulanan cibre fermentasyonu hariç olmak üzere, şıra elde edilinceye kadar uygulanan prosesler mekanik ve fiziksel işlemlerden oluşur. Fermentasyon ise biyokimyasal ve biyoteknolojik olaylar zinciridir. Burada mikrobiyoloji ve kimya bilgisi öne çıkar. Fermentasyonda önemli işlevler gerçekleştiren; MAYA, ENZİM, BESİ YERİ hazırlama ve seçimi dikkatle yapılmalıdır. Üzüm çeşidine, üretilecek şarabın cins ve karakterine uygun maya, enzim seçilmeli ve besi yeri hazırlanmalıdır.

Fermentasyonda şarabın kalitesi yükselmelidir. Şarapta 'aroma' en önemli kalite olgusudur. Üzümden gelen aromaların kaybolması engellenerek fermentasyonda yeni ve farklı aromalar

kazanılmalıdır. Aroma burun akseptörleri ile algılanır. Sağlıklı insanlar 1000 tane farklı aromayı algılayabilir. Algılama kişiye ve deneyim seviyesine göre değişir.

ŞARABIN ŞİŞELERE DOLUMU VE SUNUMU

Fermantasyonunu tamamlayarak yeteri kadar dinlendirilen şaraplar durultulup, filtre edilerek şişelenir. Şarabın kalitesi diğer gıdalardaki gibi, yapılacak analizler sonunda belirlenir ise de şarapta yeterli olmaz. Mutlaka yapılacak degüstasyon (tadım) ile şarabın kalite ve karakteri hakkında ancak kesin sonuca varılabilir. Restoran veya evlerde şarap sunumunda bir seremoni olmalıdır.

Bu seremonide şarabın etiket ve şişesinden başlayarak inceleme yapılır. Etiket ve şişe dizaynı, şarap çeşidi ve tipi ile uyumlu olmalıdır. Şişe açılıp şarabın renk ve berraklığı da incelendikten sonra sunum yapılır.



Kısaca şarap ile insan sağlığı arasındaki ilişkiye de değinmek istiyorum. Çünkü bu hep merak konusu olmuştur. Şarabın insan sağlığı için koruyucu olduğu daha ilk çağlarda biliniyordu. Orta çağda kolera salgınına karşı kiliselerde su içilmesi yasaklanıp, sadece şarap içilmesine izin verilmesi sayesinde aydın kilise erkânı hastalıktan korunabilmiştir.

Şarap sosyal gerginliği azaltır.

Bir çok ülkede bir kadeh şarap, konuk severliğin ilk işareti sayılır.

Şarap bağışıklık sistemine etkilidir.

Deriyi diri ve sağlıklı tutar. Beyne kan gidişini artırarak, beyni dinç tutar.

Soğuktan korunmada ilk anda yarar sağlar.

Kan dolaşımını ve kas gücünü artırır.

Eklem ağrılarını azaltır.

Trioid, böbrek üstü ve seksüel bezleri uyarır.

İdrar miktarını artırarak, vücutta toksinlerin birikimini azaltır.

Kandaki damar tıkanıklığını engelleyen LİPOPROTEİNLERİN kandaki oranını yükseltir.

Antioksidan etkisi ile vücudun serbest radikallere karşı korunmasını sağlar. (Serbest radikaller sağlıklı hücre yapısını değiştirerek, kanser riski yaratırlar.)

Ölçülü miktarlarda şarap içilmesinin hiçbir zararı yoktur. Zararlı olduğu bazı kişilerce söylenen alkol bile az oranda alındığında ölüm riskini azaltmaktadır.

Günlük doz; kadınlarda 20 g/L alkolü, erkeklerde 30 g/L alkolü geçmemelidir. Bunların şarap olarak ifadesi 2-3 bardaktır.

Az içiniz, ama mutlak iyisini içiniz.



PART I
THE ROLE OF DESIGN IN AGRICULTURAL
INDUSTRIES TO DEVELOP VALUE-ADDED
PRODUCTS AND SERVICES

Beatrice Villari, Arianna Vignati, Antonella Castelli
Agriculture Food-Raw and Design: The "Emporium" Section in the
"Me.Design Forme Del Mediterraneo" Exhibition

H. Alpay Er, Özlem Er, A. Can Özcan
Winning by Design in the Turkish Agricultural Industry: A Case
Study of Strategic Design in Tariş Zeytin A.Ş.

Lia Krucken
How can Design Support Value Creation from Agrobiodiversity
Resources?

Mine Ertan
Do-It-Yourself Tools for Strawberry and Citrus Production in Mersin

Stuart Medley
Less Realism: More Meaning
Historical and Psychological Reasons for Avoiding Photographic
Imagery in Wine Labelling and Promotion

Şölen Kıpöz
Fashionable Foods and Tasteful Fashions:
Food in the Kitchen of Fashion Design

Tunçdan Baltacıoğlu, Melike D. Kaplan
The Impact of Package Preference on Brand Image

Turgut Var, Melike D. Kaplan, Öznur Yurt
Wine Tourism in Turkey

Turgut Var, Öznur Yurt, Melike D. Kaplan
Impact Analysis of Wine Tourism



AGRICULTURE FOOD-RAW AND DESIGN: THE "EMPORIUM" SECTION IN THE "ME.DESIGN FORME DEL MEDITERRANEO" EXHIBITION

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ABSTRACT

This paper describes the role of the design in the valorization of the agricultural food-row of the oil and of the wine starting from the research experience prepared for the "Emporio" section of the "Me.design. Forme del mediterraneo" exhibition (4th november - 12th december, Palazzo della Borsa, Genoa).

In the "Emporio" section the relationship among territory, agricultural food-row and design has been introduced. The "Emporio" section is represented as a travel through the typical Italian agricultural and local food. The section describes products through the "raw materials", the transformation process and the goods, considering the communication and the way of distribution and sale.

It has been decided to turn the Italian agricultural and food products "into a show" as synonymous of quality and typicality. They represent in fact also the value of the local traditions and the identities of the territories. The aim of the "Emporio" section has been to illustrate, through best practices (of companies, consortiums and specific events), the main Italian agricultural and food-rows to highlight the design competences when related to these themes, and to show how design can be considered as an "innovation driver" of several phases of the productive row. As a result, design can be considered a capacity to increase the value of territorial resources.

In particular, the relationship between design and productive processes will be exemplified with a case study: the Planeta case, Sicilian Company that produces wine and oil. It proposed a business company strategy that used a design approach in order to value the own wine and oil production, both on a national and international market, through an integrated system of products, communication and services.

Keywords: Strategic Design, Design Approach, Local Resources, Local Development.

1. The design approach

"Food, cooking, and diet seem to be the core issues on which the general conflict between local and global is played. From one side the courses and the food daily consumed around the world are getting similar and similar, to the other side though, as an automatic answer, the research goes towards those traditional and typical foods that, giving voice to the culture of a specific area, gain its original attractiveness" (Paolini, 2002).

Italy and design are two words often associated to that production and media phenomenon so called *Made in Italy*. Nowadays this phenomenon can somehow be tied not only to the manufacturing production, but also to those *local productions* that represent a real national patrimony. The local productions, especially those tied to the wine-gastronomic line, have become the focus of a debate including ethical and cultural considerations (i.e. associations such as "Slow Food"¹ or the "critical wine"² activities) as well as research

and development (i.e. those activities aimed at exploiting the gastronomic resources through industry and breeding, which should not damage the biodiversity or the resources exploitation; or the researches upon the products' traceability).

Food, that is wine and oil as well, represents a *culture*, which should be preserved as well as communicated, exploited, and somehow *hybridised*. The food products are therefore considered as *resources*, they belong to that patrimony made out of tangible and intangible components, which describe the Country's richness.

The Me.Design³ research used this approach to investigate the relationship between design and territory, where the agro-industrial sector's issues are one of the research's focuses.

The Me.Design activities comprised of theoretical investigations, and a series of experimentations around the Country. The whole of these elements is the core of the two sections of the "ME_Design. Forme del Mediterraneo" exhibition: the "Itineraries" section gathered all the design experiences tied to the issue of design for local development processes; the "Emporium" section shows how important is the design component⁴ along some agro-industrial production lines.

Some premises are needed:

- The wine-gastronomic resources are considered to be "*territory's medium*" (Paolini, 2000), they represent then vehicles of the local *identity*;
- The product (not only the wine or oil product) is considered in terms of *production line* that is through the *process* involving several actors, companies and workers carrying out activities aimed at defining the tangible and intangible aspects of the product itself.

These aspects contribute in defining a first framework used by design to face these issues. In fact, to consider the *local productions* in terms of resources (not only economics) means to place them within a wider system, which is strictly tied to the belonging *place*, to the social and cultural system that somehow determines its evolution.

Therefore the resource *wine* and the resource *oil* are design elements through which it is possible to foster economic, social and environmental development process:

To consider the *product* in terms of production line means to face the design issues from the process point of view. Design in fact can represent an innovation factor acting both on the territory's dimension, (the *territorial capital*⁵), and on the components tied to the individual's activities and his relationships network (the *social capital*⁶).

¹ <http://www.slowfood.it/>

² <http://www.criticalwine.org/>

³ "ME.Design. Design strategies, tools and procedures aimed at increasing the value and promote the resources of the Mediterranean area between local and global." is a co-founded MIUR (Ministry of the University and the scientific and technological research) research programme for the two years period 2001-2003. The research used innovative methodologies and involved the Italian Universities belonging to the SDI | Sistema Design Italia network (www.sistemadesignitalia.it)

⁴ The "Emporium" and "Itineraries" sections are described in AA.VV.

ME.Design_Forme del Mediterraneo, catalogo della mostra, Alinea, Firenze 2004.

⁵ Zurlò, F., (2003).

When facing the project through these points of view, design has to act on the tangible aspects of the productions, as well as on the intangible aspects that define their specific value.

In fact the factor that characterizes especially the wine and oil productions is the impossibility to reproduce *tout court* the values, the know-how, the local knowledge peculiar of the product. In this sense design can be a tool through which it is possible to promote different activities and projects, tied to the production and product dimension, to the communication channels, to the distribution systems, and to the services related to the product itself.

This is peculiar of the product-system approach, used to tell the production lines in the "Emporium" section of the "Medesign - Forme del Mediterraneo" exhibition.

To design in order to improve the value of the local production lines means then to place design itself within a much wider and complex development process. Design, in handling these issues, has necessarily to face different levels of the several production lines' steps. This leads to a former reflection upon the local resources, the production modalities, and a latter one upon the distribution and communication modalities, and on the market laws. It also allows to become aware of the design potentials and to consciously use them to support sustainable development processes.

2. The production line "on display": methodology

In the *Me.design - Forme del mediterraneo* exhibition, the "Emporium"⁶ section aimed at representing the relationship amongst territory, agro-industrial production line and design product. The exhibition tried to make spectacular the Italian "agro-industrial product" as synonymous of quality, traceability, typicality, and because it represents the value of the local tradition; through which it is possible to rediscover the territorial local identities. In order to rediscover places and resources, several design actions are being developed, which should help the producers, the Consortia, the Bureaux to reach their target of safeguarding and improving the value of this patrimony. Design (product, communication, service) here acts as a discipline that facilitates the definition of a shared strategy, for improving the value of the production line and the territory.

The aim of this section was that of telling, through real experiences, the main agro-industrial lines, and to make clear how design is related to the typical local resources.

The main Italian food lines shown are the Oil, the Pasta, the Cheese, the Wine, the Meat, the Fish, the Fruit and Vegetable and the Distillates ones.

This document focuses especially on the **Wine and Oil lines**, in order to argue the methodology used for a lines' pre-comprehension and for identifying the intervention key points of the design component.

⁶ See Maffei, S. (2004) Territorio, filiera agroalimentare, progetto, in Fagnoni R., Gambaro P., Vannicola C., *Medesign_ forme del Mediterraneo*, catalogo della mostra, Firenze, Alinea Editrice.

⁷ The curators of this section were Stefano Maffei, Vincenzo Cristallo, Francesco Zurlo. The section had the contribution of Antonella Castelli, Arianna Vignati, Beatrice Villari. The graphic design is by Massimo Bianchini with the contribution of Lidia Tralli

The first research step comprised of the identification of 3 significant national cases for each line (Wine and Oil):

1. Identification of an *important company*;
2. Identification of a *consortium* or *bureaux* for the local collective promotion;
3. Identification of a local *event* through which it is possible to illustrate the complexity of the initiatives aimed at improving the value of the agro-industrial product.

The cases were selected according to several criteria:

- the recognizability of a design component;
- the strong connection with the territory;
- the representativeness with respect towards the agro-industrial production system, which in Italy is mainly comprising of SMEs.

A graphical-communicative telling showed the lines, starting from the resource as a raw material, passing through its manufacturing process, the final product, up to its communication and the selling modalities. The images used wanted to illustrate the analysed food best practices.

More in detail, the lines were organised in four macro-areas: context, process, product, communication / distribution.

1.CONTEXT

This part sees four main sections:

- the *territory*, being the geographical place where the food raw material is produced;
- the *raw material*, being the starting point of the manufacturing process;
- the *selection*, that is the choice of the raw material for all the controlled and protected productions, which is essential for obtaining a high quality product;
- the raw material *preparation*, which is when the raw material is actually transformed into the final product.

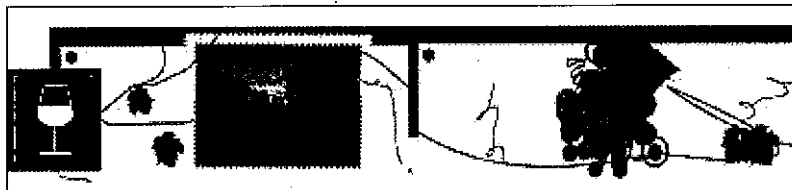


Figure 1. Detail of the Wine line (CONTEXT Board)

2.PRODUCTION PROCESS

This part describes the raw material manufacturing processes allowing to obtain the food product which is then distributed on the market. The big industrial processes based on the intense exploitation of the local resources go together with the manufacturing processes aimed at regaining the final products' "original purity", through recovering local traditions and also promoting a healthy and balanced diet.

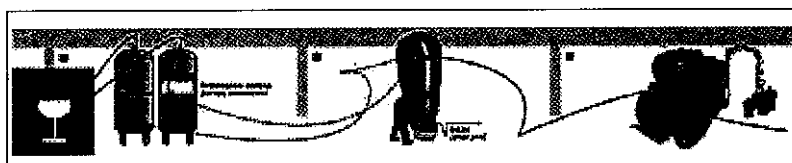
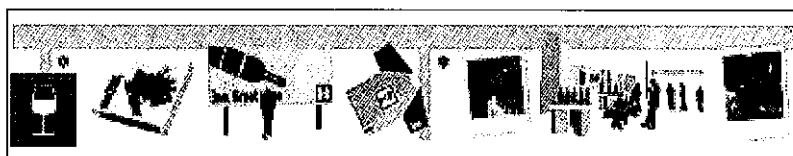


Figure 2. Detail of the Wine line (PROCESS Board)

3. PRODUCT

4.COMMUNICATION / DISTRIBUTION

Several design components emerged from the analysed lines, which were important in the definition of the communication strategy: the *packaging*, that is the container that allows the product to be preserved, carried, displayed and consumed; the *display*, comprising of the physical elements used by the producer to communicate with the final customer; the *web site*; the *advertising campaign*; the *brochure*; the *selling point*, being the place where the consumer buys and/or consumes the product; the whole system of *services* related to the product purchase.



3. Strategic design for the integrated exploitation of the oil and wine production line: the Planeta case

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Focusing on the two main highlighted lines (the wine and the oil ones), it was very important to refer to a real Italian company, which has been able to combine the richness of the wine tradition together with the possibility of implementing one of the oil's manufacturing line: the Planeta case⁸.

Planeta is a Sicilian company based in Sambuca di Sicilia (AG), also operating in Palermo (where the management and marketing division are) and in other branches around Sicily. First of all Planeta started up a project for the wine production re-qualification, staking on the local dimension of the product, in order to then widen the company offer with products deriving from the implementation of the oil manufacturing process. This allowed the company to start a process of repossession of the local territory, but also to communicate outside the identity of those places through quality products.

The Planeta Family started the quality wine production activity in 1985 on the Arancio lakeside, a Sambuca di Sicilia. The family company is managed by Alessio, Francesca and Santi Planeta, helped by a famous Piedmontese wine expert, Carlo Corino, and it produces a few wines that express very well the new Sicilian wine-making techniques, with the aim of increasing the value of the local varieties, of planting and adapting the best international vines, and of recovering the best and oldest Sicilian D.O.C.

The Sicilian context has always generated many opportunities, both because of its old wine tradition, and for the availability of the production structures, of the technical capabilities, of the economical and production activities tied to the grapes cultivation and their transformation into wine; furthermore, the physical resources represented by the soil and the weather, the environment, the architecture and the tools and objects traditionally used within this activity, enhanced the possibility to communicate a real "local identity".

One of the main components for the entrepreneurial project development was the re-qualification of the Sicilian wine through an innovative process recovered from the traditions and developed for producing the 4 different kinds of wine the company produces. The know-how and the experience gained lead to improve national and international vines, assembled together with the most interesting native varieties.

The expertise and the knowledge of the wine-making techniques, together with the research and development skills, and the sense of belongingness to the culture and the territory, allowed Planeta to go over the production constraints tied to the standardisation and the homologation of the wine qualities and to use strategic skills.

The company has refined its production techniques, so that the production is now able to answer the requests of the market, which is becoming more and more international. In this sense, the company took part at several international specialized fairs, in order to be able to find a dialogue with a wider reality.

The development of a real product system is a proof of this strategic vision capability: a diversified offer was integrated by a communication and distribution plan very effective for the product. The company uses identity communication artefacts (the logo and the labels), but it also activates a real communication and promotion

⁸ Further information on the site www.planeta.it

strategy. These promotional activities and services were developed and modified throughout the time: from the definition of the company image focusing on the company itself (everything was played around the word game Planeta/planet, moon/sun/comet), to the representation of a production reality rising in Sicily where there are particular geographical, climatic, environmental, cultural and production characteristics. Thank to this, those places find a new, global, rich and dynamic identity. In fact, the company also participated to some events for the promotion of the product, but also of the places and the wine production activities tied to innovative tourist circuits (the regional initiative "*Strade del Vino* - Wine roads", and then the national one "*Cantine aperte* - Open wineries". Nowadays, real local services are structured: sightseeing, tasting, experiences of knowledge of the production processes and of the places, from the vines to the wineries. All these aspects are integrated to a hospitality idea: there's a link (even on the web site) to a series of itineraries in the closest places that represent important sites, selected by the company amongst environmental and cultural goods, hotels and restaurants, and showed through adequate maps.

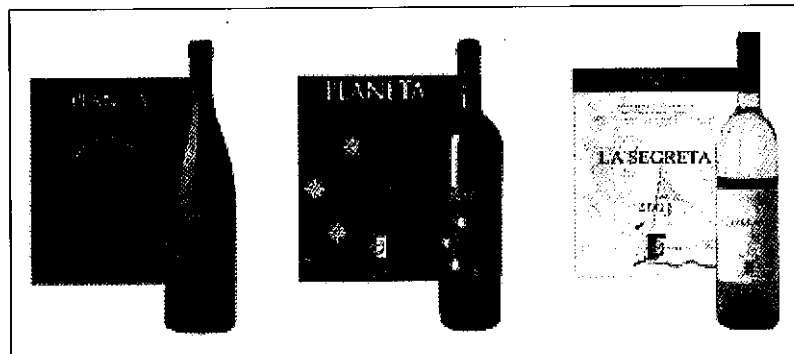


Figure 5. Communication examples of the Planeta wine

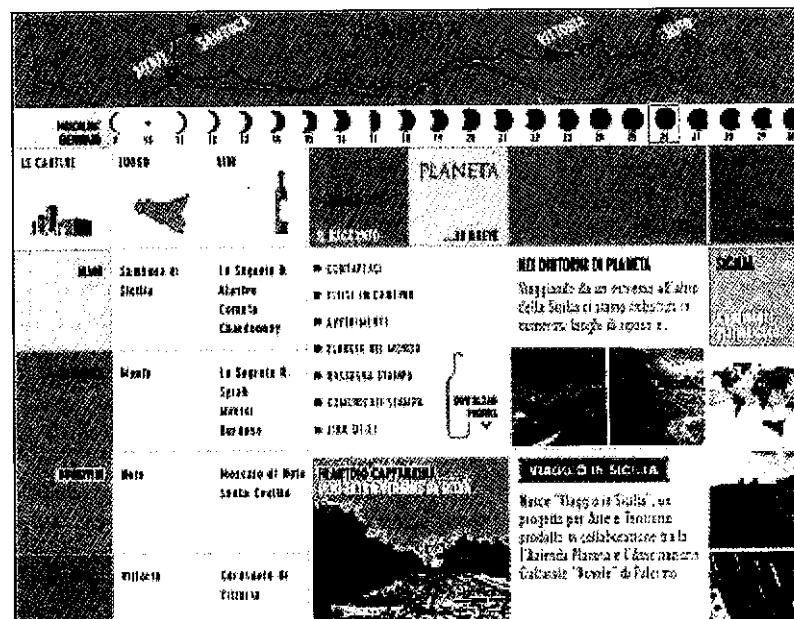


Figure 6. Web site page (<http://www.planeta.it/>)

This case highlighted how an integrated project acting at every stage of the manufacturing process and aimed at improving the value of the production line, allows to define the product's communication artefacts, but also the actions for improving the local identity and specificities' value. In Planeta the design contribution is

evident not only as a communication tool, but as a discipline using strategic tools for improving the local resources' value through integrated services.

4. Conclusions

The exhibition Medesign_Forme del Mediterraneo showed that when talking about typically Italian agro-industrial production lines, it is possible and plausible to talk about local system as integrated whole of product, communication and service. Within this scenario, design isn't only at the service of the improvement of the final product's value, but it is considered as a discipline able to face the production systems. It then uses modalities that require strategic, analytical and interpretation capabilities, to understand not only the product and the market, but also the local and relation identities that determine its value.

From this the design (as a practical discipline, but actually not much acknowledged) role emerged, in facing issues regarding the *shape* of the final product, as well as the plots of the actors' relationships, the modalities to *tell* the artefact, the whole of the values tied to tradition, typicality, local peculiarities from which the artefact itself rises and through which its uniqueness becomes clear. Within the agro-industrial lines design as a discipline can intervene with competences and tools able to exploit a complex system of individuals, organisations, companies, associations, territories, in order to activate communication and service strategies. These strategies should be able to "bring out" from a territory a unique image of quality, recovery of traditions and production innovation together.

Considering the increasing competition with the global economies, the typical agro-industrial productions becomes strategic elements for the territory: they have resources, identity, peculiarities that should be well used in order to be more and more worldwide recognisable. If there are consortium and companies that already faced a systemic change (in terms of product system), there are also many production realities in Italy that need to "shift" to strategic thinking. The Planeta case highlighted how, especially in these realities, design, being a service activity, could use capabilities and tools for improving the product's value, but also to globally communicate places, individuals, identities of the production realities.

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WINNING BY DESIGN IN THE TURKISH AGRICULTURAL INDUSTRY: A CASE STUDY OF STRATEGIC DESIGN IN TARIŞ ZEYTİN A.Ş.

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ABSTRACT

Traditionally design is closely associated with manufacturing industries. This is even more emphasized in newly industrialized markets such as Turkey where design and manufacturing are regarded as strong symbols of modernity in every aspect of the daily life. Nevertheless, today design has an ever increasing important role in agricultural industries, which account for a significant amount of the national economies in terms of value-added and employment figures. In many countries it is increasingly recognized that the strategic use of design can contribute significantly to the competitiveness of firms operating in agricultural industries. Within this framework, this paper aims to present a case study of how the strategic use of design contributed to the commercial survival of an agricultural cooperatives union in Turkey. Tarış, the first and the biggest Union of Agricultural Producers and Sales Cooperatives in Turkey was established in 1915 by local farmers in order to sale their products directly to the international and national markets. It was started acting in an official capacity in 1935, and had been an essential part of the Turkish agriculture policy for the last 60 years. Although it is one of the largest and successful examples of cooperative unions in Turkey, it had structural problems due to its administrative and financial dependency on the government over the years. When the IMF forced the Government to restructure the fiscal policy towards the agricultural sector in 2000, Tarış with 127.900 farmer members has been left to survive on its own in a competitive market environment.

By the year 2000, Tarış was a local brand known mostly in Aegean region. It lacked a clear corporate identity, and a brand awareness in the Turkish market. In response to new conditions, Tarış Zeytin A.Ş. was established in 2001 to market the products of the members of Tarış Olive and Olive Oil Union, and has been the most significant instrument of the new survival strategy of Tarış. The vision of the company is to establish Tarış as a brand in national and international markets. By adding value to the Tarış products and the image, contributing to the increase of its sales and profitability, and thus increasing the prospects of Tarış's survival as a cooperatives union in an ever increasing competitive environment, design has been one of the main elements of this successful survival strategy. The case of Tarış also highlights the potential role of design as a value and identity creating operator in the regeneration of similar traditional agro-industries or sectors in Turkey.

Introduction

Traditionally design is closely associated with manufacturing industries. This is even more emphasized in newly industrialized countries such as Turkey where design and manufacturing are regarded as strong symbols of modernity in every aspect of the daily life.

Nevertheless, today design is beginning to have an ever-increasing role beyond manufacturing industries. In many countries it is increasingly recognized that the strategic use of design can contribute significantly to the competitiveness of firms operating in agricultural industry, which accounts for a significant share in terms

of value-added and employment figures in national economies. Within this framework, this paper aims to present a case study of how strategic design contributed to the success of a corporation in the Turkish agricultural industry.

Strategic Design

Companies need to develop integrated product, service and communication policies to differentiate themselves in today's competitive markets. The strategic use of design or strategic design secures the integration of the company's various offerings to the public such as its products and services, hence the articulation of a competitive strategy. In the last 10 years, there has been an increase in the emphasis made on the concept of strategic design management. Beyond a limited understanding of design management confined to the management of the design function at organizational or project levels, the concept of strategic design foresees that design is not only concerned with the products, but also with how a company defines its goals.

In this sense, *Tariş Zeytin A.Ş.* can be defined as a company where design is used to integrate the products, brand identity and communications as to create a distinctive competitive strategy.

Turkish Agricultural Industry: Problems and Challenges

The significance of *Tariş* case cannot be fully understood if it is not perceived within the larger framework of the Turkish Agriculture and Agricultural industry. About 30 years ago, Turkey was known as one of the 7 countries having a surplus of food. Today, Turkey is close to become a net importer of food. One of the main reasons for this is that agriculture has been used for a very long time as an instrument of domestic politics (Güçlü, 2004). Now, facing the liberalization of trade in agricultural products due to the World Trade Organization's recent decision, and the prospects of complying with the EU's common agricultural policy, the Turkish agriculture is in a deep structural crisis. The main problems facing the Turkish agriculture today are under-investment, low productivity, the lack of international marketing skills and insufficient product diversification into more value-added fields. The modernization of the Turkish agriculture is huge task while the World agricultural product markets are being rapidly liberalized and government subsidies are forced to cut down agricultural products due to the World Trade Organization's recent decision, and the prospects of complying with the EU's common agricultural policy, the Turkish agriculture is in a deep structural crisis. The main problems facing the Turkish agriculture today are under-investment, low productivity, the lack of international marketing skills and insufficient product diversification into more value-added fields. The modernization of the Turkish agriculture is huge task while the World agricultural product markets are being rapidly liberalized and government subsidies are forced to cut down.

Nevertheless, this challenge has to be taken up because agriculture is very crucial for Turkey. Before everything else, about 40 % of the Turkish population still depend on agriculture as a major source of employment. In fact, with its large and ecologically rich agricultural land, Turkey has a significant potential to become a major player in the agriculture and agricultural industry (Evcim, 2004). Therefore agricultural industry is even more important for Turkey because it is:

"a) mostly export-oriented; b) one of the sectors with the highest net foreign currency input; c) the bridge to cross from agriculture to industry. It trains industrial workers, and d) it plays a role of increasing the income of petty

farmers and unqualified workers at the lowest income levels of society, evening out income distribution" (Güçlü 2004).

As Güçlü (2004) also points out, agriculture is important for other industries, too. If a sector that is the source of subsistence for 40 % of a country's population cannot provide the necessary purchasing power, then other industrial organizations cannot find buyers for their products in the domestic market.

This short analysis makes one thing very clear: The agricultural industry in Turkey needs to be reorganized to be able to compete successfully in a global market economy; otherwise Turkey may face major social and economic problems that may hinder the further development of the country. In this basic framework, if and when it is used at strategic level, design emerges to be one of the tools that can contribute to the competitiveness of the Turkish agricultural industry, in particular the food industry. We believe that Tariş, which has contained many features of the Turkish agricultural industry with its links to the thousands of farmer families through the cooperatives union, is a good, but also a rare example of this argument in Turkey. The rest of the paper discusses the role of design in Tariş's successful revival strategy.

Background: Olive and Olive Oil in Turkey

Since the main product of Tariş Zeytin A.Ş. is olive oil which has strong territorial and historical identity to build on, it appears to be imperative to briefly overview the olive and olive oil production in Turkey. Olive tree is believed to be indigenous to the entire Mediterranean Basin, and Asia Minor is considered to have been the birthplace of the cultivated olive some six millennia ago. Olive and Olive oil have always been strong elements of the Mediterranean culture shared by the common people of that region. The generic term "Mediterranean diet" refers to the dietary patterns found across the Mediterranean and it contributes to good health, provides well-being, and forms a vital part of the world's collective cultural heritage has existed in Italy, Greece, and in parts of France, Lebanon, Morocco, Portugal, Spain, Syria, Tunisia, and Turkey, closely tied to traditional areas of olive cultivation in the Mediterranean region.

The wild olive tree is believed to be originated in Asia Minor where it is extremely abundant and grows in thick forests (IOOC, 2005). It appears to have spread from Syria to Greece via Anatolia (Turkey) although other hypotheses point to Lower Egypt, Ethiopia, the Atlas Mountains or certain areas of Europe as its source area. Ruins of an ancient olive oil factory were discovered in Izmir, Buca region, which is still a main olive cultivation area. Archeological studies revealed findings about the olive pressing and distillation techniques, and the collecting channels used in that site about 2500 years ago. Such historical facts show that the olive oil production and trade existed in Turkey since these times.

Since olive-tree is an alternate bearing plant, every year production changes significantly. Turkish olive oil production reaches up to around 200.000 tons in "on years" and around 80 000 tons in "off years". Turkey ranks the fifth in the world olive oil production. Nevertheless the olive oil consumption in the domestic market is still low despite more than 10% annual growth of the market for the last 3-4 years.

Turkey has also the potential of exporting a great majority of her production, which was 90-100.000 tons per annum by 2002. World olive oil exports varied around 250-450 thousand tons during

1994/95 and 2000/01 seasons. Turkish exports account for 10-15 of the total world exports. Turkey has been exporting olive oil to more than 50 countries in the world, including the major olive oil producing countries such as Italy, Spain. Most of the Turkish exports to those countries are considered to be re-exported under the brands of those two countries to the US, which is the major importing country in the world. During the recent years, Turkey has accomplished a great increase in her exports to the USA, and became the third largest supplier to the USA since 1999.

Tariş: A Short History

Tariş, the first and the biggest Union of Agricultural Producers and Sales Cooperatives in Turkey was established in 1915 by local fig farmers to by-pass foreign merchants and loan sharks in order to sell their products directly to the international and national markets. Union of Raisin Producers and Sales Cooperatives joined Tariş in 1937, and Unions of Cotton, and Olive and Olive Oil Producers and Sales Cooperatives joined Tariş in 1949 (Tariş, 1993). Today, Tariş carries its activities with fig, raisin, cotton, olive and olive oil agricultural sales cooperatives in 65 locations with more than 127.900 farmer members in the Aegean and Marmara regions of Turkey. The aim of Tariş is to act as a cooperative union through which the rights of the farmers are protected. Tariş products range from dried figs to olives and olive oils, from vinegar to soaps, detergents and agricultural textile products.

Legal Framework for Cooperatives can be dated back to the first law of cooperatives in 1867. This law was replaced with a new one in 1923 in the Republican era. Following the 1929 World Economic Crisis, a new law of cooperatives was issued in 1935. With this law, Tariş was put under government control in financial and administrative sense, and started acting as a government agent. Since 1935, Tariş had been instrumental in the implementation of the "Price Support System" in which the commodities of the member farmers are bought at pre-determined prices that might not be the same as international market prices. The "Price Support System" was an essential part of the Turkish agriculture policy for the last 60 years, and was financed by publicly-owned banks.

Although Tariş is one of the largest and successful examples of cooperative unions in Turkey, it had some structural problems due to its administrative and financial dependency on the government. Its management was directly affected by daily politics since the early 1950s. Due to the inefficient use of public funds as loans, Tariş has also had a significant problem of debt for years. In conclusion, Tariş faced the problems of inflexible and bureaucratic corporate culture, too many and unqualified employees, lagging production technology, production-oriented management structure, limited distribution network and relatively high operational costs.

Despite its well-established research and development capabilities since the mid 1980s, its high product quality and appropriate prices, Tariş entered the 1990s as a local brand known mainly in the Aegean region. It lacked a clear corporate identity, and strong brand awareness in the Turkish olive oil market. In this period the need for restructuring Tariş was already felt, but little could be done due to its heavily bureaucratic structure. Meanwhile, the Turkish olive oil industry began to experience some changes during the 1990s. In 1995, the oldest and the most well known brand of Turkish olive oil industry, a family-owned company, Komili was bought by a multinational food giant, Unilever. This was one of the first take-over of the local brands in the Turkish agricultural industry by

multinational corporations.

Restructuring of Tariş became possible when the International Monetary Fund (IMF) forced the Turkish Government to restructure the fiscal policy towards the agricultural sector in 2000. With a new law passed in June 2000, "Price Support System" ceased to exist, and unions of cooperatives gained administrative autonomy from the government. With administrative autonomy, government financial support was also withdrawn, and Tariş has been left to survive on its own in a market-economy.

Response of Tariş Olive and Olive Oil Agricultural Sales Cooperatives Union to these new developments (administrative regulations, fiscal discipline imposed by IMF, increased competition, and internal problems, etc.) has been to conceive a new strategy.

Tariş Zeytin A.Ş.

Tariş Zeytin A.Ş., which was established in February 2001 to market the products of the members of Tariş Olive and Olive Oil Agricultural Sales Cooperatives Union, is the most significant instrument of the new strategy of survival. The vision of the company was as a dynamic and creative producer of olives and olive oil, to establish Tariş as a brand in national and international markets and;

"To adapt to the effects of globalization, we aim to integrate the techniques of different organizations and management styles to ensure the livelihood of our products and producers and thus establish a standard in our sector." (From the mission statement document, 2001).

The primary aims of Tariş Zeytin have been to produce and sell natural and healthy products, to maintain the tradition of quality and trust associated with Tariş, to maintain the cultural heritage, to protect the environment, to ensure highest customer satisfaction, to keep up with technological developments, and to make high quality Tariş olive products available in national and international markets.

Before operating practically in October 2001, Tariş Zeytin A.Ş., i) formed a small but flexible and motivated team of qualified personnel, ii) created a strong IT infrastructure to use of web technology effectively, iii) and developed a new marketing strategy for Tariş olive and olive oil products in which the strategic use of design played a pivotal role.

The Role of Design in Tariş Zeytin A.Ş.

According to different market research sources, Tariş Zeytin A.Ş. has been the second or the leader olive oil company in the Turkish market by 2004. Tariş has doubled its market share in the last two years (AC Nielsen, 2003) and it is the only and fastest growing olive oil company beyond the market average. Since its foundation in 2001, Tariş Zeytin A.Ş. has accomplished the nation-wide distribution of Tariş olive products, the shelf presence of Tariş products in major supermarket chains such as Carrefour, Real, Migros and Metro, the diversification of its sales channels, low cost, but informative promotional campaigns about olive oil and Tariş, the diversification of export markets, diversification into organic, natural products. Today, Tariş has 1,952 retail sales points, mostly in large super or hypermarket chains where %85 of the olive oil sales take place, and 52 wholesale dealers throughout Turkey. (AC Nielsen, 2003). Tariş also exports its products to 30 different countries, including retail sales points in Ramstore chain in Russia, Kaufhoff retail chain, Germany, and its sales corner in Harrod's, London in the UK. Tariş has also started operating a franchising chain, with

special "Tə-Ze" concept olive/oliveoil shops in İzmir, İstanbul and Chicago in the US. In addition to these, Təriş Zeytin A.Ş. also started online sales of more than 200 olive, olive oil and related products and the web site (www.teriszeytin.com.tr) won national and international design awards. Təriş was acknowledged by the World Bank as one of the best practice of Union company comparing to the other Turkish cooperatives in terms of growth and profitability. Strategic design had a significant role in these achievements by recreating and coordinating Təriş brand identity at different levels.

Despite the better market penetration of the market leader (Unilever Group), Təriş has performed rather well, and moved up to the second place from the fifth one, with a market share of %26 in the Turkish olive oil market. In Extra-Virgin olive oil sub-category, Təriş caught up with the market leader in October 2002 (AC Nielsen, 2002). Financial figures from 2001 onwards reveal that Təriş Olive and Olive Oil Cooperatives Union, with its new strategy implemented by Təriş Zeytin A.Ş., has increased its profitability, and made significant progress towards a self-sufficient, competitive existence in a market environment. Among other factors, packaging design has also contributed to the positive performance of Təriş Zeytin A.Ş. Brand awareness of Təriş increased significantly in big cities where health conscious new olive oil consumers are concentrated. Now, the share of Təriş in three big cities, İstanbul, Ankara and İzmir, is above 30%. Especially, in extra-virgin olive oil segment, where the design strategy of Təriş is concentrated, and the identity of Təriş and olive oil is more strongly asserted through design, Təriş outperformed the market leader supported by the financial means of the Unilever Group. Təriş' sales of extra-virgin olive oil increased from 45.000lt in 2001 to 124.000lt in 2002 (AC Nielsen, 2002).

In the case of Təriş, design has been instrumental in these achievements. A design consultant based in İstanbul, has worked closely with the top management of Təriş Zeytin A.Ş. in İzmir, in the implementation of the new strategy since 2001. Top management's commitment to the strategic use of design has been crucial in the success of Təriş. Design decisions have not been considered as responsibilities at tactical or operational levels, but at the highest strategic level. Design has been one of the major responsibilities of the top management, which is a rare case in Turkey as in many other countries. The specific mission of design has been to recreate Təriş identity in products and packaging, specialized retail shops, purchasing points, web sites, and advertisements. Design strategy has been based on the strong Mediterranean identity of olive and the historical roots of Təriş in the Aegean region (Er et.al., 2003).

Strategic use of design has created and coordinated the identity elements of Təriş in products, packaging, retail environments and communication materials. Design has been successfully used:

- to build a corporate identity on the existing foundations of Təriş history and quality,
- to coordinate communication with consumers and the public to increase the brand awareness of Təriş in the Turkish market,
- to create environments that stimulate specific retailing experiences for olive products,
- to develop new and value-added olive oil products with distinct identity" (Er et al, 2003)".

In short, design has been used strategically in Təriş Zeytin A.Ş., to reposition the company and its products competitively in the Turkish olive oil market, and support its export drive in the international markets.

The case of Tariş, nevertheless, is not without its limitations. In the domestic market, just after Tariş's remarkable gains, almost all competitors have started using design in their packaging and communications. Design that was a unique differentiator of Tariş between 2001 and 2003 is now one of the intense fields of competition where almost all brands and companies are increasingly active. This is especially so in the extra-virgin olive oil segment of the market where consumers from upper income levels are targeted. Since design is increasingly a standard element of the competition in the market, it is likely to be more difficult for Tariş to maintain the competitive advantage it gained when design was not recognized as a competitive tool by its main competitors. To maintain the advantageous position that the company enjoyed in the market, a more systematic and innovative approach may be needed.

Another potential limit of the Tariş case is its apparent dependency on the Turkish packaging industry's existing capabilities for new product design and development. Packaging, especially glass containers are the main design element of the olive oil market. The sustainability of Tariş as a distinct brand in the domestic and international markets requires a constant supply of innovative and differentiated packaging design solutions. Niche olive oil markets also require highly differentiated glass and ceramic containers. Such requirements demand a strong packaging support, which is innovative and different in design but flexible in production volume. The last limitation relates to the weak image of Turkey as an olive producing Mediterranean country. This needs to be promoted as well as the brand identity of the company.

Conclusion

In conclusion, it can be said that the strategic use of design has added value to the Tariş products and the image, contributed to the increase of its sales and profitability, and thus increased the prospects of Tariş's survival as an agricultural cooperatives union in an ever increasing competitive environment. Due to its social and economic impact on the large population earning their lives from agriculture in the South West of Turkey, this is well beyond a commercial corporation's success via design. The successful use of strategic design in the case of Tariş highlights the potential of design as a value and identity creating operator in the regeneration of similar traditional agro-industries or sectors in different parts of Turkey.

Nevertheless, whether the strategic use of design can be replicated in other sectors of the Turkish agricultural industry remains to be tested with more studies of design management/strategy initiatives at firm level.

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HOW CAN DESIGN SUPPORT VALUE CREATION FROM AGROBIODIVERSITY RESOURCES?

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ABSTRACT

The aim of this paper is to stimulate a discussion on systemic approaches to valorisation of agrobiodiversity resources from a design perspective.

The relationship between products and territories is evident in several products, especially in food. A local food product can be considered as a continuity of its region of origin, strongly characterized by its edaphic and climatic conditions, and as a result of local traditions of knowledge that are embedded in its history and production. The local food product represents a cultural and social expression of a certain community, a sign of local intellectual heritage. Thus, there is a range of meanings related to a local food product, connected to the community's history, customs and rituals.

These local values embedded in products need to be properly communicated to consumers outside the original territory. Thus, planning and promoting communication are some of the more evident roles played by a designer aiming to promote local development.

The importance of institutional support actions to promote valorisation initiatives (considering simultaneously product, intellectual heritage and the region of origin) should be noted. Experiences from *Slow Food Foundation for Biodiversity* (2004), *LEADER European Observatory* (2000) and *Altromercato* (Lorigliola, 2001) emphasize this consideration.

The example of *Satéré-Mawé's Guaraná* is used to illustrate the "territory-product-community approach".

Final considerations of this paper emphasize a) the need to consider a systemic approach and b) the design roles in this context.

Design actions can assist the recognition and expression of the product's identifying features and the promotion of a united culture to protect local resources as part of the territorial identity. Therefore, design can contribute to the valorisation and conservation of agrobiodiversity resources. The hypothesis sustained in this work is that the design perspective can help to make society aware of the origin, history and values embedded in local food products.

Key Words: Agrobiodiversity Resources, Biodiversity, Design, Value Systems, Local Resources, Traditional Knowledge, Intellectual Heritage.

Introduction

The main question to be discussed in this paper is:

-How can design support the creation of value from agrobiodiversity² resources?

¹ This work is part of a doctoral research that was carried out by the author from 2003 to 2005 at the *Universidade Federal de Santa Catarina*, Brazil. Part of this research was developed during a visiting fellowship at *DIS - Design and Innovation for Sustainability* at the *Politecnico di Milano*, Italy.

² Agrobiodiversity can be understood as "The variety and variability of animals, plants and micro-organisms that are used directly or indirectly for food and agriculture, including crops, livestock, forestry and fisheries. It comprises the diversity of genetic resources (varieties, breeds) and species used for food, fodder, fibre, fuel and pharmaceuticals. It also includes the diversity of non-harvested species that support production (soil micro-organisms, predators, pollinators), and

In the first part of the paper some considerations about agrobiodiversity resources are presented. Next, the values embedded and the values perceived in food products are highlighted. Some concepts related to the valorisation of product-territory-community are pointed out, towards reinforcing the need of systemic approaches.

The example of *Satéré-Mawé's Guaraná* is used to illustrate the simultaneous valorisation of local resources, traditional knowledge and the region of origin.

Lastly, the design roles in the valorisation of agrobiodiversity resources are identified.

Agrobiodiversity Resources

The terms biodiversity or biological diversity are used to designate a wide spectrum of ideas related to the study of species, genes and habitat, as well as the effort to protect them, according to Pennisi (1991).

Biological resources provide food, clothing, housing, medicines and spiritual nourishment. They also provide an increasing number of intermediate products, such as natural ingredients for the cosmetics and pharmaceutical sectors (essential oils, natural dyes, latex, fibres, resins, gums and medicinal plants), or final products, such as timber, handicrafts, nuts and tropical fruits - United Nations Conference on Trade and Development - UNCTAD (2002).

Products based on local resources, specifically those from agrobiodiversity, are becoming more important very fast, due to both economic motives related to business potential and increasing consumer demand for more natural and safer products.

If well managed, bio-businesses could generate tangible economic benefits for populations whose livelihood depends on biodiversity, and provide an incentive to use that biodiversity in a sustainable way.

The conservation and sustainable use of biological diversity was the main theme of *The Convention on Biological Diversity* - CDB (1998), signed by 168 nations in Rio de Janeiro, 1992. The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, by appropriate access to genetic resources and by appropriate transfer of relevant technologies - taking into account all rights over those resources and technologies - and by appropriate funding.

In spite of this, biological resources are being irreversibly destroyed. In general, agrobiodiversity resources are not exploited in a planned and sustainable way, and their potential is not converted into wealth for the community. Furthermore, the incorrect use of these resources cannot bring economic development to the community and can provoke significant environmental and cultural damage.

Therefore, a systemic, integrated approach is fundamental to

those in the wider environment that support agro-ecosystems (agricultural, pastoral, forest and aquatic) as well as the diversity of the agro-ecosystems", according to Food and Agriculture Organization of the United Nations - FAO (1999).

elaborate coordinated actions, thus promoting long-term sustainable development. It is crucial to consider social, economic, cultural and environmental variables. A design perspective could bring the transversality required to this sort of analysis.

Valorisation of Product - Territory - Community

Some important concepts related to a wide approach to the valorisation of local resources, which encompasses not only the resources but also the region of origin and the resident community, will now be considered.

Each local resource is a complex identity based on two basic components: a legacy and the capacities of a resident community to recognize the potential resources, transform them into effective resources and cultivate them in a sustainable form - as stated by Manzini (2004).

The relationship between local resources and productive communities has been explored by LEADER European Observatory for Rural Development. It introduced the concept of "*territorial capital*" as "*elements set available in the material and immaterial level which can constitute, in some aspects, advantages and in others, disadvantages*" (LEADER, 1999, p.19). It is important to consider the dynamic character of territorial capital: it can only be valued according to the history (its past) and recognition of past elements, and its specificities can support a strategic building (future), in other words, "*the territory project*". Moreover, there are global relations (external networks, exchange with markets and institutions) and local ones (local networks, interaction between actors and institutions from the territory) which are involved with the territory and are fundamental in the "territorial capital" analysis.

In this sense, territorial capital leads to what it is considered as local wealth (activities, landscape, patrimony, traditional knowledge, etc), aiming to promote territorial competitiveness.

The notion of territorial competitiveness is corroborated by Cristallo (2003), who introduces the idea of the "*environment-company*" or a decentralized company, i.e., the territory is seen as a "*productive habitat*". The term "productive habitat" refers to an articulated and complex system of productive activities located in a certain territory, inside an environment in which all that is produced is narrowly linked to the binomial context-identity. In many cases the local company is determined by an informal economy that promotes the establishment and equilibrium of relations among territorial, human, physical, economic and intangible resources.

Ecological sustainability is another important aspect to be considered. As stated by Capra (2002), ecosystems³ organize themselves according to the principles of ecology - interdependence, recycling, partnership, flexibility, diversity, and, as a consequence of all these, sustainability. Capra emphasizes that all members of an ecosystem are interconnected in a network of relationships, in which all life processes depend on one another. Thus, it is important to consider this condition of dynamic equilibrium when exploiting one particular agrobiodiversity

³ Ecosystem means "a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit", as stated in the CDB (1998, art.2). Capra (2002) underlines that ecosystems are sustainable communities of plants, animals, and microorganisms, which can be understood as ecological networks.

resource.

Therefore, the conservation of biodiversity involves the conservation of cultural diversity and a plurality of knowledge traditions, according to Shiva (1997). This plurality in turn is ecologically necessary for survival in times of rapid change and accelerated breakdown.

In conclusion, holistic sustainability is the basis of the success of a "territory-product-community" initiative of valorization: local resources must be cultivated and exploited in a sustainable way in order to maintain all the values related to them.

QUALITY AND VALUE OF FOOD PRODUCTS

The food product can be considered as a continuity of its region of origin, strongly characterized by its edaphic⁴ and climatic conditions, and as the result of local traditions of knowledge that are embedded in its production. The local food product represents a cultural and social expression of a certain community, a sign of local intellectual heritage. Thus, there is a range of meanings connected to a local food product, which are related to the community history, its customs and rituals.

Some illustrative examples of local resources that are closely linked to local community life are: *Limoncello di Sorrento*, from Italy - a liquor made from local lemons; *Lavande en Provence*, from France - a raw material for several products, such as cosmetics and perfumes and *Guaraná dos Satéré Mawé*, from Brazil - used in beverages and foods.

In these cases the product is considered part of local community history, and so valorising it means reinforcing the community identity. The strong links between territory and product, highlighted by the final products' visual appearance, can be noted. In conclusion, the qualities of the final products reflect its production system.

From the consumer perspective, several aspects simultaneously condition the quality of a food product:

- a) organoleptic attributes and epicurean motivations, related to the sensorial experiences when eating food;
- b) compliance with technical or commercial hygienic regulations, related to raw-materials used in product formulation, production processes, additional ingredients, safeness of packaging;
- c) nutritional values, perceived through the product composition, its origin and properties;
- d) utilitarian value, evaluated by the cost / benefit relationship;
- e) ethical and moral values of producing, distributing and consuming food products, related to social, economical, cultural and ecological sustainability.

In some cases, the food product's personality is greatly characterized by the edaphic and climatic conditions of the region of origin - e.g. wine, olive oil. Thus, information about the region can be an important reference for the consumer to infer the quality of the product.

⁴ Relating to, or determined by, conditions of the soil, especially as it relates to biological systems (OPEN DICTIONARY, 2004).

The combination of all these aspects will define the overall quality of a food product, which is directly related to the product's value.

The overall quality of a product is evaluated by the consumer from an objective quality (based on technical aspects and intrinsic product attributes) and a subjective quality (based on individual judgments). According to Cardello (1994), from a consumer's perspective, food quality is a perceptual and evaluative construct which is relative to person, place of purchase and purchase situation.

As stated by Duncan and Moriarty (1998), consumer behavior is governed by the perceived quality of the product, which results from the relationship between a priori quality and the experienced quality (before and after the experience). So, coherency in all messages is necessary to build a positive and truthful image.

Therefore, the planning of product communication strategies must consider many aspects of perception and how they integrate themselves.

Two important vectors used by the consumer to infer product quality (i.e. perceived quality) are traceability and authenticity. These characteristics are becoming more important due to the proliferation of numerous indistinguishable products on the market.

In general terms, traceability^{5,6} is related to the technical quality of the product. However, overall quality encompasses cultural and social aspects that are much more difficult to trace in a global market. Therefore, it is important to consider a wide view of traceability, in which ethical and moral values of producing, distributing and consuming food products are taken into account.

The search for authenticity is connected to our desire to reinforce a personal identity, which is unidentifiable in the global economic context, as stated by Cové (2003). The authentic product results from a mental reconstruction of a local past, and represents a return to origins, the recovery of our roots.

Thus, it is very important to provide correct inputs (information) in order to guide the consumer to a real evaluation of products. Furthermore, the increasing interest in and awareness of cultural and social aspects embedded in products contributes to the valorization of environmental and socially friendly practices. From this perspective, design plays a crucial communication role in allowing the consumer to understand the commitment on the part of the producer.

A remarkable example of valorisation of local resources is *Saté-é-Mawé's Guaraná*. Its exploitation and conversion to products is possible due to support actions, as will be shown.

It is presented in three parts: 1) context description, 2) value system analysis and identification of support actions, 3) final product analysis.

⁵ Traceability is defined as the "ability to trace the history, application, or location of that which is under consideration", according to the International Organization for Standardization (ISO 9001:2000).

⁶ Food traceability means "the ability to trace and follow a food, feed, food-producing animal or substance intended to be, or expected to be incorporated into a food or feed, through all stages of production, processing and distribution", according to Council Regulation (EC) No 178/2002.

Example: Guaraná From Satéré-Mawé

a. Context description

Guaraná (*Paulinia cupana*) originates from the Amazon rainforest in Brazil. It is widely diffused throughout the world due to its therapeutic properties as cardiovascular tonic, stimulant, intestinal regulator, anti-venereal disease and aphrodisiac (Barros et al., 2001). It is also an ingredient found in many sodas, energy drinks and protein bars.

Guaraná is produced and commercialized by the indigenous community of *Satéré-Mawé* and represents the main feature of their economy (approx. 800,000 hectares where 7,000 people live distributed among 70 villages). The *Satéré-Mawé* see themselves as the inventors of the plant's culture, a self-image justified on the ideological level through their myth of origin, according to which they are the "*Children of Guaraná*" (Lorenz, 2004).

Therefore, the history of this community is umbilically linked to the *Guaraná* culture. They grind the seeds to prepare a traditional beverage, which is part of a social ritual.

According to Lorenz (2004), *Guaraná* processing involves several different stages: the harvesting of the bunches, the peeling of the seeds, their washing and roasting, the peeling of the roasted beans and their crushing, the preparation of the loaves and their smoking. The know-how embedded in these processes represents part of traditional knowledge and cultural heritage of *Satéré-Mawés*.

The *Satéré-Mawé* consider the ecosystem where they live as their main legacy. In this sense, the community has elaborated a long-term plan in which sustainability is the most important priority. As stated by Fraboni (2001), the "*Guaraná Project*" represents a vision of the future in which the heart of the area of native *guaraná* propagation remains intact, from which the *Satéré-Mawé* society has withdrawn to the surrounding lands.

The "*Guaraná Project*" is considered as an emblematic example⁷ of simultaneous valorization of the community, the ecosystem and its resources, and also as an illustration of the *Agenda 21*⁸ statements.

b. Value system analysis and identification of support actions

In 2002, 6.5 tons of *guaraná* powder were produced, of which 50% were exported by fair trade organizations (FUNAI, 2002).

Local associations, such as *Conselho Geral da tribo Sateré-Mawé - CGTSM*⁹ and *Associação da Consultoria e Pesquisa Indianista da Amazônia - ACOPIAMA*, support the local organization of *Satéré-*

⁷ The "*Guaraná Project*" was recognized as an example of respect to traditional knowledge and management of natural resources at the The World Exposition EXPO 2000 in Germany (EXPO 2000, 2001).

⁸ Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the environment. Agenda 21, the Rio Declaration on Environment and Development, and the Statement of principles for the Sustainable Management of Forests were adopted by more than 178 Governments at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, 3 to 14 June 1992 (UNITED NATIONS, 2004).

⁹ The General Council of the *Satéré-Mawé* Nation was founded in 1996. It represents the *Satéré-Mawé* communities and is responsible for the commercialization of *Satéré-Mawé* *guaraná*.

Mawè. The *Slow Food Foundation for Biodiversity*¹⁰ and *CTM*¹¹ *altromercato* play crucial roles in the Guaraná's value system.

CTM altromercato takes part in the management of the production chain and also distributes the product in the market/society in local shops (called "*Bothegue*") and thematic events. This consortium imports *Guaraná* semi-processed from Brazil and manages, in Italy, the manufacture, distribution and promotion of several final products derived from it, such as *Guaranito*¹² and others (*guaraná* syrup, beverages and candies). In fact, *Ctm altromercato*'s general tasks are to support community organization and production activities and to adapt and refine the products to reach the standard quality and please a large number of consumers.

An international *Slow Food Presidium*¹³ was dedicated to *Satéré-Mawès' guaraná* in 2002. This presidium was aimed at establishing a production protocol that defined the traditional techniques of its cultivation, conserved native *Guaraná* and assisted in developing and producing other *Guaraná* products for sale internationally. *Slow Food* is supported by the CGTSM and the patronage of the Brazilian Ministry for Agricultural Development.

In conclusion, consumer awareness when using products allows the consumer to play an active and political role in the consolidation of the product's real value.

Guaraná's value system is briefly shown in Figure 114, which

¹⁰ The mission of the *Slow Food Foundation for Biodiversity* is to organize and fund projects that defend our world's heritage of agricultural biodiversity and gastronomic traditions. It was created by the *Slow Food* movement in partnership with the Region of Tuscany, recognizing that the appreciation of gastronomy must include the additional step of safeguarding our gastronomic resources. While the *Slow Food Foundation for Biodiversity* promotes projects around the world, its direct financial contributions are especially dedicated to the world's less developed countries, where conserving biodiversity means not only improving quality of life, but actually saving lives, communities and cultures. Source: *Slow Food Foundation for Biodiversity* (2004).

¹¹ *Ctm altromercato - Cooperazione Terzo Mondo* was founded in 1988 in Bolzano by a group of people and associations actively involved in international solidarity and development co-operation, with the aim of tackling poverty and the imbalances in North-South relations by innovative and concrete means. In 1998, the cooperative was transformed into a consortium of world shops called *Ctm altromercato*. It is currently the largest Fair Trade Organisation in Italy, and the second largest worldwide. It maintains projects with 150 small producers and craftsman groups, organized in 40 countries, in South America, Asia and Africa. It involves 600 food- and handicraft-producing communities. In Europe it promotes products and distributes them in 230 sales points, managed by 120 associations and cooperatives, and also through an online sales service. It also takes part in consumer education through its publication about products, producer communities and related subjects, such as fair price, environmentally compatible culture and production, respect for children's and women's rights. Source: *Ctm Altromercato* (2004, 2005).

¹² *Guaranito* is the first fair trade guarana beverage commercialized in Europe by *CTM altromercato* (2004). The idea comes from Brazil, where the soda made with guarana, called "*Guarana Soda*", is very popular. Its exclusive recipe was elaborated by *Ctm* in collaboration with the CGSTM, and thanks to the experience in beverage production of the Italian family enterprise *Reysoda* from Pavia (*CTM altromercato*, 2005).

¹³ The *Presidia* are geographically-based concrete actions, where infrastructure of local production can be increased. The main points are to promote artisan products, establish production techniques to set quality standards for the product, and to guarantee a viable future for traditional foods. In Italy this process is financed by the Agricultural Ministry and by Italian private companies. At regional levels the *Presidia* projects encompass organizations interested in regional development, such as governmental institutions, city halls, national parks and universities. According to the *Slow Food Foundation for Biodiversity*, the most important result of the project is that it has proven that consumers are willing to pay fair prices for local traditional products, and that their production can be an economically viable activity (*Slow Food Foundation for Biodiversity*, 2004).

illustrates the production of *Guaranito*.

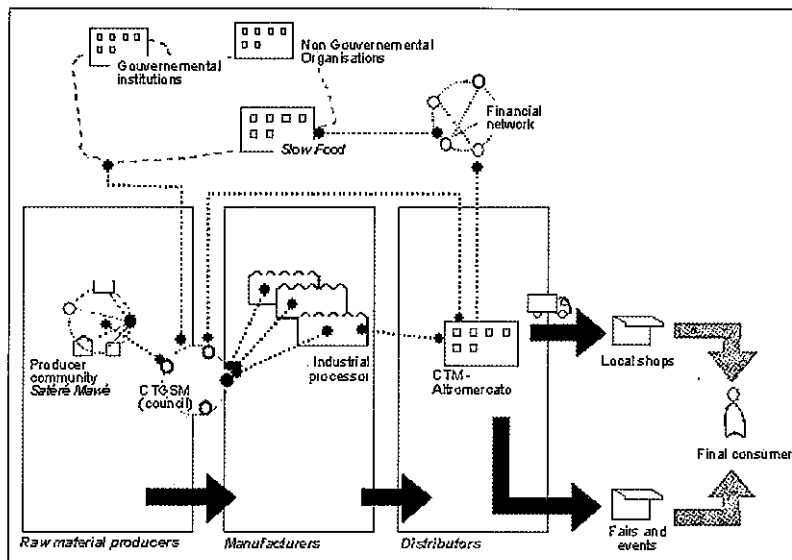


Figure 1. *Guaraná's* value system: identification of the main players and the product and information flows in *Guaranito's* production.

c) Final product analysis

Guaranito's appearance is carefully planned to reflect both *guaraná's* identity and the global communication strategy of CTM *altromercato*.

Design plays a mediating role in the creation of value, characterizing the identifying features of local resources and the benefits of the final product, as shown in Figure 2.



Figure 2. *Guaraná* production and the final product commercialised by CTM *altromercato*.

Source of Pictures: Cooperative Chico Mendes (2004), CTM *Altromercato* (2004).

The most explicit links between final product (*Guaranito*) and the original resource (*Guaraná*) are: a) the characteristic red, white and black colours, b) the illustration of the fruit. The history of the product and the producer community is briefly described in the packaging, helping the consumer to evaluate the product. Furthermore, CTM *altromercato* provides support materials that offer more detailed information, such as publications and folders.

CTM *altromercato* promotes fair economy initiatives. It is associated with European and international organizations to develop a chain where information about producers and projects of cooperation can be exchanged. Educating consumers on issues and opportunities concerning international trade and on responsible consumption, helping the excluded communities to speak up and be heard by institutions, advocate for the promotion of sustainable rules and

¹⁴ The method used to represent the value system was adopted from the "system organization map" presented by Jegou, Manzini and Meroni (2004).

practices in international trade are other activities developed by this consortium. Additionally, puts pressure on European institutions to recognize a fair market as an opportunity for development for of producer groups in Africa, Latin America and Asia (CTM *altromercato*, 2005).

Communication about product history can also be seen as an important strategy to make society aware of the values embedded in products, supporting their recognition and evaluation. A strong ethical value can be shared by all participants in the value chain, from producers to consumers (e.g. practicing fair and transparent pricing).

Slow Food also plays a crucial role in the diffusion of *Saté Mawé Guaraná*. In fact this foundation is engaged in the promotion of specific food products (together with their relevant territories and producers) through various channels: publications, the press, the *Slow Food* website, representation in major fairs and by producers' associations and local organizations (Slow Food, 2004). It also informs and educates consumers to recognize and select high quality products.

DESIGN ROLES IN THE PRODUCT - TERRITORY - COMMUNITY APPROACH

Planning and promoting communication are some of the more evident roles played by a designer aiming to promote local development. The values to be considered in the promotion are: transparency (manufacturer and place of production), traceability (product manufacture and date of production), history and meaning (reason for the product, consumption situation and context).

Thus, design actions are connected to the recognition and the expression of identifying features and the promotion of a united culture to protect local resources as part of territorial identity. Design can be considered as a means of expressing local values and, in this way, can contribute to the valorisation and conservation of biodiversity resources. It is related to:

- a) promotion of a united culture to protect local resources as part of the territorial identity;
- b) creation of frameworks that allow and facilitate the visualization of value systems and support strategic decisions;
- c) support of communication between participants to make them aware of the importance of values embedded in their actions and products;
- d) definition of product quality criteria and the diffusion of design culture among entrepreneurs;
- e) support for adopting and respecting rules related to a coordinated image identity.

Furthermore, designers play an evident role as opinion leaders. They can contribute to the diffusion of values related to environmental sustainability and cultural valorisation, converging on initiatives such as the *Slow Food Foundation for Biodiversity* and the *CTM altromercato*.

In addition, the great potential for synergies between several professional areas (such as environmental, food and agricultural experts) and professional design should be emphasised. The combination of different competencies can support the development of new scenarios and shared visions.

The role of design in food systems is discussed by Meroni (2005), according to whom, a "food system" can be understood as an integrated system of products, services and knowledge, as well as a complex of relationships, players, traditions and customs that are related to a particular food product inside its territorial and historical context. In this sense, designers can act in planning products, systems and scenarios in contexts of use or consumption.

Thus, design can also plan the development of other products and services related to the original resource, considering a systemic view of the region of origin (as emphasized in the notions of "territorial capital" and "productive habitat"). In consequence, it can contribute to the economic and social wealth of local communities, integrating many sectors, such as tourism, hotels and catering.

FINAL CONSIDERATIONS

Guaraná is an emblematic and successful case of simultaneous valorization of local resources, traditional knowledge and the region of origin, made possible by the coordinated action of all the participants involved in its value system.

The discussion about design intervention in practical cases is very important. It can make design roles more explicit, through real examples, helping to stimulate a more systematic integration of this profession into unconventional contexts.

The "product - territory - community approach" encourages the commitment of all participants in the value system. Producers, manufacturers, institutional organizations and others can and should collaborate towards the conservation of the resource and its ecosystem, as well as the product features and its image.

The "product - territory - community approach" converges to a holistic interpretation of sustainability, as emphasized above. Coordinated actions are essential to promote long-term sustainable development. A design perspective could bring the transversality required to this sort of analysis, taking into consideration social, economic, cultural and environmental variables.

Furthermore, the product-system related to food seems to be a fruitful design research field, which may have significant positive impacts on local communities.

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DO-IT-YOURSELF TOOLS FOR STRAWBERRY AND CITRUS PRODUCTION IN MERSIN

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ABSTRACT

Strawberry and citrus producers in Mersin make tools and machines themselves for their needs, or they make them done, to increase the efficiency of their production. The contribution of these tools to possible agrindustrial design should not be ignored. The aim here is to investigate and evaluate data that are provided by the final products of this do-it-yourself activity, for industrial design and production. The other aim is to understand its possible contribution to design.

Industry for agricultural tools and machines in Mersin is underdeveloped. Tools and machines specifically used for strawberry production are not being commercially manufactured. Therefore, it is possible to come across with farmers who make tools and machines for themselves. These are do-it-yourself productions, which are practical, economical, functional and local solutions. These tools are made by evaluating daily opportunities and provided for needs in a short time. We will analyze these criteria by examining.

The objective of this study is to call attention to the potential of do-it-yourself examples, which may provide data for so-called "agrindustrial design." Another objective is for this data to contribute to the development of agrindustrial design in this region.

Do-it-yourself tools and machines are produced for special needs and conditions by using of found-objects. These tools and machines are developed according to the talent, knowledge and equipment of the maker; some of them are custom-made by workshops. Custom-made tools are developed as far as the opportunities of workshops can support. Tools and machines are renovated when the conditions that determine the needs change.

The potential needs of strawberry and citrus producers can be assessed in such a way that specialists may collaborate and become organized to respond to these needs. It is possible to apply the opportunities of industry and technology in this collaboration. Hence, agrindustrial design and production in Çukurova Region may develop. This region has a potential to be an ideal area for the development and application of tools and machines for agriculture. It may then produce in for the national and international agriculture markets.

Keywords: Do-It-Yourself, Do-It-Yourselfer, Found-Objects, Find-Set-Use, Mersin, Strawberry And Citrus Production, Industry Of Agricultural Tools And Machines.

INTRODUCTION

In Mersin, I came across a strawberry producer who is a do-it-yourselfer. He has made his own tools and machines. He uses them in each step of strawberry production. Self-made tools and machines provide efficiency for strawberry production, thus he can obtain significant savings in labor expenses.

I was curious whether there was anyone else who was a do-it-yourself agricultural producer in Mersin? This curiosity took me to the citrus gardens. I found several more do-it-yourself tools there.

A couple of questions came to my mind: Why do these people make tools by themselves? Why do they produce machines or have them produced? How much is the agricultural machines industry in Mersin developed? Is this industry undeveloped or

underdeveloped?

Çukurova is an important agricultural region in Turkey. Well... Is that not an ideal place to develop the industry of machines for agriculture? Is this not the right place to develop the industry of machines for agriculture? Is it not possible to design and produce tools and machines for needs of strawberry and citrus producers in an organized fashion?

The aim of this paper is to put out the possible contribution of products of Do-it-yourselfer, on agrindustrial design. Ideas on how the efficiency of experiences and knowledge gained by experiencing and making may effect the development of tool and machine industry in Çukurova, will be shared.

STRAWBERRY PRODUCTION IN MERSIN

Mersin, located at the Region of Çukurova in the south of Turkey, is an East Mediterranean port city. Mersin, with its economy determined by agriculture, trade, tourism and industry, is an important agricultural area in the region of Çukurova with its fertile geology.

Mersin is the only trade door for the East and South-East Anatolian regions with its harbor and free trade zone among its industrialized neighbor cities. According to the General Budget Tax Income distribution among cities, it is in the sixth place after İstanbul, Kocaeli, Ankara, İzmir and Bursa. [5]

Mersin, with its population of 1651400, is accounted as the eighth biggest city of Turkey. In this city, 57.6% of working population (521868) is active in the sector of agriculture. (DİE 2000)

The area of Mersin with its city center and nine districts is 15853 km². Its districts, Tarsus, Çamlıyayla, Center, Erdemli, Aydıncık, Bozyazı, Silifke, Gülnar, Mut, Anamur, are lined up along the coast of Eastern Mediterranean Sea.

The 25.6% of its area, which is 406,000 hectares, is used for agricultural purposes. 6.06% (824606 hectares) of this area is used to grow citrus; and other fruits including strawberry are grown in 4.06% (20.124 hectares) of it. Mersin provides 33% of citrus and 6.55% of other fruit production of Turkey. [5]

Strawberry production started in 1970's in Turkey. In 1975, 16000 tons of strawberries were produced and the amount reached 145000 tons in 2002. [3]

The Mediterranean region is an important area for growing early season strawberries. Here, 'strawberry for the table' is grown. Strawberries were planted for the first time in Tarsus by Ms. Arife in 1970's. Productivity was low because of the temperature differences between day and night. Then, she planted strawberries in Silifke for the first time. Since the climate of Göksu Delta is appropriate for strawberry, Silifke became an important district for strawberry production.

Strawberry is the most important agricultural product determining the economics of the Silifke district in Mersin. According to registered sources 2 tons strawberry are reaped from each decare[5]. On the contrary, the local producers claim that these figures vary from 4 to 7 tons. Since 1989, the strawberry has taken the place of the banana with an amount of 56000 tons harvest per

year in Anamur district that has become another important area for strawberry production [6]. The basic difference between Anamur and Silifke is the scale of production. Anamur is an area for small-scale producers. When the scale is small, it is said that the quality of the product increases. But the quality of strawberry in Anamur is not very different from the production in Silifke. These two districts make Mersin the largest strawberry-producing city in the Mediterranean region. Mersin is one of the two cities besides Aydın, which is another city in the Aegean Region that exports strawberries to other regions.

According to the data provided from the City Agricultural Office of Mersin, 71392 tons strawberries were grown in 2004. This amount is almost half the yearly production of Turkey with the rate of 49.23%, and 2.23% of world production. These assets are registered values. On the other hand, according to local farmers, actual values are much higher.

Turkey is in seventh place with 145000 tons of production among the strawberry producers of the world in 2003. USA (944740 tons), Spain (262500 tons) and Korea (209938 tons) take the first three places in this sequence. Japan, Italy and Mexico follow them. World strawberry production between the years 1996 and 2003 increased by 16.5% and the amount reached 3198689 tons. During the same period of time, the production increase in Turkey was 35.5%. [2]

These figures show that strawberry production in the world and Turkey are increasing significantly. A significant amount of strawberries are produced in the Mediterranean region of Turkey; and Mersin, in this region, maintains its leading role in strawberry production.

What are the possible reasons for this rise? What are the problems and difficulties facing production during such an increase?

IMPORTANCE, DIFFICULTIES AND PROBLEMS OF STRAWBERRY PRODUCTION

Strawberries are producible in different geographies during four seasons. Its vitamin value is high. It is consumed, as well as processed, fresh. Investments in strawberries, compared to citrus, are turned into income in a short period of time. Income per unit of field has a higher profit compared to other fruits. Strawberry is appropriate to grow in small areas by family enterprises. Harvest continues for four months. Long harvest times help to turn the losses into profits. Strawberry production continues increasing both in Turkey and the World because of these features opportunities.

There are also difficulties for strawberry production. Heavy workmanship is needed in each step of strawberry production. This necessity increases labor and costs. Strawberry as one of the berries is frail when it is fresh. It is necessary to deliver and sell it right after reaping.

Besides the agricultural problems in strawberry production, from the industrial design point of view, industrial production of tools and machines for strawberry production has not existed in Turkey yet. Human power is used instead. The main problems are losses during reaping, delivering, storage and packing. During reaping, size selection and categorization are requirements to comply with world standards. Practical solutions have been sought for this process. The problem has not yet been solved. The problems being mentioned are directly related to industrial design.

The quality of strawberry produced in Silifke has reached world standards. The production, which does not yet use automation and branding, sorely needs the application of the design process and product development. The qualities of strawberries produced in Turkey are comparable with the products of the world, but packaging and presentation need to be developed. Strawberry importers in foreign countries have received requests from Turkish strawberry producers on these issues: Delivery with pre-cooling, better conditions for packaging and aesthetics of presentation. When these problems are solved, Turkish exports are expected to increase.

Does tool and machine production for strawberry growers exist either in Turkey or Mersin? How can farmers provide them?

TOOLS AND MACHINES FOR STRAWBERRY PRODUCTION

The agricultural tools and machines industry in Turkey has been the subject of research. The findings show that this industry does not focus on strawberry production. A list of production in Turkey between years of 1993-2003 for agricultural machines and tools consists of 128 items. None of these items were specifically produced for strawberry production [4]. Only 10 of the items, intended for other agricultural productions, may be converted for use in strawberry production. This research concludes that this specific industry in Turkey has not yet considered strawberry production.

As the Region of Çukurova is the most important agricultural area in Turkey, it would be expected that the agricultural tools and machines industry would be developed widely in this area. But this is not so. Only a few firms producing agricultural tools and machines exist in this area. Two firms from 18 are registered in the Trade and Industry Association of Mersin, and are active in the Sector of Machine and Appliances Production [9]. This shows that this sector is under-developed in Mersin compared to the production for other industries such as textile, fiber, glass, machines for work and construction, soda, raw oil, cement and premixed concrete, chemical fertilizers and vegetable oil. [5]

Industry in Turkey has not produced specific tools and machines for strawberry production. What can one do if industry does not provide for our needs? What does a strawberry producer do? One, who needs a tool, does it him/herself as in the time of pre-industrialization, or s/he has the tool made.

DO-IT-YOURSELF / CUSTOMER-MADE ACTIVITY

The problem solving talents of a human being are highlighted when/where organization, system and mechanization does not exist or develop. Basic needs for living are determined by life experience. One searches for solutions, evaluates existing conditions and then makes an object by him/herself with his/her practical intelligence. This process is called **Do-It-Yourself (DIY)** activity and the person concerned is called **Do-It-Yourselfer**. A do-it-yourselfer uses his/her production [7]. The object may be named a **find-set-use** [8]. During creation, if the do-it-yourselfer has support from another maker, workshop etc. to finalize the making process, in that case, the object becomes a **customer-made** product.

One do-it-yourselfer, who has a 30 hectares strawberry field, has constructed a series of tools for strawberry production. This is a perfect example for do-it-yourself activity. These tools indicate the

possibilities for tool design for strawberries.

A STRAWBERRY PRODUCER IN SILIFKE AND HIS FIND-SET-USE TOOLS

Have you ever met a do-it-yourselfer? It is possible to meet a do-it-yourselfer anytime and anywhere. I had met a strawberry producer in Silifke. Göksel Kaplan (GK), who has been producing strawberry for 10 years, started production in one decare.

His production has grown into 40 decares in the fifth year after starting production. This year he is growing strawberries in 30 hectares. He has grown 5-7 tons of strawberries per decare in his field in a season. His production is the second largest in Silifke. On the other hand, he is a do-it-yourselfer. He makes tools and machines in order to increase efficiency and make a profit out of labors. He has had some tools made. As he uses these tools, labor expenses are decreased. Efficiency is increased and so are profits.

Curiosity, talent, ability and the desire to do a good job make someone invent things. GK has observed and done research with a desire to solve problems and to provide for his needs. He made tools experimentally as he has found and examined some tools and machines, which have similar functions to what he needs. He used his own welding machine as the only tool and his strawberry field as his workshop. Sometimes, he has ordered tools made from other workshops. He has gained between 20-25.000 YTL/per year a profit out of labor costs after his recently manufactured 'Strawberry Pruning Tool' that cost him only 750 YTL to produce. The pruning process, which is normally completed by 100 workers in a month, was completed by one person within the same time of period. That means, the labor cost of 99 workers was turned into profit.

Could not GK import the tools that are not provided in Turkey? It is expensive to import tools and takes time. He prefers to solve his own problems to increase efficiency and profit, and to ease labor and growing costs. It took approximately three months of research and development time from beginning of the idea to the first use of the final product. The biggest strawberry producer in Silifke has shown an interest in GK's new tools. They have used GK's tools that they later reproduced themselves.

There are other tools made by GK in the last two years. These examples will be examined here in order to understand the functions and the efficiencies they provide. Tools used for under-cover and open-air production processes of the growing steps below are listed in order following:

- 1.Preparing Soil,
- 2.Mulching,
- 3.Seedling,
- 4.Taking care,
- 5.Fertilizing,
- 6.Harvest and packaging.

Some tools made by GK are entirely new for strawberry production in the region. A couple of them are already produced for other agricultural products and are then adapted by him for strawberries-except Strawberry Pruning Tool. His find-set-use tools are listed as follows:

- 1.Strawberry Pruning
- 2.Mulch Punching

3. Mold for Punching
4. Seedling
5. Top-Cover Punch
6. Seedling Planting Fork
7. Seedling Top-Cover Frame
8. Seedling
9. Top-Cover String
10. Nylon Roller
11. Top-Cover Cylinder
12. Green House Heater
13. Tractor Wheel
14. Canal Opening Apparatus
15. Fertilizing Apparatus
16. Mulching Apparatus

Some of these listed tools below are anonymous such as the Seedling Planting Fork. GK has provided them for efficient use by through development. Some tools and appliances below are originally made by him such as the Strawberry Pruning, Mold for Punching, Seedling Top-cover Punch, Nylon Roller and Top-cover Cylinder. On the other hand, some of them are bought and modified, for example, the Fertilizing Apparatus. GK says that more complicated tools are used by neighbors who have a large production like him. Simple solutions such as the Seedling Top-cover Frame and String are preferred by small-scale producers in neighborhood.

1. Strawberry Pruning



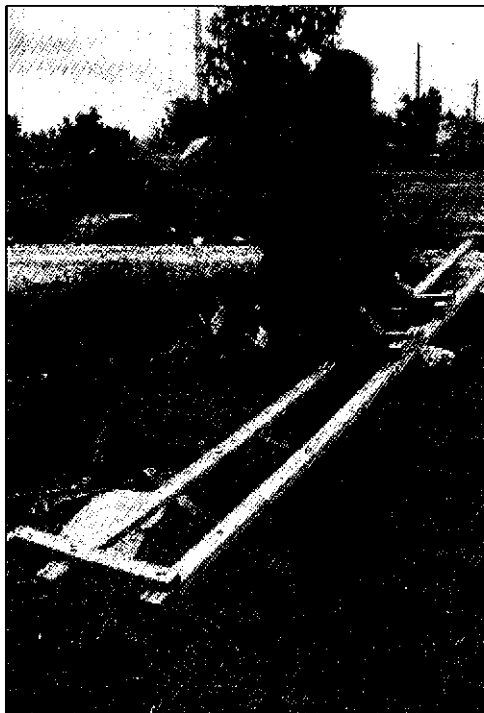
This tool is attached behind a tractor and leaves are cut off by spinning ropes under this tool. This spinning movement is provided by the engine of the tractor. When strawberry leaves are pruned, they are transformed into organic fertilizer.

2. Mulch-Punching



Mulching is the covering process of soil as bumps where seedlings are planted. This nylon cover is called Mulch. This cover is punched for the seedling. A metal cup in the bottom of mulch-punching tool is warmed with burning coal. Holes appear when this cup is pushed against nylon. Even though this tool looks practical, it takes more time when compared to cutting the nylon with blade.

3. Mold for Mulch-Punching



Planting holes on the nylon cover should be in an order. If the cover

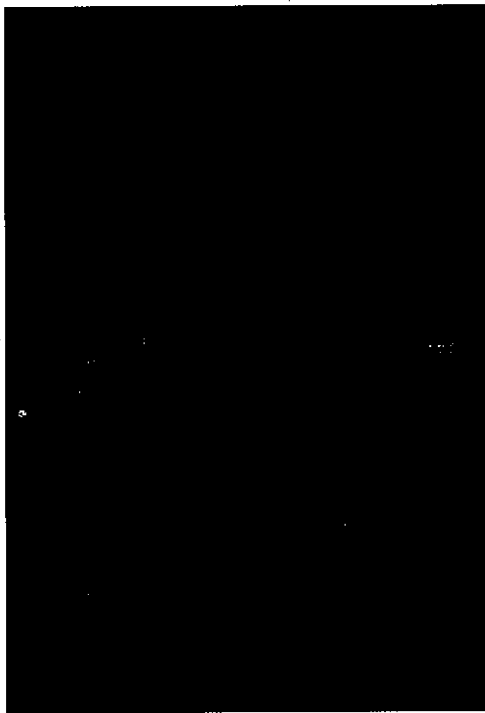
is a sheet rather than a roll, it is marked with this mold. After marking, holes are made by a mulch- punching tool.

4. Seedling Top-Cover Punch



Strawberry seedlings are covered to protect them from the cold. This nylon top-cover also needs to be punched to avoid sweating. Prior to this, the top-cover nylon was produced without holes, this punch made holes on it in an appropriate order.

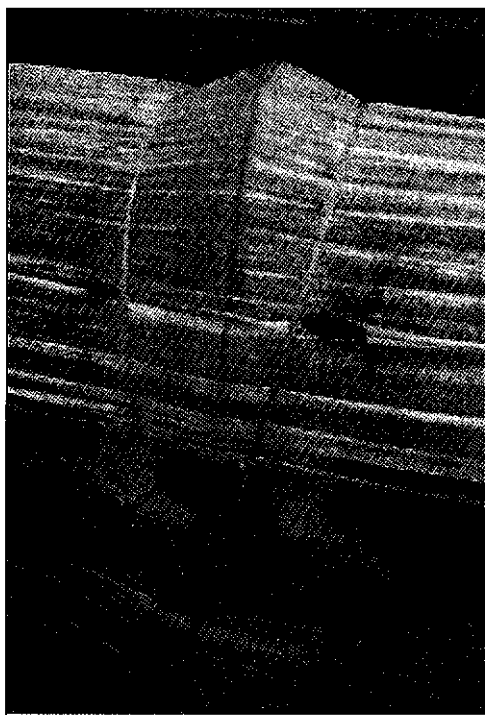
5. Seedling Planting Fork



An anonymous tool, the planting metal fork, was developed by GK.

It was off-centered and combined with a metal tube in order to fit in and not injure one's hand during planting.

6. Seedling Top-cover Frame



He produced a top-cover frame by redesigning an existing example.

7. Seedling Top-cover String



He replaced the rubber strings with rope and used shorter rubbers because the top-cover strings were made of rubber, which loses its elasticity under sunlight and is costly. This became a widely used

solution especially preferred by small-scale producers in Silifke.

8. Nylon Roller



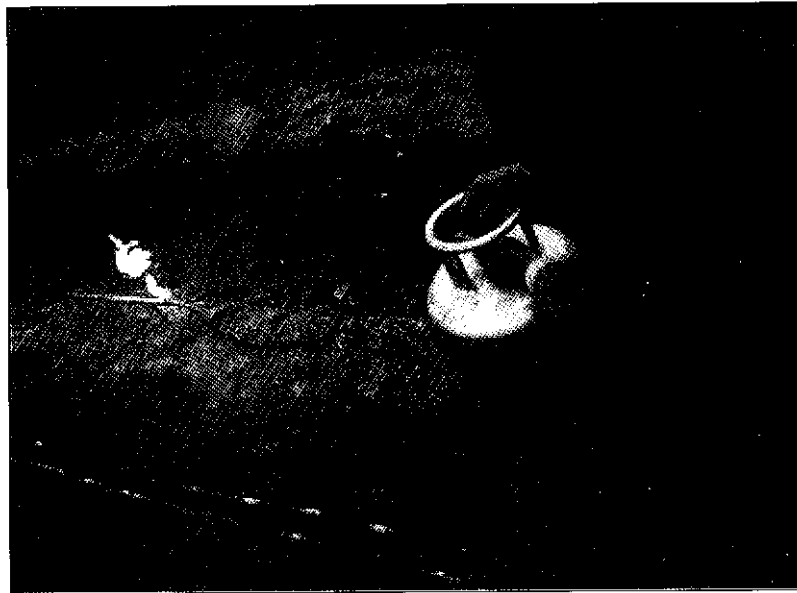
A metal roller makes it easier to remove the top-cover when the weather gets warm.

9. Top-cover Cylinder



This cylinder is used to stretch the nylon top-cover easily and properly.

10. Forcing House Heater



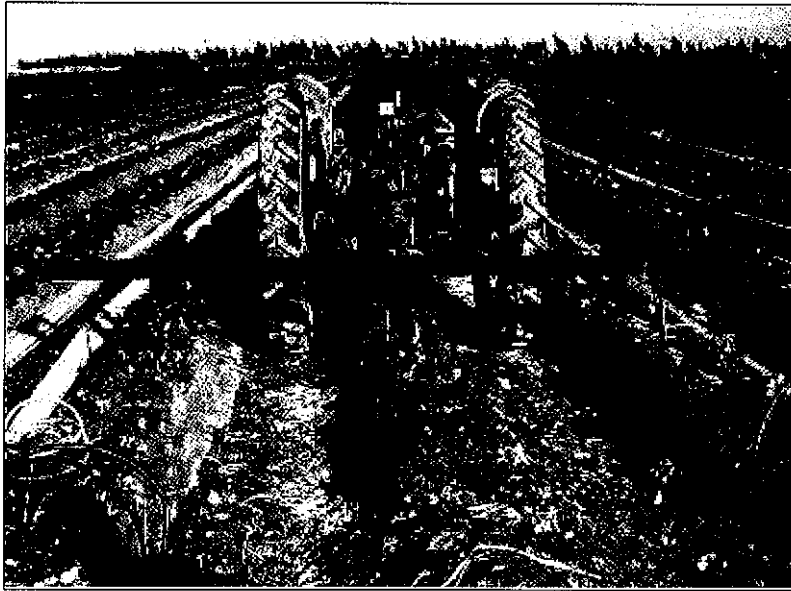
This heater, made by examining other existing examples working with gas and oil, is a simple and minimal solution. Similar ones have been produced by the Turkish machine industry [4].

11. Tractor Wheel



A tractor that is used for agricultural purposes by attaching different apparatus on it is also used for strawberry production during soil preparation and pruning. However, the standard width of its wheels is too large for the distance between two sets in a strawberry field. In this example, found-narrower metal wheels are exchanged with standard ones by modifying it's the tractor axis.

12. Apparatus for Lining Canal on Set



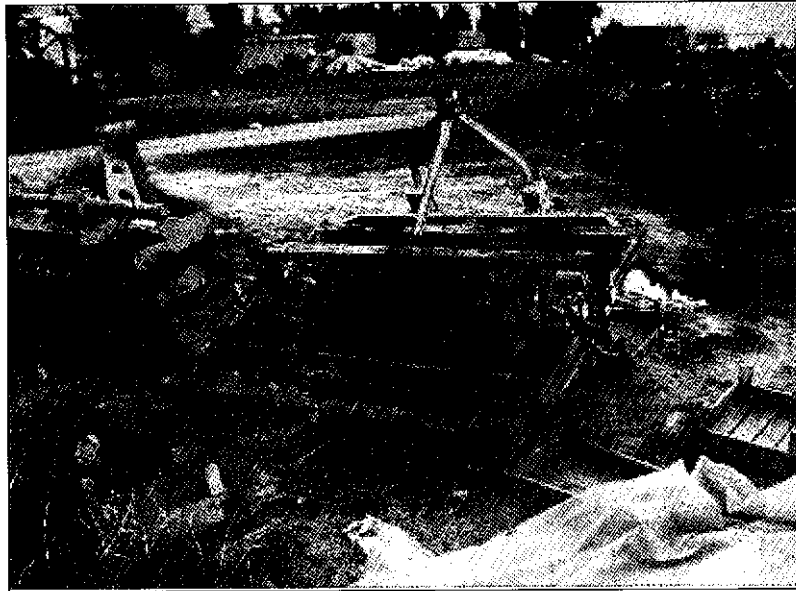
This apparatus is attachable behind a tractor and adjustable to dig canals on sets. This process of preparing soil was originally done with an adze. This apparatus has provided efficiencies in time and labor.

13. Fertilizing Apparatus



This apparatus was made as an attachment to a Set-Making Vehicle in order to fertilize during the soil preparation stage.

14. Mulching Apparatus



This tool, used to lay down the mulching nylon on sets, is originally made. It has been developed in three months for the first use. Further development of this apparatus took an additional twelve months. While GK was using it, he was informed that similar ones exist abroad.

These tools have been being developed step-by-step during the last four years and have still being used. After experiencing the use of each one, if a new idea appears that possibly increases efficiency, he moves for a new design and manufacturing process. The previous one is scrapped.

Why has the machine industry in Turkey not focused on manufacturing for strawberry growers?

Because, small-scale strawberry production by family enterprise has been common. As family members are working at fields, labor is cheap, workmanship is family oriented. Therefore, there is no urgent need for machines and tools. If there existed manufactured tools and machines to increase efficiency, would they have bought them? Certainly, they buy them if the manufactured products are economical and efficient. Even though, their need is not as urgent as that of big producers, tool design can provide better conditions and opportunities to both small and big producers.

If this research were enlarged to encompass the entire region or country, we would most likely find other do-it-yourself produced tools. However, this is based on the scale of strawberry production. Instead of looking at the rest of the region and the country, this research has continued in citrus gardens in order to understand the reasons for do-it-yourself tool production by comparing it to strawberry production. Find-set-use tools have even been found in citrus gardens.

FIND-SET-USE TOOLS FOR CITRUS PRODUCTION

Amount of produced citrus is greater than that of strawberries in Turkey. 2,493,000 tons of citrus were produced in 2002. 751,853 tons of citrus were produced in Mersin during 2004.

Citrus production needs less labor, and fewer special tools and machines compared to strawberry production. Pruning and harvesting are steps where heavy labor is needed during production [2]. After planting trees, agricultural production continues for years, unlike strawberries, which are planted every three years. Steps such as fertilizing are done by machine. The list below is intended for found tools and machines used for citrus production:

- 1.Tree-Supporter
- 2.Tree-Supporter Carrier
- 3.Pruning Shears
- 4.Fertilizing Apron
- 5.Fertilizing Platform
- 6.Citrus Basket

1. Tree-Supporter



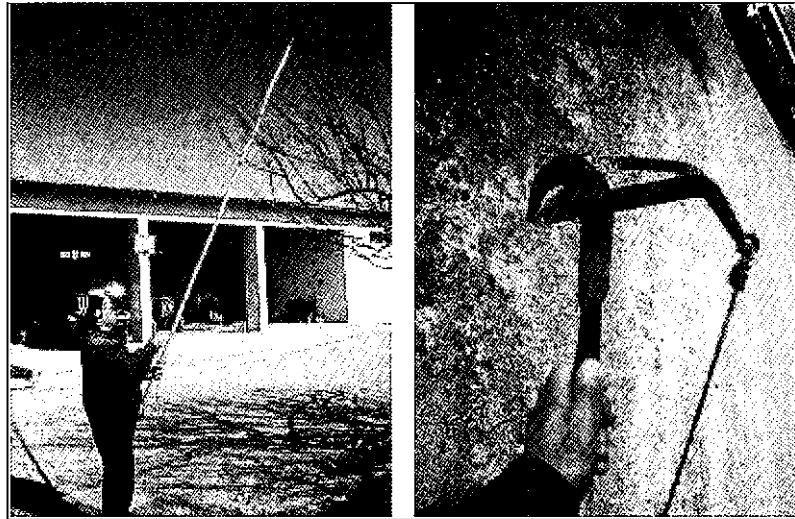
Plastic tip is a mass-produced item. These pieces are mounted on wooden sticks cut to size by the farmer.

2. Tree-Supporter Carrier



This wooden apparatus, being attached to a tractor, helps carry the tree-supporters in the field.

3. Pruning Shears



A shear mounted on the tip of a wooden stick is a mass-produced item. Cord providing adjustment of height is the farmers' solution.

4. Fertilizing Apron



This apron cut out of empty fertilizer sacs, is used to spread fertilizer by hand.

5. Fertilizing Platform



This platform was made by the farmer. It is attached to the medicating machine, which provides fertilizer.

6. Citrus Basket



A straw basket is transformed by covering it with fabric so as not to damage the citrus fruits.

I had come across a limited amount of do-it-yourself tools for citrus production. The Pruning Shears above are similar to self made-

tools for strawberries. It is the only one used for the heaviest step of production. Even though few examples exist, the properties of tools are the proof of this idea: Heavy labor necessitates a do-it-yourself activity where the industry does not provide solutions.

CONCLUSION

The potential of existing needs in agricultural production should be emphasized for agricultural design. The efficiency of the industry of agricultural tools and machines in the region of Çukurova and Mersin can be improved. Design and manufacturing should be primarily focused on the needs of this region. In the future, agricultural tools and machines may then be developed for national and international markets.

Tool and machine design and manufacturing are needed for strawberry production in Mersin. Problems in the packaging, storage and delivery processes for strawberries create new opportunities for industrial design in this region. In addition to this, similar design opportunities are possible for citrus production of the region.

Industrial tools and machines may be developed through collaboration between universities, techno-parks, entrepreneurs and farmers in the region. Mersin University as a local institution of this type could play a role as a pioneer.

New agricultural tool and machine designs can be realized by organizing a collaboration of experts, and evaluating opportunities of industry and new technologies. These types of applications will create models for other agricultural productions.

The potential leading role of universities will be realized through local foundations such as the local government, Trade and Industry Associations, KOSGEB (Small and Medium Industry Development Organization) etc. Would it not be possible for this consciousness-raising approach in agricultural design to become a government strategy? Why not? Is it not possible for it to become government policy? Of course it may.

For these developments, evaluating the value, data and collective knowledge of Do-it-yourself type of production and improvement is important for the future competitiveness of agricultural tools and machines.

Feeding the agriculture industry with industrial design increases the quality of manufacturing in Turkey. Agricultural products may then be enabled to take their place in the worldwide market.

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LESS REALISM: MORE MEANING HISTORICAL AND PSYCHOLOGICAL REASONS FOR AVOIDING PHOTOGRAPHIC IMAGERY IN WINE LABELLING AND PROMOTION.

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ABSTRACT

I scrutinise the efficacy of photography versus illustration to impart accurate and/or evocative messages regarding the promotion and packaging of wine. I am proposing that high levels of representation in wine promotional design (through photography or very literal illustration) are capable of specific reference to region and time but lesser degrees of representation allow for more intense and distilled meanings, and greater intellectual and emotional impact. The question is how does this happen? Are the reasons physiological, psychological, sociological or a combination of these? Another issue discussed is that, in graphic design education and practice, type takes precedence over image. 'Typography' as a defining term has become almost interchangeable with 'graphic design' and while font choice is seen as paramount, image choice is left to instinct, or worse, the photograph is prescribed for all situations. Many wine label designers favour a type only approach and I examine historical reasons for this. I make the case that food and wine labelling, promotion and packaging are special situations that require an approach melding type with image rather than avoiding image or merely overlaying it. Using examples I examine appropriate contexts for representation and visual distillation.

Keywords: Wine, Label Design, Realism, Representation, Photography, Distillation of Images, History, Psychology.

Introduction to Wine Imagery: Historical Reasons

Design of wine labels is virtually the only area of publicity to avoid the use of photography. Wine design is in an enviable position in this regard. The design world outside of the wine industry, lacking immunity against the vagaries of fashion, is undergoing a revisitation of the aesthetics of modernism without the rigour of modernism's original manifestoes. Aspects of these modernist aesthetics, including the use of photography are just beginning to find their way into wine design imagery (Figure 1), and I discuss here reasons to be wary of this encroachment.



Figure 1. Label for 'Old Rowboat' California 2004, Zinfandel (designer unknown), which both looks and reads as more appropriate for a whisky label.

In the course of my PhD research, I am examining, among many other aspects of graphic design, the packaging of wine. The thesis is concerned with the use of images in communication design. The research has developed out of the conjecture that less reality in an image equates to a more distilled and intense meaning: that levels of representation in graphic design imagery have a profound influence on the kinds of messages imparted, and paradoxically,

that less accurately rendered images have the potential to communicate more accurately. The questions are how does this happen and in what ways does it happen? Are the reasons physiological, psychological, sociological or a combination of all of these? The essential problem under scrutiny, as it pertains to the graphic design discipline, is the overuse of photography in visual communication.

In this paper I will discuss how this research is appropriate in the study of wine labels and their imagery, examine historical reasons why these labels rarely utilise photographs and good reasons to continue this practice.

Finally, I will look further at the problems associated with photography as a general communicative tool. Ultimately, this is kind of a cautionary paper which tells those in the wine industry to be a little wary of those in the design industry.

The avoidance of photography in the design of wine labels is primarily, of course, a function of history. The making and labelling of wine precedes the history of photography by many centuries. It is fortunate for the wine industry that it is much older than the design industry (which dates merely from the 20th century) because there is one aspect of the design industry which is fundamentally flawed, and that is its understanding of image. By the time photography was invented as a medium for capturing the visual world, the wine label had become a medium of its own, steeped in tradition. Outstanding among these traditions is the use of fine calligraphy which can be traced back through monastic wine-making.

This almost sacred lexicon of label designs has become an unwritten and unstated prescription as to what can and can't be done with a wine label. In the course of designing a new label, in order to generate new ideas, the designer quite naturally refers to wine labelling history and examines what has gone before. Using this unthinking, instinctive approach is appropriate as far as it goes. Should such instincts fail us however, we need some solid social and scientific grounding on which to found such practices. Wine label design is constrained by its own history but more than mere history should prevent straying from the central styles of these labels. There are sound reasons not to move too far from the classical or post-modernist styles prevalent in this niche of the design discipline. These reasons will be examined here, first, sociologically and second, psychologically.

Wine label design: Sociological Reasons

Traditionally food is bought at market from the produce on display. Fresh foods must be assessed visually, as much as through touch and smell, before purchase: an apple may *feel* firm and crisp but if it is blue in appearance it will likely not be purchased. This practice of buying fresh, unprocessed food from an open-air market is somewhat diminished in the West by the overwhelming presence of processed foods. Packaged foods and fresh foods are now separated out from each other in the supermarkets of the world. Those foods, which are more strongly associated with fresh foods and fresh food markets essentially, have good historical reasons to limit their packaging to allow for this visual assessment. If the food is not greatly processed, or if that processing is essentially a traditional one, as in wine-making or olive-pressing, these are also good reasons not to over-process the packaging. Wine and olive oil both look appetising in their final forms and their packaging will do well to reflect this fact through large transparent spaces (the glass

of the bottle) that reveal the produce to the best effect (Figure 2). The corollary of this is a small label. So the surface area with which to impress needs to be limited. The area for a photograph then is limited. In wine imagery, the most impressive photographs are those which give an impression of a region through a particular landscape. There may be good arguments for such images when they can be reproduced at a large scale for conferences or expositions, but confining landscape photography to a tiny surface such as a wine label is self-defeating. This then, is the first argument for a distilled, simplified image. Space is at a premium, so the typography of the label cannot afford to merely overlay illustration where it exists but must meld seamlessly with it (Figure 3).



Figure 2. Label by Origin Design¹, reveals the contents of the bottle to remarkable effect.



Figure 3. label by Tucker Design¹, seamlessly and elegantly unites typography with illustration.

The visual stylings of wine labels have gone from classic to post-modern; by-passing the whole modernist movement. Modernism is design for the masses and wine is not for the masses. Even when wine is mass-produced it should not give that impression. Wine drinkers do not wish to drink wine that looks like it was made for the masses.

And yet, of course, it would be every wine manager's dream to shift masses of the stuff, and the realities of the business are that it benefits from economies of scale just like any other industry. In the market of which I have some experience (Australia and New Zealand) a mould for a new bottle shape costs in the vicinity of \$80,000. This has been beyond the budget of my own clients. Another approach to distinguish a client's bottle from its competitors is the frosted look. To achieve this through sand-blasting in my country the client must be prepared to treat three semi-trailer truck-loads of bottles, again elevating the budget and bottling run beyond the reach of my clients. It is precisely the mass-producers of wine who can afford these means of product differentiation, and yet, visually, conceptually, ideologically, wine belongs with exclusive, luxurious products created in the hand-crafted, time-honoured, individually tailored tradition.

As with all facets of communication design, if a pragmatic approach to visual problem solving is taken, the composition of a wine label should best communicate visually those aspects of the vintage that the client and designer have agreed upon to promote.

In this equation there exists a utilitarian angle with regards to the

promotion of the wine: the designer is attempting to provoke the consumer into buying the bottle. However, the design itself can never appear expedient. This is not information or instructional design but more like experiential design since the very circumstances of wine's consumption are indulgent or exultant, celebratory or contemplative.

With regard to the label the designer needs to be mindful of the consumer's viewing situation. The label may be viewed while browsing at the bottle-shop, the cellar-door or the 'off-licence', where it must compete visually with other labels. Later, of course, it can be more leisurely perused at the table. It is the only product whose commercial graphics may be seen 'at table' in the finest restaurants. It is the duty of the designer to help sell the wine through differentiation, but also to enhance and harmonise with, through type and image, this fine dining experience.

Wine is not primarily about sight but about taste and smell. Even sound, the wine going into the glass, and feel, the body of the wine in the mouth and in the stomach, the heft and cool of the bottle in the hand (Figure 4), should be on a par with the visual aspects of the wine-drinking experience. Wine is an experiential realm where vision can and should take a back seat. Type and image on the label must be in sympathy with their particular wine and do their utmost to enhance the experience but by no means overshadow it.



Figure 4. Label by Cowan & Assoc.¹, says much about the physical experience of the wine and the bottle through graphic device.

Photography, associated as it is with modernism and not classicism has no place in this equation. Photography is a great democratiser: every image to some extent shares a similar surface through photography. Every colour photograph reproduced through printing will always contain percentages of the same four colours. This democratising force was one of the reasons the modernist designers of the Swiss School endorsed photography. Democratisation is anathema to wine.

The most mechanical problem of photography is its limitations in print. A label that is largely photographic has no texture but is flat and featureless. Photography, reproduced using four-colour process printing, can never begin to match the luxurious textures, the complex layering of paper stocks and varnishes, nuance of

specialist spot and metallic inks and embossing of the a typocentric or illustrated label.

In the end, photography is just a surface. A kind of sheen put on things that indicates a certain amount of the same thing regardless of subject. Rick Poyner, writer and editor of design magazine 'Eye', has observed of particular kinds of photographs that 'Most consist of a single prominent subject and a depthless pictorial space that the eye can absorb at a glance'². In other words the use of photography can severely limit product differentiation through label design.

Design for wine should be like poetry (Figure 5). Poetry refrains from spelling out the meaning of words but leaves something of this work to the reader. The reader brings to poetry or design his own meanings and associations. This gap in communication in poetry or design is actually what allows it to resonate with each reader. Design theorist Beryl McAlhone tells us "It is as if the designer throws a ball which then has to be caught"³ The stereotypical poet is a wine drinker precisely because the romance of wine and poetry go hand in hand. Photography, compared with typography and illustration has a far reduced capacity to be evocative in this way.

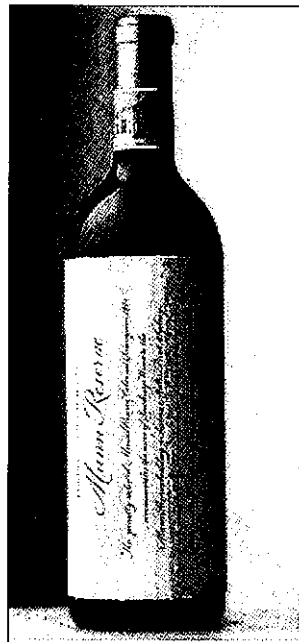


Figure 5. Label by Lewis Kahn¹ includes poetically worded copy prominently on the label.

Wine Label Design: Psychological Reasons

I discussed above the problems of photographs on wine labels, firstly because photography sits uneasily in small spaces and secondly because it sits uneasily with the rich visual history of wine labels. I alluded to photographs perhaps having a place in wine promotion where they can be output at large sizes in order to convey something about wine regions at an impressive scale. But even in such circumstances there are problems to overcome (Figure 6).

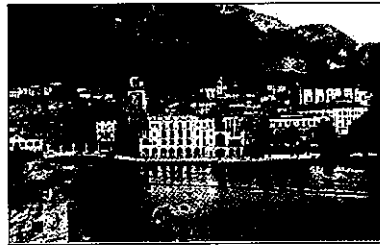


Figure 6. Illustration in this olive oil label, using a little artistic license allows for a condensed version of the landscape to include those aspects that make Riva unique. Note that the photograph of the town cannot be so inclusive.

As discussed, photography is a modernist surface; completely part and parcel of Modernist visuality. It can be seen as the *prima* means of image making in the work from the Bauhaus, in the photomontages of the Russian Avant Garde, and through the gridded layouts of the Swiss Typographers. The Swiss School tell us through design education textbooks that there is no place in design for any kind of image other than photography. Notions of tradition, exclusivity, luxury, privilege, which precede the invention of photography -notions essential in the marketing and perception of wine- were anathema to these designers.

Joseph Müller-Brockmann, Swiss designer and author said, 'photography provides an objective picture of material reality and thus conveys an impression of authenticity. It requires no effort to understand its message. Where photography is concerned, the modern publicity expert need not hesitate to exploit all its different modes of expression in order to influence opinion. When the camera records a situation, it furnishes objective information on an event, whether it shows a total picture or only a detail'⁴. Müller-Brockmann went on to warn against the use of illustration in design stating that it reflected only the subjective viewpoint of the illustrator. Most tertiary trained graphic designers have been taught from such textbooks or similar, accepted volumes on design education written by like-minded modernists such as Donis Dondis and Erik Spiekermann.

To examine the problem of photography in communication from a psychological angle, let us assume that photography is the visual analogue of reality; what Susan Sontag in *On Photography*⁵ describes as being 'directly stenciled off the real, like a footprint or a death-mask'. What, in theory, could possibly be wrong with using photography for communication purposes? Let us entertain for a moment the notion that reality might not be the visual ideal with which to communicate to the human visual system. What aspects then of the visual world might be unnecessary for the recognition and understanding of it?

Nature, as far as the eye and brain are concerned is not something that can be taken on face value. As far as recognition is concerned there are two problems to be solved by the visual system in order to recognise aspects of the world around it. Firstly, the object

constancy problem, or how the eye and brain know what constitutes a particular object from many visual angles, and what separates or connects that same object from or to its surroundings. Secondly, the homogeneity problem, or how the visual system helps determine the difference between similar things such as chardonnay grape or a chenin, or an even more subtle problem, the difference between John and Peter or Achmed and Reza.

Through a study of caricature and its paradoxical ability to render a person more recognisable than the person himself, Australian psychologist Gillian Rhodes has found a key to unlock the way in which the human visual system works⁶. Rhodes explains how the visual system in concert with cognitive apparatus allows the brain to map new visual input against stored 'norms'. These norms exist for whole ranges of visual information and are expanded upon with experience of the visual world. Where the new visual information differs from the norm, the mind tends to store these differences in a form exaggerated beyond their actual appearance. Rhodes explains that extreme signals -those that do not occur in the natural world, and are therefore not reproducible through photography- are more noticeable, more discernable, and/or more memorable than less distinctive ones. (p. 61) She explains '...that these distorted images could evoke "equivalent" or even heightened responses without resembling the original in any straightforward way.' (p. 25)

'[Visual] stimuli that exaggerate some critical property of the natural stimulus, such as its size, contrast or number, often produce an enhanced response ... This preference for extremes seems to be a fundamental feature of recognition systems, and one that imposes important constraints on the design of signals. (p. 82)

Similarly, a 1956 study by American Psychologists Ryan and Schwartz showed that drawings were in some situations more effective than photographs with regard to time taken to recognise features and positions of particular objects⁷.

According to Rhodes, the ability of the human mind to interpret and understand exaggerated drawings better than photography 'raises an even more intriguing possibility. If drawings can be interpreted as externalisations of mental representations, then ... those representations might themselves be caricatured. If so, then caricatures would be effective because they match the memory representations better than undistorted images!' (p. 91)

Conclusion

Photography can only show us the world as it is. To some extent, all vineyards look the same. What separates one place from another might not be the outer appearance of that place but its rich history. The label for Peñalolen, a Chilean wine (Figure 7) uses photography to a very memorable effect. Here the exception proves the rules I have argued for, because in this instance photography has been used to capture an artifact that has already been visually distilled for us.

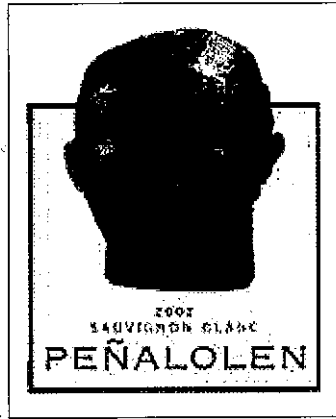


Figure 7. Peñalolen 2002 Sauvignon Blanc label from Chile shows an artifact unique to this wine region.

Any well trained photographer or draftsman can show us the world as it appears on the surface. It takes an artist of singular skill to discover his own most powerful mode of expression and distill his work to this point (Figure 8).

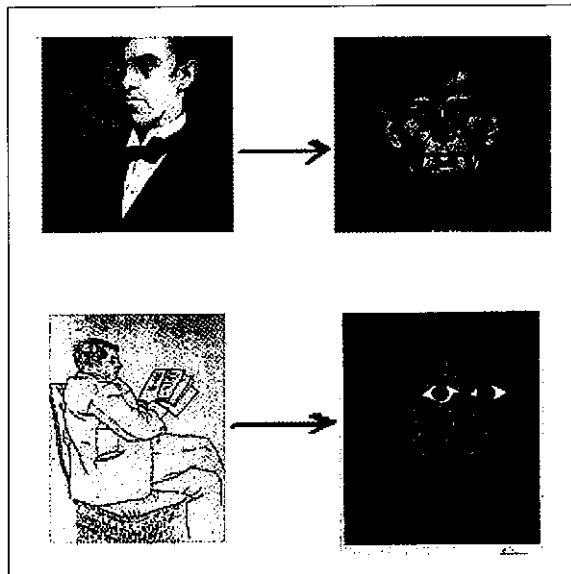


Figure 8. Through the work of Lowry (top) and Picasso (bottom) we can see that a progression from conservative representation to a more distilled and powerful mode of expression is a natural one for skilled visual artists as they begin to understand the limitations of realism.

If we consider communication an effective triumph of signal over noise, designers must amplify the signals their audience is watching for. Designers need to partially solve the problem of the perception of the world on behalf of their audience: to filter out from reality those aspects, which are unnecessary for the understanding of a message, or those aspects of reality that do worse: that actually obscure the message. Photography has few such filters.

So it is to wine's benefit that photography has not become the *lingua franca* of its imagery as it has elsewhere in visual design. Wine labels have a rich history which is written largely in typography. Their avoidance of photography lends more importance to the written word and the drawn image. Linguistic experts have long recognised that written and spoken language does not reflect reality but structures it. Most words describe relationships between things

or completely invisible abstractions; few words exist merely to name 'things'. Photography can only show us 'things'. It merely points at subjects in order to communicate and anyone who has tried to communicate to someone who doesn't speak their own language will know that pointing at things is no way to communicate at all.

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FASHIONABLE FOODS AND TASTEFUL FASHIONS: FOOD IN THE KITCHEN OF FASHION DESIGN

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ABSTRACT

The food being a core element of life culture provides an aesthetics of living through various means of representation from the environment that it has been consumed to the package in which it has been stored and presented. The need to beautify and to promote the healthy food connects it more closely to the fashion world; There are fashions of consuming and presenting the food; 'return to nature' tendency brought forth the ecological gourmet culture which is followed by the global circuit of local food, and ended up with the organic food trend. The Vogue magazine is publishing the food supplement biannually to represent the new and trendy foods from the eye of food photographer in a similar manner that of the fashion photographer interprets the season's new looks. In the case of perfume bottles the link between the fashion is even more visible; the crucial need to store and package the perfume, the solidification and morphing the natural product to a tangible object is achieved through the design of it's bottle. Having a role of recalling its actual smell, the bottle creates a desire to consume the natural product.

Shaping the liquid components of the food culture like olive oil or wine draws a similar case. In that case the bottle functions to recall the actual taste of the product and creates an appetite to consume it. Moreover the ritual of consuming wine becomes more evident than the actual product itself. It is a component of taste, tasting, the glass used, service and appropriate gesture of holding the glass ect. We activate our five senses to perceive and consume the food. The feelings created through the senses are not only sought for the end product, but also could provide a valuable insight to understand the feelings of designer in the design process. The emotional response of these senses could improve the creativity and observation skills of a designer for different design experiences.

Based on the relation between food and design culture a practice based research has been done for fashion design experience .In the first stage a group of fashion design students are asked to use their five senses to create their individual textures, forms, colors and compositions based on their personal feelings. In the following stage they are asked to use their senses to perceive, feel and interpret certain types of foods to experience different kind of colors, textures and lines to translate in to fashion design experience. It is clear that not only the end product of design, but also the process of designing could activate senses stimulating alternative design experiences.

Keywords: Fashion, Food Culture, Five Senses, Design Research, Creativity.

The food being a core element of life culture provides an aesthetics of living through various means of representation from the environment that it has been consumed to the package in which it has been stored and presented. The need to beautify and to promote the healthy food connects it more closely to the fashion world; there are fashions of consuming and presenting the food; 'return to nature' tendency brought forth the ecological gourmet culture which is followed by the global circuit of local food, and ended up with the organic food trend. The Vogue magazine is publishing the food supplement biannually to represent the new and trendy foods from the eye of a food photographer in a similar manner that of the fashion photographer interprets the season's new looks. Food becomes almost a piece of art work with its visual configuration..

In case of shaping the liquid components of the food culture like

olive oil or wine, the question arises as "how to solidify the food to present it?". In that respect, perfume, wine and olive oil could live the same destiny. Needless to say that the link between perfume and the fashion is more visible due to the crucial need to store and package the perfume, the solidification and morphing the natural product to a tangible object is achieved through the design of its bottle.

Having a role of recalling its actual smell or taste, the bottle as design entity creates a desire to consume the natural product. Moreover the ritual of consuming wine or olive oil becomes more evident than the actual product itself. It is a component of taste, tasting, the glass used, service and appropriate gesture of holding the glass. We activate our five senses to perceive and consume the food. The feelings created through the senses are not only sought for the end product, but also could provide a valuable insight to understand the feelings of designer in the design process. The emotional response of these senses could improve the creativity and observation skills of a designer for different design experiences.

Based on the relation between food, fashion and design culture, a practice based research has been done with fashion design students. The project has been run with 2nd and 3rd year Fashion Design students of Izmir University of Economics, Faculty of Fine Arts and Design. In the first stage, the students are asked to use their five senses on wine or olive oil to create their individual textures, forms, colors and compositions based on their personal feelings.

The food is one of the essential elements to experiment our senses. Therefore in the first part of the project, the sensorial experience has helped to express designer's feelings, emotions and reactions against the source of inspiration. By choosing an element, object or form of food related to wine or olive oil, the students are asked to express and visualize their sensorial experience through association of words with images.

Within this sensorial experience, the first contact with the chosen element had become the starting point for the design process; in other words the feature which attracts or motivates one of the senses of the experienter/designer; its shape & color/seeing ; its texture & skin/ touch; its voice or sound/hearing; its odor, smell/smelling; its taste/tasting. Through that experiment the association of the chosen element of the food, with a certain culinary experience has been built.

Workshop on senses

To support the sensorial experience, the students are asked to bring materials and objects that have colors, textures, smell or sound that they can associate with the food they have selected. Through the use of their senses to perceive, feel and interpret certain types of foods to experience different kind of colors, textures and lines, the students created analogies to be transformed in to design practice. It has been clear that not only the end product of design, but also the process of designing could activate senses to stimulate alternative design experiences. At the end of the workshop each student came with a certain approach being more focused to certain senses they activated to perceive and experience wine or olive oil.

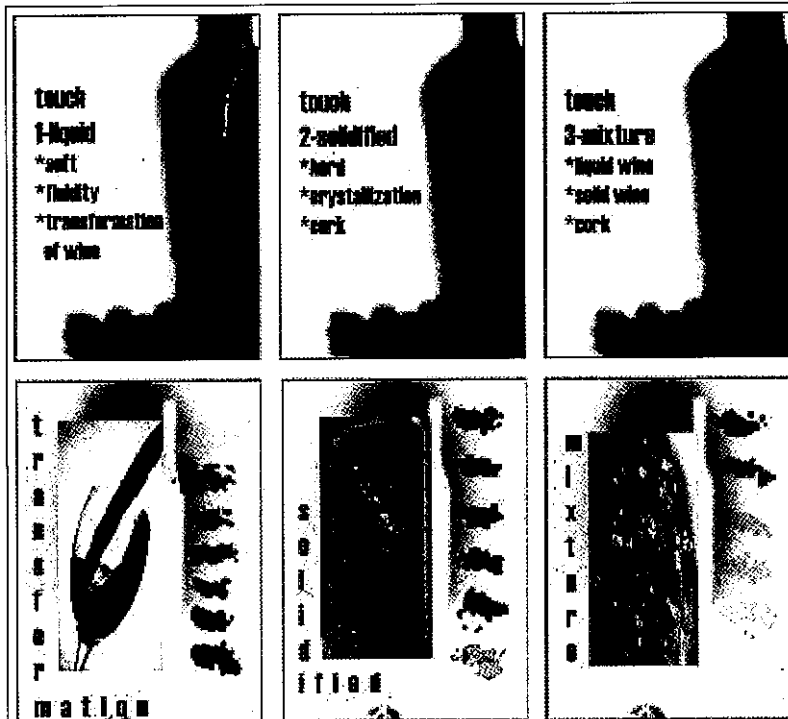
As a means of presentation of the ideas and feelings throughout the sensorial research the mood boards were used to visualize the concept. The images produced by first hand observations and

sensorial experiments on the food are combined with other conceptual images and some textures and fabrics. 'Mood boards represent a visual and multi-sensorial (texture, movement, sound) means of communication, which may have value in assisting communication and inspiration during the design process.' (McDonagh and Denton 2005).



"Deformation" by Ersel Örgü:

The texture of wrinkled olive is associated with texture of aged skin of olive producers mainly through the sun expose and fabric's texture.



"Transformation" by Duygu Atalay: Ontological experiment by touching and testing liquid wine, solidified and crystallized wine, and mixture of these with cork.



"Re-Vintage" by Ekin Erez:

Textures and colors of barrels which serve as the main instruments of wine making is taken as inspiration.



**"Life Elixir" by
Simge Yükselen:**

Purity of olive oil is translated into the idea of "purification" of body and soul.

Through the visual records of multi-sensorial and ontological experiences, the mood boards that students created, gave clues about their inspiration from a certain aspect or feature of olive oil and wine such as raw product's texture through its touch, instruments used in wine making and preserving, the taste of olive oil and wine, ontological experiments on physical features and the ways of solidification for a possible design experience.

Cultural Identity of Wine and Olive Oil

The connection between food and culture is clear. In a broadcasting advertisement of an Italian kitchenware company it says: "The Italian flag takes its colors from mozzarella, tomato and sweet basil/basilico". "The culinary culture is a producer of national identities in representation of shared symbols."(Actis 2003: 54)

The association of cultural value with the physical features and aesthetical elements of food could be exemplified through the relation of wine and blood. Scientific studies on benefits of wine to health, state that wine may function as the blood of life, by lowering the health risks associated with high blood pressure (<http://www.webmd.com/content/article/94/102702.htm>).

Association of wine and blood has its roots in the history of ancient civilizations, related to wine making and viticulture. For example the connection between wine and blood in early Egyptian culture has been represented by Shesmu, ancient Egyptian demon-god of the underworld. Being known as a slaughtering demon, god of precious oils for beauty and embalming and a god of the wine press, he was thought to be a helper of the justified dead, offering them alcoholic red wine to drink. Yet he was also seen to be a demon who would tear off the head of a wrongdoer, throwing the head into the wine press to squeeze out the blood as if it was grape juice (<http://www.crystalinks.com/shesmu.html>).

The most common relation of wine and blood comes from the Eucharist theology of Christianity in which Blood of Jesus is accepted as the wine. The importance of this association was not only coming from the theological belief, but also from socio-economical reasons. At a time making and selling wine had been declined along with the decline of Roman Empire by AD400, viticulture could have recovered that crisis thanks to that sacred identity of wine promoted by Christian church. Especially the monasteries around the Burgundy region in France, and Benedictine and Cistercian region in Germany became the main centers of making and selling wine. (Doğer 2004: 35)

Probably taking its roots from that symbolism, today wine is associated with blood in the expression of closeness of body and

soul:

*"I got red blood, and I got blood red wine Which I bring you,
when the snow is heavy on the ground If you say where go
I'll just, wrap my cloak around.."*

from the lyrics of **"Blood Red Wine"** by Rolling Stones

Apart from the spiritual meaning, wine has become a means of social gathering. Grape harvesting has not only been a sign of taking the first fruits of wine making and commerce through its all manual instruments within the local and traditional ways of wine making, but has also become a means of celebration of the fertility of the land, thus one of the fundamental social arenas of wine serving and drinking. The scenes of harvesting and pressing wine have always been subject to wall paintings and carvings of Egyptian culture, and amphoras of Anatolian, Greek and Roman culture.

The most meaningful contribution made by Greek culture to wine was the devotion of a God, Dionysos as the God of wine and entertainment world in Greek mythology. Apart from his mythical character, Dionysos's gift to today's culinary culture has been the custom of tasting wine when the bottle is opened by the owner of the dinner, due to the "share of Dioynsos" which had been known as a symbol of tasted wine during the wine drinking session-symposion by the guests of a typical Greek dinner, which was opened even with a pray for Dioynsos by raising the glasses in a toast (Gürsoy 2003: 22).

In transition from authentic local production of wine to its industrial production and globalization, its cultural value and associations has also been subject to change. A critical change addresses the fact that 'the family origins and its authenticity are forgotten with an emphasis of quick satisfaction and standardized tastes'. As Jonathan Nossiter puts it clearly with his documentary film "Mondovino" (2004) through his main characters such as French vintner Aimé Guibert saying "Wine is dead". In developing an attitude towards globalization Nossiter is not alone. Slow Food Movement which is founded in 1986 in the foothills of Italian Alps, in an area known for its red wines and white truffles, concentrating on dedicating to preserve and support traditional ways of growing, producing and preparing food had declared its manifesto in direct response to the opening of McDonald's restaurant in Piazza di Spagna of Rome; *"A firm defense of quiet material pleasure is the only way to oppose the universal folly of fast life"*. In the mid 90s the slow food movement, developed a new political dimension called eco-gastronomy (Stille2001) being a dynamic layer of agro-food systems, become a sign of a social experimentation as a creative community (Manzini 2005: 4).

On the other hand global circuit and cross-cultural consumption of local and authentic food, created another kind of "otherness" coping with the logic and practices of Orientalism." The presence of 'Other' in the global food market exposes new 'exotic experiences', leading to an adaptation of process of distinction as overexposed experiences and especially culinary experiences that are viable in most classes become uninteresting in bourgeois taste" (Actis 2003: 62).

Another critical transformation in socio-cultural dynamics of culinary culture has been gender roles and regulation of the female body in consumer society. It is ironical to remind that it was forbidden to drink wine for women in the Ancient Greek and Roman culture whereas today wine drinking and tasting became a shared activity

between men and women having a more unisex and democratic character rather than being male dominated activity. In other words the contemporary image of metropolitan women eating outside and raising their glasses in a toast with men became a sign of "mobile liberation of the body from the female domestic space" (Actis 2003: 26).

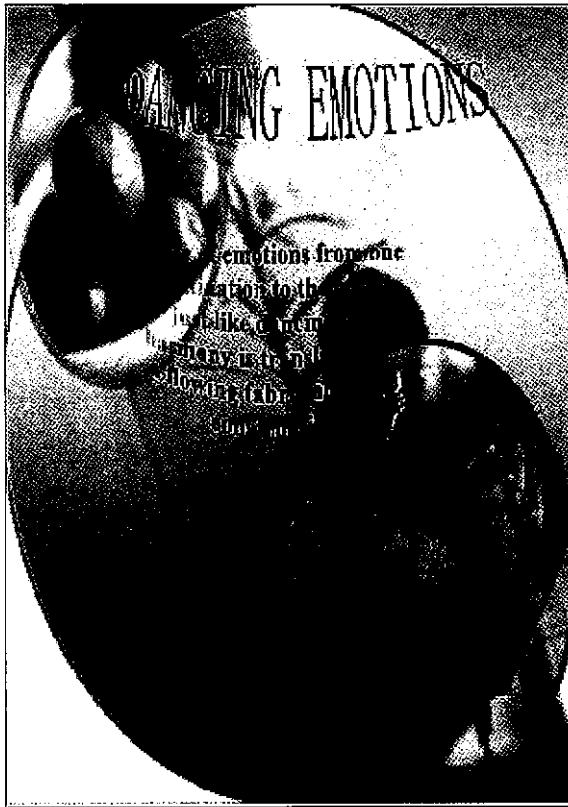
On the other hand freedom of female body has been subject to regulation and disciplination by patriarchal norms of femininity in the capitalist society. 'Fashion has become an important means of the objectification of the female, at an extent that *feminization* was required to designate the aesthetics of fashion.' (Lehmann 2000) In a similar way culinary culture related to wine and olive oil designating new fashionable modes of consumption, through popular means of regulation of the body supported by the discourse on benefits of a fit body.

Especially in the case of olive oil which is known as "golden oil" throughout the history, not only because it was a remedy for the physical body, being a miracle oil for beauty of the skin, but also the symbolic value and spiritual power of the olive branch believed to bring victory, peace, happiness, sacredness, prosperity and generosity. Therefore the new image of olive oil in the capitalist society can be easily supported by the historical knowledge and its cultural heritage as a representation of Mediterranean culinary culture and by produced legends on the benefits of olive oil for bodily experiences.

The relation of olive oil with bodily experiences for ornamentation of the body was much more evident than its use in culinary culture through its historical evolution. It was known as the oil of goddesses and divine with its sweet smell, special taste and miraculous power of seducing, used to rub the body. The oil's fluid shiny character was always represented in an analogy with the rhythmic movements of the dancing bodies and, touch and look of a fluid, shiny fabric in Greek mythology. Homeros was even taking this metaphor further and makes us think that dancers' and young girls' dresses are made up from oiled yarns, by telling us the oil was dripping in the floor from the hems of the skirts of the girls. (Hehn 2003: 75)

The poetical and aesthetical character of the olive oil, as represented and seen was coming from the metaphors related to visual senses rather than its smell; thus the relation of oil with anything as the beauty of the body or skin was much more related to its visual texture with the definitions as oily, shining, brightly and gleaming.

The traditional use of olive oil in relation to body within the traditional fight, oil-wrestling presents another character of the miracle oil. The custom of pouring olive oil to the body by wrestlers has more functional purposes rather than decorating the body. Besides helping to prevent rival's easy attacks and making the fight more struggling and more longer with the slippery bodies, the use of a thick layer of olive oil on the body was helpful for warming-up and softening the wrestler's body, thus protecting the skin from possible harms and injuries caused by falling on the ground. (Ünsal 2003: 62)



"Dancing Emotions" by Nimet Erkam:

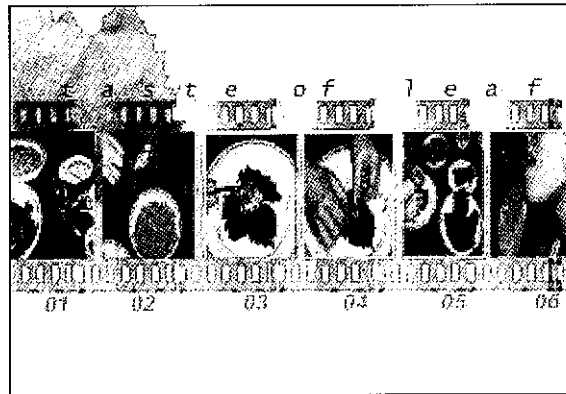
The metaphor between the olive oil, bodily movements of dancers and shiny and fluid texture of the oil is used.

Cultural Research for Design Concept

Acknowledging cultural value of wine and olive oil, the second stage of the project is formulated to make a research on culture, lifestyle and culinary habits with an understanding of olive oil and wine in terms of cultural heritage, life culture, contemporary art and visual culture considering the issues below;

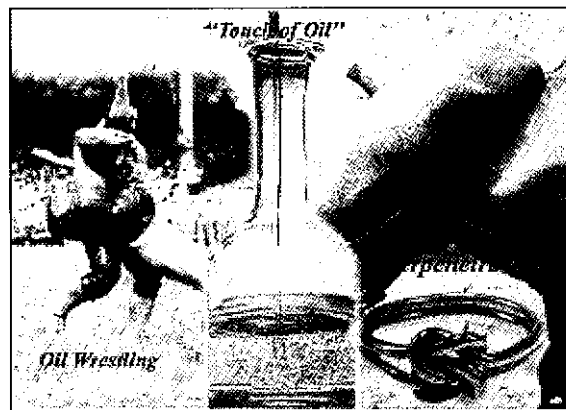
- 1.Cultural Heritage: Food culture, traditional and contemporary understanding of health and beauty related to Aegean and Mediterranean culture, traditional use and meaning of wine and olive oil in Anatolian culture; national and cultural culinary identities through the ways of growing, preparing and eating and drinking food
- 2.Culinary Culture as a part of Life Culture: Lifestyle and culinary habits with references to material culture, the differences and similarities between authentic agro-systems and "Fashionable" ways of preparing and social experimentation and political character of culinary culture (as in the case of Slow Food Movement, which accelerated its rhythm especially after 11th of September) or cross-cultural consumption of different cuisines, creation of the new 'exotic' food in the global system.
- 3.Art &Visual Culture: Analysis of a visual art work, painting, sculpture, photography or film or and artist and iconic character that could be associated with the wine and olive oil culture and contemporary culinary scenarios

Concerning these issues, each student came with a unique design concept that they can associate the 'sensual approach' with the 'cultural' concept based on a particular scenario of eating, drinking, production and cooking experiences and rituals of wine and olive oil, culinary habits or considerations on health and beauty.



"Taste of Leaf" by
Melis Gence:

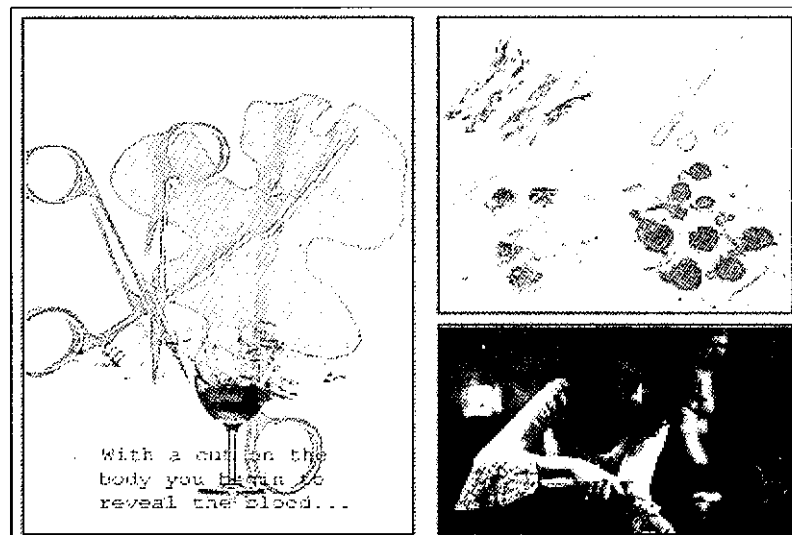
Cooking process of
Sırma as a
Mediterranean dish is
analyzed



"Touch of Oil" by
Salim Çiftçi:

Through the
movements and
interaction of bodies
with oil in traditional
Turkish sport
oilwrestling, the
relation with oil and
skin is taken as
inspiration.

Through looking to popular culture, artistic influences and contemporary means of making and drinking wine, different cultural connections are discovered for different design scenarios. Some of the movies like Sideways (2005) by Alexander Payne, which is about an celebratory trip of two friends to the vineyards of South California, over viewing contemporary wine culture through wine-savvy characters who are impersonalized by some wines, or like Gegen die Wand (2004) by Fatih Akin which gives references to post-punk street culture, through differentiation of cultural identities, and the notion of 'otherness' in cosmopolitan cities are taken as inspiration.



"Pure Blood" by Merve Candag: Relation between wine and blood is sought through sensual and ontological experiment on fabric's texture; References to subculture represented by the film Gegen Die Wand are used to conceptualize the fashion attitude

From Concept to Fashion: Deconstructing Fashion

One of the reasons of associating the wine and olive oil culture with fashion in a project was to develop a research methodology for design practice which starts with multi-sensorial experience and ontological research and improved by socio-cultural research to end up with an original design concept. In other words, the food became a good instrument for being a design source, in spite of the fact it was irrelevant to the language and system of fashion, to start with an experimental designing process, rather than looking at directly to the world of fashion for designing a garment.

On the other hand as it has already been mentioned in the introduction part, contemporary culinary culture and fashion culture are both feeding from and serving for the same cultural atmosphere. As Coco Chanel said, "Fashion is not only in the garments, it is in the air". That was the view point of Chanel to understand her time and to breath in the cultural climate that surrounds her. If Chanel was the mother of modernism in fashion, Charles Baudelaire was the father of modernism, believing that fashion has played a vital role to understand the dynamics and mechanism of modern life.

In the modern society, new ways of "culinarization of the self" (Actis 2003) is no more different than shaping and regulating of the self. In fashion the notion of 'time' draws the character of the new, as modernity does to underline the difference of the new from the old and, the present from the past. "Fashion and modernity, as the expressions of elementary progress need the past as (re)source, only to plunder and transform it with an insatiable appetite for advance". (Lehman 2000: 9)

Therefore within this study understanding past was important. But, instead of historical research of costumes, the traditional, authentic or mythological character and historical evolution and cultural heritage of wine and olive oil have been more referential, to come up with a new, experimental and modern idea of design.

Another concern of this study was redefining and reshaping the body, through deconstructing 'the fashionable'. This has been achieved through the critical analysis of the issues of a design process explained below;

1. Rather than translating the visual language in to a 'trendy' look that could be viable and commercialized within the global fashion system new expressions and attitudes of fashion has been sought; developing a fashion philosophy by questioning the meaning of fashion; such as fashion for pleasure, fashion for taste, fashion for a social concern, fashion for experimenting the material, fashion for memorizing the cultural heritage fashion for spiritual satisfaction, fashion for utility, fashion for aesthetics, fashion for a dialogue, ect. by questioning why and what to wear.

2. The standards of beauty and femininity and the conventional gender roles in the consumerist society which transforms the female body to a mere object of desire and ornamental display through fashionable modes of image formation has been questioned. The possibility of alternative, yet aesthetical gestures, postures and shapes of femininity has been sought through association of wine and olive oil with the human body; ontological study transformed in to anatomical one by morphing the liquid element of food in to an anatomical form, constructing the fabric as a metaphor of the shape of wine or olive oil.

3. Rather than concentrating on visible modes and shapes suggested by culinary culture and fashion, it has been concentrated on the possible ways of contribution of wine and olive oil to the kitchen of fashion design; focusing on their ontological existence through activated senses; therefore the process of designing become an accidental and evolutionary process like metamorphosis by the use of analogies, rather than a stylistic visual expression.

4. According to Simmel, two social tendencies are essential to the establishment of fashion one being need for union and the second is need for isolation. Fashion like all other social agendas is fed from the conflict between "adaptation to society and individual departure from its demands". (Simmel in Barnard (1996): 11) Following Simmel's statement, the need for individual departure led alternative and counter movements through subcultural affiliations throughout 20th century fashion history especially between 1950s to 80s. By the 90s the fashion system gradually started to loose its independence, softening its sharp edges of counter-hegemonic attempts and become indispensable mechanism of globalization.

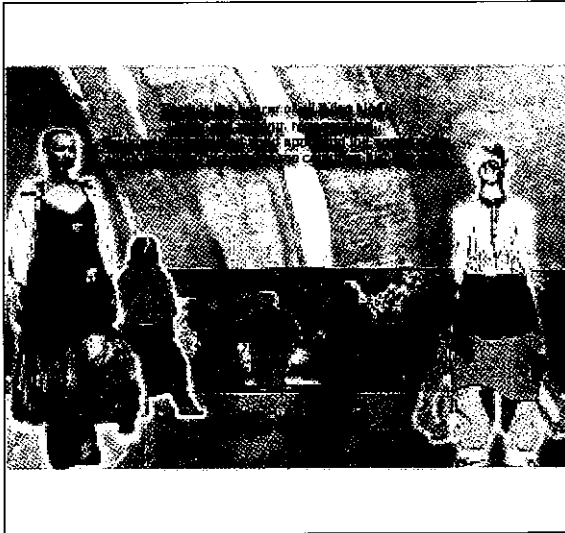
The freedom of working and designing within a design academy facilitated to feed the mechanism of individuality rather than conformism. Therefore rather than concentrating on the aesthetics and values of global fashion system which creates a dominant cultural paradigm through standardized shapes and tastes, authentic values, local traditions, creative communities for counter-hegemonic responses and subcultural affiliations has been sought. With an objection to the way that the local, authentic or traditional has been represented as 'exotic', even regarded as the 'other' within the globalized fashion system or culinary culture, the original social experience and the cultural value has been taken as a source of departure for designing.

5. Fashion has always been accused for being artificial or trivial with an argument that all fashion and clothing can do is to decorate or prettify the body. (Barnard 1996: 17) Obviously this claim is exaggerated, but at the same time it is not far from equating fashion with ephemeral rather than being fundamental. Baudelaire had a more positive attitude defining it as immediate, unpredictable and the charm of constant change. The fashion system has to feed with the new ideas which could live only for a season to be replaced by the other. To overcome this ephemeral and artificial character (as a sublime deformation of nature (Lehman 2000: 20) a more experimental approach is adopted within this study ignoring the logic of season and the trend. Therefore the experience of designing a new dress was not an output of a certain fashion cycle, but rather it was a natural output of a sensorial, ontological and cultural experiment. The design language has been developed in terms of defining the shape, line, cut, construction details, volume of the garments; functional elements, cutting and sewing details of style elements; pockets, arms, collars etc; the color story, fabric choice, accessories and trimmings through a matching by creating analogies with the elements of visualized design concept.

The project is finalized by translating the design concepts and fashion attitudes in to language of fashion design to realize a garment. Through the process of sketching and filtering designs; completing the illustrations following the mood; designs are realized through flat sketches, pattern development and cutting through the use of draping and construction along with creative sewing and finishing techniques.

26 projects with prototypes has been realized and exhibited in Faculty Of Fine Arts and Design halls in Izmir University of Economics within the frame of the Agrindustrial Design Symposium. The outcomes of this project had also been presented in a fashion show organized by Turkish Embassy in Islamabad. 8 moods/themes that define different design philosophies & approaches to wine and olive oil, not only reflected in the choreography and musical scores of fashion show, but also in the installations of exhibition area. The definition of themes by their projects is as follows;

1. Local; Covers projects based on local identity of wine with its production processes and cultural indicators. The concepts are reflected to textures, materials and forms of garments in a manner of recycling and reincarnating the traditional clothing style.



"Re-vintage" by Ekin Erez:

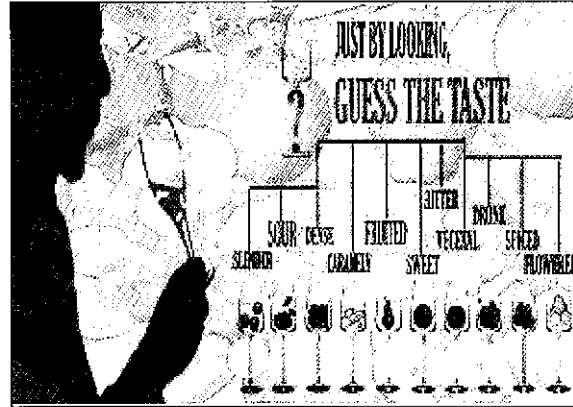
Colliding the two world in one; one belonging to viticulture in America with references to the film "Sideways", and the other being related to the production and aging processes of wine with a local taste in Anatolia: Taste of vintage wine has been represented through combination of authentic clothing elements which come up with a kind of "glocal" look.



"Motorbike & Village" by Manolya Inceogullari:

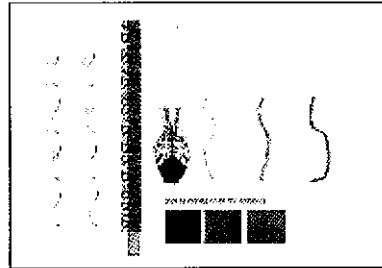
A love story between a girl who brews and sells wine living in Şirince and motorcycler visitor; the garment reflects the marriage of local & metropolitan values through the use of fabrics and structural elements.

2. Pastoral; Covers projects that are treated with a romantic attitude towards natural beauty, poetical language through flowing rhythm of colors, forms and sounds of natural materials. Appeals to a kind of women who is concerning about beautifying herself with gifts of nature and healthy lifestyle.



"Guess the Flavor"
by Deniz
Demirçiftçi:

Starting with the experience of tasting wine, created an analogy between the visual sense and taste of wine. The form of wine glass is transformed to woman's figure to taste the fluidity of the form. Fruity wines are effective on colors



3. Mediterranean; The projects based on life culture, culinary habits and lifestyle of contemporary Aegean and Mediterranean culture are in this group. The colors, the joy of life, the forms related to metaphors of foods and Mediterranean architecture are all representative of this mood.



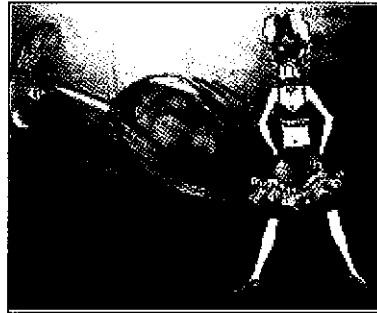
Left; **"Medi-terra-nea-nation"** by Cem Güner; Inspired from Mediterranean nature and environment which meditates through its colors and sources.
Right; **"Cooking and Living"** by Hande Karabağlı; Story based on a Turkish woman who transforms her house to a Turkish restaurant in Greece, which includes most tasteful dishes of Turkish cuisine made of olive oil.



"Taste of Leaf" by
Melis Gence:

The analogy of preparation of the Mediterranean dish to the construction of the garment with a wrapping action of the fabric around the body.

4. Nostalgia; A cultural and historical approach with a retrospective look to making and consuming of wine and olive oil. The designs have the character of contemporary style of decorum with a flashback to icons and idols of the past.



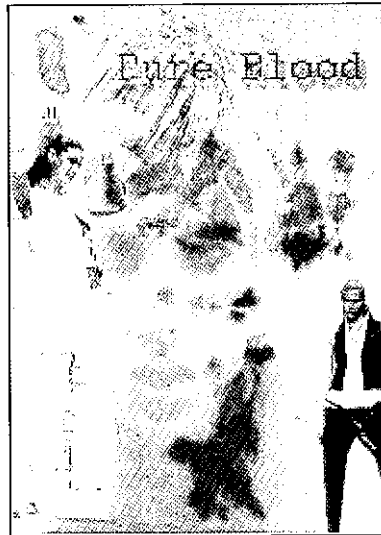
Left and top: "And God Created Brigitte Bardot" by Müslüm Akeydin:
Inspired from Bardot's passion to wine.
Left, right; "Journey to Past" by
Seyhan Deniz Reis: Inspired from
Burdundy wines.

5. Experimental; Covers projects which ontological experiments on olive oil and wine transformed in to garment construction and movement of fabrics. The mood represents an underground youth cultura who has no expectancies about fame, wealth or status except enjoying the dense minimal pleasures of life with a rebellion mood.



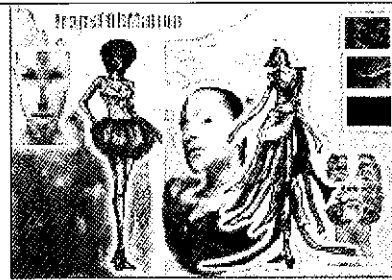
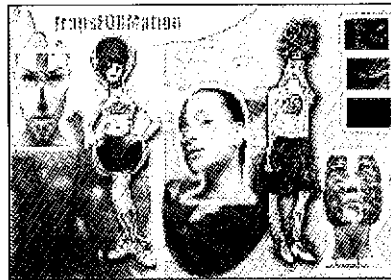
"Hopes in a Bottle" by Nazlıhan
Dikmeoğlu: Takes inspiration from the
underground culture of street beggars.





"Pure Blood" by Merve Candaş:

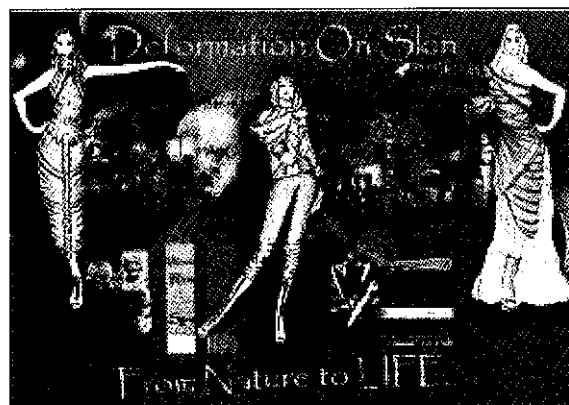
A modern outfit is designed in white and red, red being a representation of blood and wine splashed from the static white body.



"Transformation" by Duygu Atalay:

Grape turns in to wine, wine turns in to ice and crystal, and all of them twins in to movement of the fabric.

6. Spiritual; Spiritual and philosophical mood questioning the issues of reflection, purification and deformation of the body and soul with a metaphysical attitude towards making and using of wine and olive.



"Deformation of Skin" by Ersal Örga:

Wrinkled texture and aged skin of the olive farmer is represented by a draping construction of the garments through the use of crinkle fabrics.



"Life Elixir" by Simge Yükselen:

Spiritual purification through olive oil is represented by taking references from sufism; the two layered garment symbolizes the ritual of whirling dervishes, including a long black coat and a narrow ecru dress in which the circular movement of draping of the fabric around the body is reminding the fluidity of the oil and whirling movement of a dervish.

7. Ethnic; Based on interaction between olive oil and skin, the notions of beauty, fluidity and rythym is transformed in to the movement of fabrics. The movement of the body in traditional sports and dances is taken as inspiration.

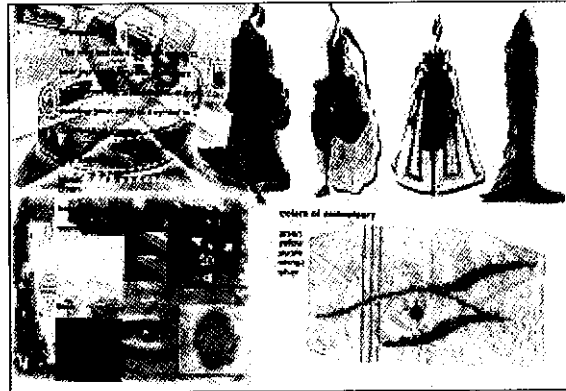


Left; **"Touch of Oil" by Salim Çiftçi:** Slippery bodies of the wrestlers are represented by shiny fabric in olive oil color, and fighting action is represented by plaid like and knot like fastening details of the construction.

Right; **"Dancing Emotions" by Nimet Erkam:** The metaphor of shiny and glittering movements of dancers in Greek mythology through the use of oiled yarns of their dresses, is represented by fluid fabric and draped contruction.

8. Orient Deluxe; The projects in this group are bridal wear and wedding dresses.

An important part of a lifespan becomes a metaphor for the olive tree. Through the iconic characters taken from Ottoman culture and cross-cultural influences on grooming&beautifying oneself the traditional elements are treated in an eloquent and luxurius way.



"Lifespan" by Emel Ayal:

The olive and olive oil which refers to birth and death in Greek mythology, transformed in to a wedding ritual and wedding gown which is a symbol to bring two different living to gather.



"Refika" by İpek Aygöl:

Inspired from the mystery of beauty by the olive oil soap, Refika from Adatepe Village like the Greek girl Refika who found it from olives in the past.

Conclusion

Wine and olive oil being the most ordinary and common elements of our traditional food, contemporary culinary culture and our bodily experiences have been the source of an experimental design practice, within the frame of fashion design education. The point of departure acting as a resource of design, has not only been instrumental for self-training of a designer to discover and utilize his/her senses and emotions, but also provided an ontological experiment with different modes of its physical entity. In addition to this, wine and olive oil being the core elements of agro-industrial society had a long history with variety of stories, meanings and myths in relation to human experience throughout their life span, supplied a body a knowledge for a socio-cultural research, thus offered a rich source of inspiration for an experimental and conceptual design practice for fashion, independent from the fashion itself. The experimental nature of design process illustrated that the process of designing could be important as the end product, even being more expressive about the cognitive and intellectual nature of designing. Developing a certain attitude to fashion and translation of the design concept to a particular fashion concept through matching the ontology of a dress with the visual elements of the concept ended up with a critical view to fashion.

Rather than following and fitting to conventional and globalized

means of representation of fashion or consulting to commercial fashion trends, alternative and individual modes of expressions, identities and aesthetics are sought. Therefore the accepted and popular nature of the fashion has been deconstructed.

Project Supervisors: Şölen Kipöz, Özge Dikkaya Göknur.

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THE IMPACT OF PACKAGE PREFERENCE ON BRAND IMAGE

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ABSTRACT

This paper examines the impact of package preference on perceptions of the brand image. It also investigates how package can be used as an extrinsic cue by consumers in evaluating the product performance, and the impact of packaging on brand value. An empirical study using olive oil packages was conducted to find out the effects of package preference on perceptions of product performance, product quality, product value and communication effectiveness, which in combination constitutes a major part of the brand image.

Keywords: Package, Packaging, Brand Image, Product Value, Product Quality.

Introduction

In today's understanding of marketing, brand and brand related issues constitute an extremely highlighted area. The importance given to brand, and particularly to brand image can be easily traced via the plethora of articles emerging in the field. It is generally reported that a favorable brand image enhances choice of the product, strengthens the relation with the customers and helps to generate long-term profits.

Brand Image

Brand image is a vital component of brand equity. Along with brand awareness, brand loyalty (Keller, 2000), perceived image and other assets that a brand may have -such as logo and slogans- (Aaker, 1996), it constitutes the consumer side of brand equity (Ailawadi, Lehmann and Neslin, 2003), which is one of the most valuable assets of the company. Brand image is a set of associations that are formed by the side of the consumers. Dobni and Zinkhan (1990) define brand image as the meaning consumers associate with the product. It is the consumer's total understanding of the brand and based on the consumers' experiences, impressions and perceptions of the functional, emotional, and symbolic benefits the brand provides. Other than experience; reputation of the producer, the country of origin, point of distribution, packaging, the format and content of the advertising presentation and the information flowing from various sources -such as reference groups- can influence the image of a brand. As noted, these associations play an important role in consumers' product evaluations and choices. Brand associations are fundamental to our understanding of inference making (Alba, Hutchinson, and Lynch, 1991), categorization and summarization (Sujan, 1985), product evaluation (Broniarczyk and Alba, 1994), persuasion (Greenwald and Leavitt, 1984), and brand equity (Keller, 1993, 2000). Studies have confirmed that consumers rely heavily on brand image to assist in their purchase decision, 50% of shoppers were found to purchase with a brand image in

mind (Wilson, 1997). Furthermore, other researchers found that a significant relationship exists between a brand's image and the intention to purchase that brand.

The Importance of Packaging

Packaging, although stated as one of the elements playing role in formation of the brand image, is unfortunately remains one of the least understood. Packaging is referred as the fifth P of the marketing mix (Nickels and Jolson, 1976) and it is usually suggested that that a well-designed package can create convenience and promotional value for the product. Nevertheless, package is still considered as a simple feature of the product, whose aim is primarily to preserve it. This approach reveals itself in considerable efforts of many firms, which try to reduce costs by sacrificing packaging. However, most of the time a package serves to just more than protection and preservation. For many products, especially relatively homogeneous consumer non-durables, packaging is a critical strategic element for brand differentiation and identity (Underwood and Klein, 2002). In an environment where an increasing number of products are sold on a self-service basis, a package may operate as a "five-second commercial" and differentiates it from the competition (Rosenfeld, 1987). With the labels it carries on, a package gives information about ingredients, quantities contained within, durability of the product, storage information and the name and address of the manufacturer. Moreover, Garber (1995) indicated that a prestigious package increases the consumer's willing to buy, for its appearance and associated image. Packages also contribute to instant recognition of the company and the brand (Kotler, 2003, p.436) and it increases the attention and probability to buy (Underwood and Klein, 2001).

Despite the stated importance of packaging, the mechanisms underlying this issue are usually taken as granted and scarcely studied by scholars. How, for example, packaging communicates the consumer? What does it tell about the product, the quality, and the brand? Does a consumer make inferences about the brand image by just observing the package? May he or she assess any information regarding the price or other product attributes? Does the preference of a package have an impact on willingness to pay more?

How packaging may affect brand image?

In this context, we propose that packages may play a key role on brand image formation. By observing the package, consumers may arrive at a conclusion about the soft attributes of the product, such as quality, as well as hard attributes such as performance, durability, serviceability of the product or reputation of the producer. The consumers may also use packages as a cue for price perceptions, a higher priced product may be considered as acceptable if the package is preferred and held favorable for the consumer. In other words, a favorable package may enhance the willingness to pay to higher amounts. Packaging may also help consumers to form an understanding of the quality level of the product. Besides, it provides valuable information in assessing the effectiveness of communication efforts.

These four elements, i.e. product attributes, value, perceived quality and communication effectiveness, are the most important contributors of brand image. The information obtained from these elements is stored as a set of associations related to the product and in general, they form the brand image of that particular product. Therefore in this research, attributes, value, perceived quality and

communicability of the product are taken as indicators of brand image, and the impact of package preference on them are studied accordingly.

Preference of a package may be dependent on several factors. Firstly, it shall be suggested the package should be adequate for the product. For example, a liquid cannot be packaged using a paper box. Therefore, a package should be sufficient to preserve the product. In addition, a package should be easy to carry, and perform as expected. Nickels and Jolson (1976) state that consumers dislike and avoid buying packages that leak, which are too heavy or too fat, or uneasy to use. Aesthetics is another important factor affecting the package preference. Kotler (2003), states that consumers may buy a product only because its package is elegant. Some consumers even buy some products because they believe that they can use the package for other purposes later. Shape and color are two important contributors to package aesthetics, which are studied in this paper. Attractiveness and labeling can also influence attitude towards package and hence, package preference.

In this research, olive oil packages are used as a medium to arrive at inferences about the brand image. Olive oil, which is an important element of Mediterranean diet, has a rapidly increasing share in the overall oil market all around the world. Turkey, although is one of the most important producers of olive oil in the world, faces a chronic problem in marketing its olive oil to world markets. This problem is not due to the quality of the oil, but just arises from the lack of a favorable brand image. On the other hand, Italy and Spain has a great share in the olive oil market and a "fine, healthy olive oil" is usually associated with "produced in Italy" or "produced in Spain" labels. The interesting issue is that some of the olive oils packaged in Italy or Spain are exported from Turkey in bulk form and are in fact of Turkish origin.

The recognition of this problem led some major olive oil firms in Turkey to focus on brand image. Along with other marketing tools, these companies are trying to form a favorable brand image with the use of elegant bottles and tin packages. The basic question of this research is enrooted in these attempts: How and to what extent a package can influence the brand image? Should we perceive packaging as a major contributor to costs, or look from the opposite side, which proposes that packaging is an extremely important tool to create a favorable brand image?

Research Methodology

A quantitative research was conducted in Izmir University of Economics. The primary purpose of the study was to develop a comprehensive perspective concerning the relationship between package preference and brand image formation.

Model

Underwood and Klein (2002), in an article where they examined the effect of product pictures on consumer responses to the brand, proposed that package design gives rise to several decision outcomes including attitude towards package, brand beliefs and brand evaluation. *Attitude toward package* represents how favorable subjects' evaluation of the package is. Beliefs about brand attributes define the knowledge structure that the consumer has about specific characteristics of a brand. Finally, *brand evaluation* is the measure of a consumer's overall attitude toward a specific brand.

Following a similar approach, preference for a particular package is an overall measure of attitudes toward the package. We propose that package preference directly and positively influences the assessment of brand image. In other words, the more favorable the attitudes toward a package, the more favorable the inferences regarding the product attributes, product value, product quality and communicability of the product. These four variables then form the overall brand image. This model is depicted in Figure 1.

The overall measure of attitudes regarding the beauty, attractiveness, elegance, usability, color and shape of the package are taken as the indicator of package preference. Product attributes such as flavor, lightness or scent; quality indicators such as producer's reputation or trust for the brand, advertisement frequency and interestingness of ads indicating communication effectiveness and price as a sign of value are taken as dependent variables.

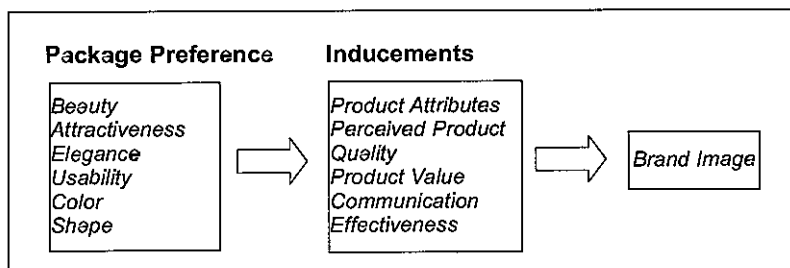


Figure 1. Model of the Study

Research Instruments

A survey questionnaire is employed to solicit attitudinal and demographic information from respondents. Respondents were first shown six different packages having different sizes, shapes and colors, and made of various materials including glass, tin and plastic. Each package was labeled as A, B, C, D, E and F. For brand anonymity purposes, actual labels were not used. Prior to presentation of questionnaires, respondents were asked to examine these packages for a few minutes. The packages used in the research are presented in Figure 2.

The questionnaire was composed of mainly three sections, other than the part that asks for demographic information. In the first phase, the respondents were asked to evaluate the beauty, attractiveness, elegance, usability, color, shape and general preference for each package on a five-point strongly agree (5) strongly disagree (1) Likert scale. In order to avoid confusion and boredom, a 6x7 (Number of Packages x Number of Statements) matrix structure was used.

In the second phase, respondents were informed that these packages would be used for olive oil and their evaluations regarding the product attributes, product value, product quality and communication effectiveness were asked. The 16 statements used in this part were then confirmed to fit in the proposed headlines by using factor analysis.

In the third phase, respondents were asked to rank packages in order of preference, provided that all are priced the same. This question also served as a crosscheck for the first phase. Later in this part, respondents were asked to state the maximum amount that they are willing to pay for packages, given the average price of olive oil is 5 YTL/liter. Data were collected at Izmir University of Economics from a total of 51 respondents.

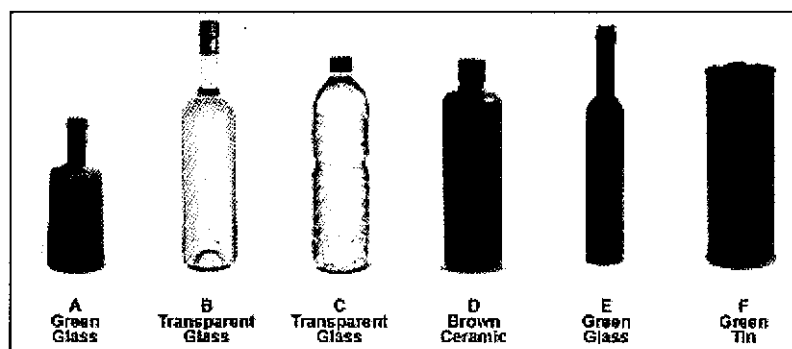


Figure 2. Packages Used in the Research

Results

Data were analyzed using One-Way ANOVA for repeated measures and correlation coefficients. Reliability of the questions was checked by factor analysis.

Package Preference

The seven statements designed to assess package preference were incorporated into compound indices, indicating the package preference for each package. One-way ANOVA test for repeated measures was run to see whether the preference indices significantly differ from each other and the order of preference. Results showed that all packages except for D and F have a significant difference in terms of preference where $\alpha = .05$ (Preference of packages labeled F and D was not significantly different as $p = .491$). The order of preference was found to be as shown in Table 1.

Assessment of Brand Image

A total of 16 statements were presented in the questionnaire proposed to indicate the product attributes, product value, product quality and communication effectiveness. First, each statement was tested to see whether a difference exists for each package. The results revealed that C scored significantly the least for each statement. 69% of the time, package E significantly scored the highest, usually followed by package A. Packages F, B and D were usually (32% of the time) couldn't be distinguished significantly for proposed statements.

Table 1. Order of Package Preference

Most Preferred				Least Preferred		
	E	A	B	F*	D*	C
Mean	4,3669	3,9561	3,4090	2,9589	2,8464	2,0882
Std. Dev.	,5200	,7060	,7446	,7365	,9828	,6331

An asterisk (*) indicates that the mean scores for these packages do not significantly differ for preference.

Subsequently, a factor analysis was run to identify the major components of brand image. A total of 4 factors -product attributes, product value, product quality and communication effectiveness- were clearly identified through the analysis. A within group one-way ANOVA test for these factors was run to find out if the means of factors were significantly different from each other. Following ANOVA, factors for each package were compared if they followed the same rank order with preference. The results are shown in Table 2.

The results of analysis for components show a similarity in order with those of package preference. Especially for packages labeled A, C and E the similarity is perfect. Component scores for package labeled B also are relatively consistent with preference order. Insignificance of preference scores for packages labeled F and D, are also reflected in component scores, which is consistent with the proposition of this study.

In order to confirm these findings, correlations between package preference and each component were also found using Spearman's Rho. Results reveal that significant relationships exists between package preference and brand image components. The correlation table is depicted in Table 3.

Table 2. Order of Brand Image Components

Brand Image Component Rankings:						
	Best (Highest for Price)			Worst (Lowest for Price)		
Product Attributes	E	A	B*	F*	D	C
Mean	4,2824	3,9098	3,5843	3,4118	2,9961	2,1176
Communication Effectiveness	E	A	B*	D*	F*	C
Mean	4,0147	3,8039	3,1569	3,1422	3,0049	1,8333
Price Level	E	A	F*	D*	B*	C
Mean	4,4118	4,1176	3,2353	3,2157	3,1569	1,5098
Overall Quality	E	A	B*	F*	D	C
Mean	4,2582	3,8856	3,5163	3,5098	3,0458	2,2026
Package Preference Rankings:						
	Most Preferred			Least Preferred		
	E	A	B	F*	D*	C
Mean	4,3669	3,9561	3,4090	2,9589	2,8464	2,0882

An asterisk (*) indicates that the mean scores for these packages do not significantly differ for respective component.

Table 3. Correlations between Package Preference and Brand Image Components

		ATTRIBUTES A	QUALITY A	PRICE A	COMM. EFF. A
PREFERENCE A	Spearman's Rho	0,455**	0,476**	0,266	0,277*
	Sig. (2-tailed)	0,001	0	0,6	0,049
		ATTRIBUTES B	QUALITY B	PRICE B	COMM. EFF. B
PREFERENCE B	Spearman's Rho	0,603**	0,562**	0,578**	0,493**
	Sig. (2-tailed)	0	0	0	0
		ATTRIBUTES C	QUALITY C	PRICE C	COMM. EFF. C
PREFERENCE C	Spearman's Rho	0,404**	0,489**	0,314*	0,472**
	Sig. (2-tailed)	0,003	0	0,025	0
		ATTRIBUTES D	QUALITY D	PRICE D	COMM. EFF. D
PREFERENCE D	Spearman's Rho	0,678**	0,611**	0,488**	0,435**
	Sig. (2-tailed)	0	0	0	0,01
		ATTRIBUTES E	QUALITY E	PRICE E	COMM. EFF. E
PREFERENCE E	Spearman's Rho	0,309*	0,488**	0,335*	0,14
	Sig. (2-tailed)	0,028	0,002	0,016	0,327
		ATTRIBUTES F	QUALITY F	PRICE F	COMM. EFF. F
PREFERENCE F	Spearman's Rho	0,295*	0,314*	0,328*	0,187
	Sig. (2-tailed)	0,036	0,025	0,019	0,188

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

In the final phase, the willingness to pay for each product was analyzed and results were compared with previous findings. The results showed that willingness to pay for a preferred package was significantly higher. In particular, respondents indicated that they should pay "more" an average 1.40 YTL for package A, .30 YTL for package B, .06 YTL for package D, 2.97 YTL for package E and .75 YTL for package F. The maximum amount to be paid for package C was 2.26 YTL below the average sales price, which is denoted as 5 YTL. The ordered figures regarding willingness to pay data are as shown in Table 4. It should be also noted that the order of willingness is perfectly consistent with package preference rankings.

Table 4. Willingness to Pay for Brands (in YTL)

	E	A	B	F	D	C
Mean	797,54	639,21	530,39	575,49	506,86	274,50
Std. Deviation	381,71	260,25	209,06	491,97	389,10	177,09
Difference Between Average Price Level (%)	59%	28%	6%	15%	1%	-45%

To sum up, the impact of package preference on brand image components were statistically proved by analysis results.

Conclusion

Despite the importance attached to brand image, the impact of packaging on formation of brand image is scarcely studied. This study aims to show that packaging is an important element for consumers in forming an image for a particular brand.

The results show that, by observing packages, consumers do make strong inferences regarding the product attributes, product value and product quality. There is also an association between the perceived communication effectiveness of the brand and its package. These findings are interesting in sense that, even though consumers know nothing about the product itself or extrinsic cues such as price, promotion and distribution points rather than the package, they feel capable of making deductions about these issues. The preference of a package is positively correlated with the belief that the product contained in it will perform as expected, has superior quality and higher price. A product being higher priced indicates that it has better quality, as price is usually regarded as an extrinsic cue to quality (Dodds and Monroe, 1985; Dodds, Monroe and Grewal, 1991). Therefore, for a package that is liked, the willingness to pay is higher as consumers value that product better compared to alternatives.

It should be noted that this study is limited in terms of small sample used in the research. Nevertheless, it provides valuable information for increasing our understanding of the importance of packaging and the influence of packaging on brand image.

This research should be taken as a starting point to further research to examine the impact of packaging on brand image, brand personality and finally, brand equity and also should be expanded to include other products, especially for those striving for a better brand image.

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WINE TOURISM IN TURKEY

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ABSTRACT

This paper offers a detailed analysis of practices in wine tourism and its implementation to Turkey. Wine tourism is rapidly developing in Turkey parallel to the development of the sector around the world. In this paper, Şirince is selected as a case and a comparison analysis is presented with Messina Hof, a winery in Texas. The comparison includes a number of aspects along with the implemented marketing strategies, such as design of bottling, packaging and labeling. In addition, the effects of wine tourism on improvement of social and economic situation of Şirince are also analyzed.

Keywords: Wine Tourism, Wine Marketing, Şirince, Messina Hof.

Introduction

In Turkey, tourism sector has witnessed a rapid development starting from early 80s and served as an important medium to generate foreign exchange sources in times of economic turmoil. It also contributed extensively to the efforts of closing trade deficit and decreasing unemployment rates. The statistics show that the number of incoming tourists rose by 800% and tourism revenues by 2,200% between 1980 and 2001. Revenue from tourism activities has exceeded USD 10 billion in 2003, and increased a further 42 % in 2004. Various tourism organizations project that Turkish tourism revenues may increase by 5.4% each year until 2020, and arriving at a total amount of 20 to 40 billion US dollars¹.

Despite the favorable figures, it should be also noted that this rapid development in tourism industry in Turkey is now reaching to a plateau. This is largely due to sustainability problems of tourism activities in the country. For years, Turkey was marketed as a tourism destination that positioned itself extensively on 3S -sea, sun and sand- and the cultural aspects of tourism were mostly overlooked. Therefore, tourism activities become vulnerable to seasonal demand fluctuations, as Turkey was usually seen as a summer destination. This approach is risky in terms of vast competition in shore tourism. Moreover, instability of politics and economics both in national and global sense turned out to be major obstacles in providing demand stability in tourism. When the fact that a majority of tourists (58 %) come from EU States is considered², it should be easily seen how this instability affects

¹ www.kultur.gov.tr/bakanlik_tr.asp

² <http://www.esiad.org.tr>

tourism activities. Yalcin (2002) states that 60 % of the European tourists prefer visiting a EU member state that they believe to be secure and qualified. This means that attracting more tourists from EU states -which form a major portion of Turkish tourism revenues- is now a difficult task. In this context, projects regarding a 5.4 % growth per year may prove to be unrealistic in the following years. The only way to realize this growth underlies in new marketing strategies to position Turkey with its cultural and historical values. In this sense, niche-marketing strategies along with mass marketed shore tourism may contribute immensely to Turkish tourism growth.

In achieving a sustainable tourism growth, small villages with unique and authentic characteristics may play a key role. Kerimoğlu and Dökmeçi (1998), in an article which they studied the tourism potential of Assos, indicate that small villages constitute an important area for culture tourism as they continue to possess the authentic fabric of culture and history, which tourists find deeply attractive. The architecture, cuisine and traditional way of living that are kept unspoiled in these villages are important elements to be marketed for potential tourists. In this context, wine tourism should be considered an important and unexplored niche to develop tourism activities.

Wine Tourism

Wine tourism is defined as visitation to vineyards, wineries, wine festivals and wine shows for which the grape-wine tasting and/or experiencing the attributes of a grape-wine region are the prime motivating factors for visitors (Hall, 1996). Getz *et al* (1999) extend the concept to include experience dimension of tourism activities; and propose that wine tourism is a form of consumer behavior based on the appeal of wine and wine regions, and a development and marketing strategy for the wine industry and destinations in which the wineries and wine-related experiences are the dominant attractions. Wine tourism is today a promising sub-sector of tourism and it has the potential to grow at a much faster rate than most of the tourism industry (Beames, 2003). Clearly, sole wine production in a rural area is not sufficient for that region to become an attractive wine tourism center. The infrastructure and event marketing activities are vitally important in wine tourism. Beames (2003) states that rapidly emerging destinations of wine tourism are capable of providing good facilities for wine, food, accommodations, attractions, additional activities and history combined with a beautiful scenery.

Wine tourism has the capacity to play a significant role in national and regional sustainable-tourism-development plans as it contributes to sustain the economic and social bases of regions as well as environmental dimensions (Hall and Mitchell, 2000). Other than helping the sales of local production and creating new jobs, wine tourism also contributes to establishment of new tourism facilities such as specialized restaurants and hotels. When looked overall, it may create a huge market comprising of all tourism activities.

Beverland (1998) indicates the potential benefits of wine tourism as providing an opportunity for customers to try new and unknown products at little or no cost, building brand loyalty, increasing margins, providing alternative distribution outlet, providing a source of marketing intelligence for wineries, providing an educational opportunity in a non-treating environment developing wine appreciation and creating awareness and improving knowledge on wines and the wine industry.

Today, several countries and regions are experiencing an immense growth and benefits flowing from wine marketing and tourism. California and Pennsylvania in the United States, Bordeaux, Champagne and Burgundy in France, Tuscany in Italy, and several districts of Australia and New Zealand stand as significant centers of wine tourism.

The economic contribution of wine tourism to stated regions is remarkable. California wine industry, which generates an approximate 45 billion US dollars annually, attracts 15 million tourists to the region each year. Wineries in California are the second most popular tourist destination after Disneyland³. In the region, 1.3 billion US dollars of tourism revenue is generated by wine tourism only⁴. In Pennsylvania, 84 wineries produced visitor expenditures of \$153 million, total sales for the economy of \$244 million, \$82 million in employee compensation and plus over 4,000 jobs in 2000. A typical Pennsylvania farm winery attracts about 10,000 visitors per year. More importantly, research showed that "wine tourists" on average spend twice the amount that other tourists spend, stay longer in the region and visit more attractions⁵. The situation is similar in other countries. ACIL Consulting (2001) reported that the overall value of wine tourism has been assessed at nearly \$1 billion annually in Australia, of which over \$400 million is spent at wineries and another \$550 million spent elsewhere by winery visitors.

Given these figures, it is obvious that concentrating efforts on creating wine tourism centers in Turkey will be vitally beneficial to national tourism industry. In this paper, we propose that Şirince, a small village in Aydın, possesses quite a number of characteristics that should be sufficient to initialize such a tourism marketing approach.

The Situation of Şirince

Şirince is a small village located on the west coast of Turkey, about 5 miles from Ephesus. The history of the village goes back to the early years of Ephesus although most of the historical houses date back only 200 years (Özzengi, 2000; cited in Var and Yüksel, 2003). A century ago, Şirince was an important Greek settlement with about 4 to 5 thousand habitants. Following the Greek-Turkish War between 1919-1922, Turkish farmers from Kavala and Thessalonica exchanged the Greek population in Şirince. Until 1936, Şirince was governed as a subdistrict with an approximate population of 2000. However, because of the economic distress, a majority of citizens migrated to urban areas causing a sharp decrease in the population. In 2005, there are 185 households in the village, totaling to a population of 575. This situation is in contrast with Hall and Mitchell (2000), as they stated wine tourism has a great importance in sustainable rural development by creating new job opportunities. This contrasting effect is largely due to improper application of wine marketing strategies in the village and lack of expected outcomes in the meantime.

Yet, Şirince still offers a remarkable opportunity for becoming a tourism center. The reasons to this are numerous. First, Şirince possesses a unique architecture dating back to two centuries. These historical houses in Şirince are currently attracting quite a number of local and foreign tourists. In addition, the authenticity of

³ www.eresonant.com

⁴ www.prnewswire.co.uk/cgi/news/release?id=125436

⁵ media.pennsylvaniaiwine.com

the village charms many people who seek to enjoy cultural tourism. Moreover, the village today is well known with its wineries and local tourists visit Şirince regularly to buy local produced wines. Currently, an average 20.000 tourists visit Şirince each month, and the tourism season lasts for 8 months.

Because of the growing interest in the village, tourism facilities are increasing in number. There are many hotels in Şirince and majority of the owners of these hotels are villagers. In addition, there are 24 wine-shops, 23 restaurants and 65 souvenir-shops, which serve to both local and foreign tourists. Also there is a biological purification facility and a health center, with one doctor two nurses. 2 churches and 40 monasteries existing in Şirince are the symbols of many different cultures that flourished in the village during its history. The oriental sport center in Şirince, is the one of six different oriental sport centers in Turkey. A number of photos of Şirince are available in Appendix 1.

Therefore, Şirince has a great potential of being transformed into a wine tourism center. Nevertheless, the road to success is paved with a number of problems. First, wine production capacity in the village is quite below the anticipated level. Artemis Winery, which was established in 1995, is the only one central winery in Şirince with a production capacity of 3 million liters. The winery sold 2.5 million liters of wine in 2004. Low sales figures are especially due to lack of sales to foreign tourists. Although quite a number of foreign tourists visit Şirince, their consumption of wine is limited with lunch and dinner they have in the village, but only a small portion of them make wine purchases. However, with adequate marketing strategies, the demand for Şirince wine may be expected to exceed 4 million years per annum. Second, Şirince Wines suffer deeply from image problems. The central winery markets its wines under three different brands, namely Akberg, Kayserkaya and Vincent. Kayserkaya serves to premium market and in production grapes from the region are used. The quality of Akberg brand is slightly above average and produced from Denizli region grapes. Vincent is the most famous brand of the winery offering various kinds of fruit aromas. However, none of these brands possess an adequate level of brand image, nor awareness nationwide. Third, the distribution of the wines is at best, problematic. Finally, and most importantly, the promotion and its accompanying communications strategies are still at their infancy.

As the challenging areas are identified, it is of sense to examine a successful example, which possesses similar characteristics with Şirince: Messina Hof in Texas. It should be noted that the success of Messina Hof is an astonishing one, as a single winery it creates more tourism revenues than Şirince can achieve as a village.

The Situation of Messina Hof

Messina Hot is a well-known winery in Bryan, Texas. It is located close to Houston, Austin and Waco. In addition to the winery, it is available to tourists with a resort.

The winery and resort was established in 1977. A young entrepreneur, Paul Bonarrigo and his wife, who relied on the research findings carried by Texas A&M University suggesting that most of Texas would be capable of growing the vinetara grapes for European-style winemaking, founded the winery as one of the only 3 Texas wineries. The name of the winery follows from the origins of its founders, Bonarrigo coming from Messina, Sicily; and his wife from Hot, Germany. From its initial production of 1,500 gallons of

wine in 1983, Messina Hof has continued to serve the community and ranks as the fastest growing and most award-winning winery in the state. During this period, Texas also turned out to be the fastest growing wine producing state in America, and boasted over 50 wineries.

Messina Hof Winery and Resort was founded on a positioning strategy that emphasizes family values, romance and tradition. It was probably this favorable image that carried the winery to success. Today, Messina Hof is one of the largest tourist attractions in Brazos County second only to Texas A&M University⁶.

Messina-Hof Winery is more full-service resort and event center than a modest winery. Currently the Messina Hof grounds include 40 acres of vineyards (plus another 500 in High Plain Lubbock), a wedding venue, tasting room-gift shop, the Vintage House Restaurant, and The Villa-an antique filled guesthouse with ten beds. Around 150000 visitors yearly flock to the estate for winery tours, gourmet meals, cooking seminars, B&B theme weekends and dozens of special events held in all four seasons. Today, the production of the winery is over 200000 gallons annually. In Appendix I, some photos of Messina Hof are presented.

The success of the winery and resort is the result of well-implemented marketing strategies accompanied with quality wines produced in the region. First, Messina Hof has large product diversity. There are dry, semi-dry, blush and dry white and red wines as well as Muscat Conelli, which is unique to Messina Hof. Also there are some specialty wines and gift baskets offered to tourists. However, the quality and diversity of products are not the only ground to success. It is the basic fact that Messina Hof does not sell wines, but it sells an outstanding experience.

Secondly, Messina Hof largely relies on an approach that may be called event marketing. A number of events organized around the winery attract many tourists. Wine and Roses Festival, cooking parties for different target groups, Mother's and Father's Day celebrations, various wine receptions and wine seminars are available throughout the year. Messina Hof also welcomes volunteer tourists who desire to work during harvest. What more interesting is that these tourists are not paid for their work, but only provided with accommodation and still there is an intensive demand from tourists to work voluntarily in the vineyards. A jazz festival is held in the region annually to enjoy these tourists. Brown, Var and Lee (2002) estimated that only this single event generates \$892,981 in total sales output, \$324,942 in personal income and the equivalent of 21.8 jobs. Each year, an art design contest is organized with focus to label designs of the wine bottles. Obviously, Messina Hof transforms each special day into a celebration event, may it be Halloweens or harvest weeks. Therefore, any time tourists visit the winery; they find themselves in an atmosphere of joy and celebration. Moreover, tailored events such as wedding ceremonies are offered to visitors.

Messina Hof successfully communicates all these events to its potential customers through different media. In addition it has a well-designed web site, which includes all the details about the region, vineyard and coming events. The website also includes "gift ideas", recipes, online reservations and educational information.

⁶ www.messinahof.com

The success of Messina Hof clearly reflects that communication is the vital priority for such a niche tourism activity. The message delivered should distinctly emphasize the experience offered to the potential customers rather than the winery products. In this context, Şirince can benefit from a number of recommendations following from Messina Hof experience.

Şirince: What may be done?

Getz *et al* (1999) indicate that there are ten critical factors, which influence the success of wine tourism. These are natural resources, wineries and other tourist facilities such as wine museums or information centers, production and consumption of wine, cultural and historical factors, accessibility of the markets, quality and reputation, seasonality, legal issues, organization and marketing efforts, and benefits sought by the visitors.

When these factors are analyzed, it may be proposed that natural resources as well as cultural and historical factors are in favor of Şirince. However, other factors, which critically depend on marketing efforts, emerge as problematic areas for the village. In this context, transforming Şirince into a wine tourism center is basically a marketing case.

A successful marketing program undoubtedly relies on a successful product. Therefore, creating a favorable brand identity and brand image are the key issues to Şirince Wines. This can be achieved through well-designed brand image and identity projects. Hall (1996) stated that successful wines have an existing regional identity, based on climatic, topographical, geomorphologic and hydrological characteristics that combine to produce wine grapes. This means that brand image is closely linked with the regional image especially for the shared name cases such as Şirince. Many factors such as rural ambiance, wine tourism facilities, climate, and people of a region will affect the brand image (Carlson and Dowling, 1998). Williams (2001), citing from previous researches indicates that climate, physical environment, production and reception facilities, people, sense of place, leisure activities and visitor experience are the dimensions of wine region imagery as well as the product itself.

Creating a brand image requires a long period and well-designed, extensive projects. Especially, the names of the brands should be changed with the more meaningful and attractive ones instead of Akberg, Kayserkaya and Vincent. Packaging, logo and other design concepts that are extremely important in perception of a wine's image (Thomas, 2000) should be outsourced to specialized agents.

The quality standards of the wines should be increased and constantly audited. Şirince Wines greatly suffer from an image of being unhealthy and unstandardized. This is due to the home-produced wines that have been available in the market prior to the establishment of a modern factory. Because of the lack of control and standardization, the reputation of Şirince wines, especially about health aspect, was perceived not reliable enough. Therefore, the modern wine production process should be declared in detail through some promotional activities.

Second, Şirince wines and the region as a whole need some detailed marketing projects. Beames (2003) stated that, generally wine-makers are focusing on only product orientation, while they are not deeply understanding of tourism marketing. Tourism is a service industry, and marketing of services calls for focus on

experiences on the side of the consumer, rather than performances. With such an understanding, the target market for the wine tourism should be revised. The markets of an any wine industry can be summarized as "consumer; the wine consumer or wine tourist; intermediary; retailers, wholesalers of wine, restaurants, wine tourist companies selling package tourism; suppliers; grape growers, equipment sellers; alliances; hotel chains, food producers, airlines, car rental companies and others; internal; employees-the seller of the wine tourist experience; influencers; media, pressure groups, the financial community and government bodies (Beverland, 2000). The developed marketing program should be clearly communicated to these groups.

When identifying the target consumers, the motives of the wine tourist also should be put forward. Macionis (1997, cited in Getz et al, 1999) states that winery visitors have six main motives. These are tasting wine, buying wine, having a day out, enjoying the rural setting, meeting the winemaker and learning about wine. Understanding these motives is important in developing appropriate marketing messages.

Following, the promotion strategies of the village and its wineries are of vital importance. Currently, tourists are only being informed about Şirince wines only through tourism agents and/or some brochures delivered at the wineries. It is obvious that such an effort is not sufficient. Şirince wines even lack national awareness and are only known to local citizens. Therefore, national and international exhibitions and events should be considered as great opportunities for Şirince wine producers. Building and promoting websites including detailed information on wine and the region is also a promising strategy. A well designed website about Şirince wines and Şirince village will be an important marketing tool for both local and foreign tourists. Moreover, Şirince wines should be communicated to the end consumer through point of purchase advertising. On the other hand, salesperson is the most important person during the wine purchase process, because there is a trial period for the product. In addition, the wine tourist usually seeks detailed information about the product and production process (Charters and Ali-Knight, 2000). Salespeople should be well informed about the product and underlying processes, as well as serving requirements and sales requirements.

At this point, event marketing as a promotion strategy requires special attention. Today, the success of many wineries worldwide arises from such events and organizations. Wine festivals, celebrations, special events and wine seminars are key areas for event marketing. Wine education is an important promotion tool, as nearly a half of the wine tourists seek information about wines from different sources and consider themselves as "wine lovers" (Charters and Ali-Knight, 2000). Lockshin and Spawton (2001) state that one third of the wine consumers are highly involved in the purchase process; they buy more wine and spend more dollars per bottle. As the standard of living increases, there occurs a previously inexistent group, which should like to be educated about wine.

In addition, cellar door tasting and sales; vineyard and cellar tours may be the effective tactics to increase the sales (Hall and Mitchell, 2000). By these activities, Şirince wine producers' sales will be increased, the customers will be educated and brand and product loyalty will be created.

A portion of the answer to increase sales lies in the distribution issue. Although there is only one central wine producer in Şirince,

wines may be purchased from different stores in Şirince as well as in some nearby urban areas. Standardization of the wine selling points and the conditions of the wine keeping emerge as the main problems. Because wine is a special product, there are many problems about the sales and preservation processes, such as storing conditions or properties of the wine glass in which the wine is being tested. In addition, direct marketing of wines especially to restaurants in the tourism destinations nearby -i.e. Kusadasi or Selcuk- should be a serious concern.

The success of a marketing strategy depends on its adequate maintenance. Therefore, continuous marketing and facility audit should be implemented. According to Carlson and Dowling (1998) the audit includes availability of promotional brochures, information and travel guides, content and distribution of wine tourism event calendars, wine and tourism related media coverage of the region, promotional activities of the regional tourism association, distribution channels for package tours and other commissionable products and services, accommodation, restaurant and guest facility capabilities, and ability to cater for people with disabilities, non-native speaking visitors and other groups.

Lastly, it should be understood that Şirince could best benefit from a collaborative marketing understanding. This is to say that synergy in all marketing efforts is what Şirince seeks. Such an understanding calls for every business in Şirince act in line with the general marketing plan and implement the appropriate measures that are requested by that program. This collaborative activity must be expanded to include governmental bodies and civilian initiatives as well. Individual efforts will at best generate individual results, those which are not much anticipated in Şirince case.

Conclusion

Tourism is a critical sector for Turkey as it serves as a significant source in closing trade deficits and creates thousands of jobs. The tourism strategy of Turkey has long depended on shore tourism, which today proved to be unsustainable and risky. Therefore, once overlooked niches under tourism should be explored and exploited. Wine tourism is one of these niches, as a part of culture tourism.

Wine tourism is briefly the visitation to vineyards, wineries, wine festivals and wine shows in which the primary motive of the tourist is to experience these authentic activities. Wine tourism is an important revenue generator for many regions worldwide. In Turkey, although there are some regions that could be nominated for wine tourism, the sector is still in its infancy. Şirince is one of these regions and with both advantages and disadvantages it possesses and it can be a perfect candidate to be transformed into a wine center.

On the other hand, Messina Hof, when compared to Şirince, is a developed wine tourism center in Texas. Both regions, Şirince and Messina Hof, share many similarities as well as differences. Briefly, Messina Hof is an example of wine tourism center with successful implementations and successful marketing strategies. However, Şirince is still on the way to gain advantages of wine tourism. The experience of Messina Hof may guide Şirince in this aspect.

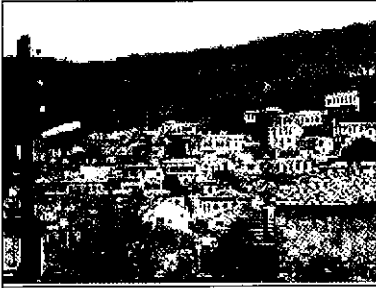
Although Şirince offers promising opportunity to be a wine tourism center, it still has a far more way to go. Appropriate marketing strategies accompanied with a strong will to make the village an important tourism region are the only tools in achieving this aim. A

success story in Şirince will create a strong desire from other villages to focus on this profitable niche and lead to the development of wine tourism in Turkey.

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APPENDIX I: Some Photos from Compared Villages



Historical Houses of Şirince



Central Square at Şirince



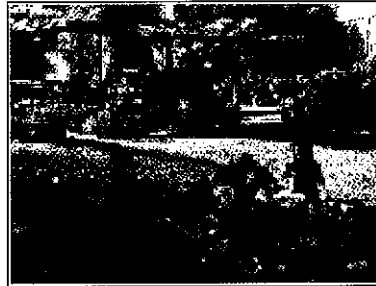
A Typical Şirince Wine-Shop



Messina Hof Resort



A Messina Hof Vineyard



Tourists at a Celebration Event
(Messina Hof)



IMPACT ANALYSIS OF WINE TOURISM

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ABSTRACT

Wine tourism has been with us over 5,000 years as grapes symbolized prosperity and wine given the names of god and goddesses in Phoenicians, Hittites, Greeks and Romans. Especially the Mediterranean countries have long been engaged with wine production. In Judaism and Christianity wine has an important religious significance. However, currently most of the wine producing regions have been facing with new rural economic development strategies and more and more wine producers are relying on product differentiation that would add to total revenue. These new products involve vinegar, grape seed oil, specialty wines, and above all wine tourism that provides additional resources for sustainability. This article gives a review of concepts related to economic impact of wine tourism in regional development. A number of cases like Sonoma County, wine production and tourism in Pennsylvania, Texas Virginia, and Australia are given and their methodologies are explained. Finally an implication for Turkey which ranks fourth in terms of area under vineyard and 42nd in terms of wine production (1996) is explored. As Turkey attempts to be a member of European Economic Union, wine tourism itself may be an important addition to Turkish tourism product.

Keywords: Wine Tourism, Mediterranean Tourism, Economic Impacts, Multipliers, Festivals.

IMPACT ANALYSIS OF WINE TOURISM

Economic impact computation of wine tourism has important significance for the community on route to a winery as well as the community around the winery. It has also importance for companies and decision makers because it quantifies various policy decisions for comparative purposes.

There are two basic methods that are used in calculating economic impact of tourism:

1. Tourism Satellite Accounts,
2. Input/Output Methods.

1. Satellite accounts

Several organizations have developed satellite accounts for tourism. A satellite account re-organizes the national system of accounts to identify the contribution of tourism to a state or national economy. The advantage of satellite accounting approach is it uses existing economic data and embeds tourism in an accepted system of accounts. The drawback is that the information necessary to extract tourism activity from national economic accounts is often not complete or consistently gathered. Also, satellite methods are much

more difficult to apply below the national level or for subcategories of tourism activity. National accounts are organized around a set of industries or commodities. The problem is that tourism is more a type of customer than either an industry or a type of commodity. Restaurants serve both tourists and local residents and the system of accounts has no easy way to distinguish one from the other. The basic procedure in satellite accounting is to claim a "share" of sales of each commodity or industry to tourism. These shares, however can vary widely for different regions. Information to estimate them generally comes from various sources including surveys of households or tourists. Many of these surveys are not carried out on a consistent basis and are subject to a variety of sampling and measurement errors. Tourist shares also depend considerably on how tourism is defined - usually all trips of 100 miles or more or overnight.

2. Input/Output Method:

This method relies on local surveys and determines expenditures of visitors based on predetermined categories. And these expenditures are used as a basis for determination of economic impact through IMPLAN. Currently most of the economic impact studies utilize IMPLAN, an economic Input-Output model developed by the U.S. Forest Service. An Input-Output model basically is a table that shows the inter-relations among all the sectors in a county's economy. For example, in order to produce milk through dairy farming sector that sector needs several inputs provided by other sectors. Also, dairy farming sector provides inputs (milk) to other sectors like ice-cream manufacturers. These inter-industry relations are determined through nationwide surveys and other secondary data. The U.S. economy is divided in 528 sectors (these are given SIC codes) ranging from dairy farm products to service industries and government sectors.

The most recent version of IMPLAN uses 2003 data on economic structure of the United States. (IMPLAN Report, 2003) However there is a mechanism to adjust the county based data for later years using price level deflators for each sector that are affected by consumer demand. There are four types of impacts that are commonly used. These are, *Direct, Indirect, Induced, and Total impacts*.

Direct Impacts (or direct effects) are the changes in economic activity within those economic sectors that directly receive expenditures (i.e. increased output or sales, income, and employment in various sectors). In the case of the tourist or visitor expenditures, in case of wine tourism, hotels, campgrounds, restaurants, gift shops, parks, and other retail establishments etc, are impacted sectors. The *Indirect Impacts* (or indirect effects) are changes in economic sectors that supply goods and services to those businesses (or organizations) directly serving to tourist or visitors. For example, suppliers of services and goods to parks and other attractions for operation and capital development purposes. Employees and owners of businesses impacted directly or indirectly by tourists or visitors earn income that is then spent on a number of household goods and services, ranging from groceries to barber shop services. The changes in economic activity resulting from household spending of earned income are called *induced impacts*. Adding these three impacts, i.e. gives the *total impact*.

Five different types of impact reports are generated by IMPLAN Modeling. These are Output Multipliers, Personal Income Multipliers, Total Income Multipliers, Value Added Multipliers, and

finally Employment Multipliers. With the exception of the Employment Multipliers, they are expressed in term of dollars due to one dollar increase in expenditures. The Employment multipliers are expressed in term of number of jobs created by one million dollar expenditure in a particular sector. Multipliers are commonly known as ripple effects. That is, the impact which follows the initial expenditures due to the inter-relations of various sectors in the input-output tables. It should be stressed that there is a difference between first round of expenditures that occur in a particular county and the direct impacts. Some of the expenditures, through leakages, go to other counties and reduces the economic impact in that particular county where the park is located. IMPLAN identifies two types of multipliers, which are called ratio multipliers because they are obtained through the already computed multiplier values. **Type I** multipliers show the relationship between direct and indirect impacts. On the other hand **Type III** (or **Type II**) multipliers, in addition to direct impacts take into account the induced impacts. These multipliers are computed as follows:

$$\text{Type I Multiplier} = (\text{Direct} + \text{Indirect}) / \text{Direct}$$

$$\text{Type III Multiplier} = (\text{Direct} + \text{Indirect} + \text{Induced}) / \text{Direct} \\ \text{or Total Multiplier} / \text{Direct}$$

Type I and Type III multipliers are commonly used to find a regional economy's response to an external injection like visitor expenditures in and on the route to a park. The size of multiplier shows the economic interdependence within a region. The greater the propensity of local businesses and households to buy locally produced goods and services the higher the multipliers will be. In short the larger the region and the more likely developed the economy where the winery or park is located, the greater the regional multipliers will be. For example the multipliers for Brazos Valley region comprised of four counties will be larger than the multipliers calculated for Brazos County.

IMPLAN Modeling has the flexibility to analyze a particular winery or other attraction within a regional context. For example, in analyzing the economic impact of Cooper Lake in north-east Texas, it was possible to create an input-output table for the four-county region as well as individual counties bordering the lake. Similarly, in analyzing the economic impact of PaloDuro Park a regional input-output table was created and the regional impacts and local impacts were calculated for comparative analysis. Similar studies can be done for winery related tourism activities.

Of course like any other economic impact models IMPLAN requires carefully defined sectors that would be affected by winery related expenditures including entrance fees. The expenditure figures that are collected through surveys should fit the overall IMPLAN classification. The better the data the better the results obtained through IMPLAN modeling of the counties and regions.

The following graphs show the impact of vineyards and wineries in Sonoma County California:

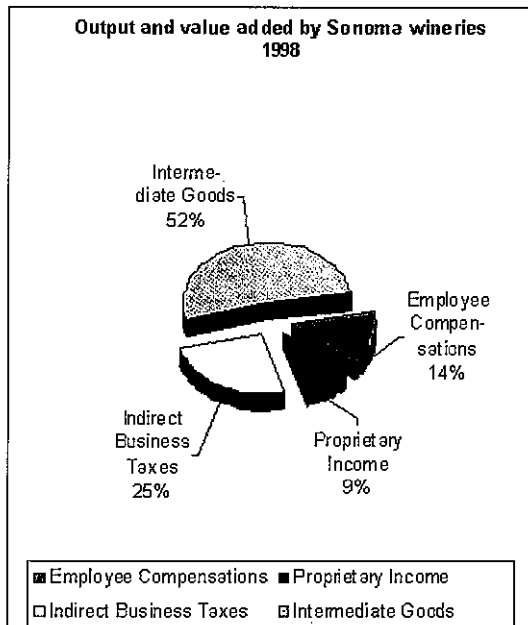


Figure 1.
Source: Benito, Carlos A., (1998), pp. 6.

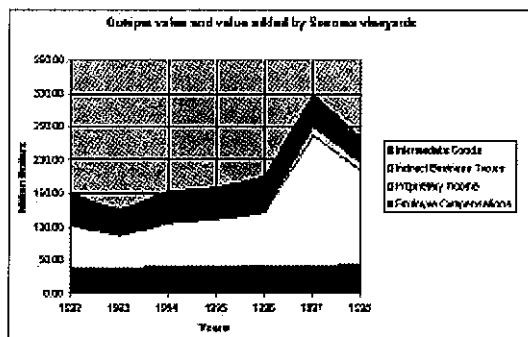


Figure 2.
Source: Benito, Carlos A., (1998), pp. 6.

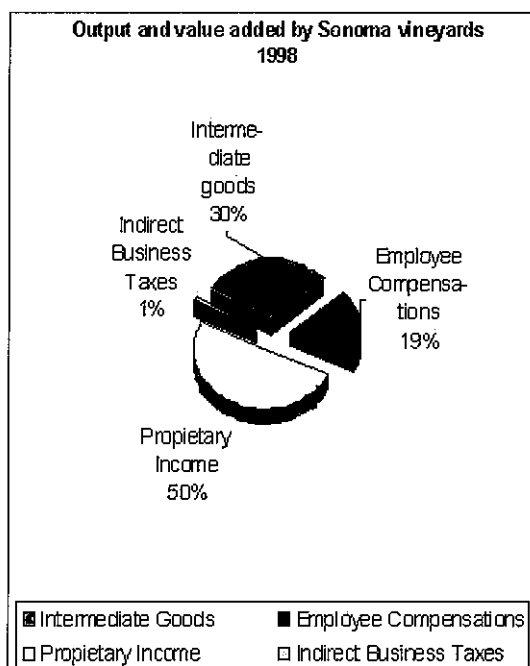


Figure 3.
Source: Benito, Carlos A., (1998), pp. 5.

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PART II
DEVELOPING DISTINCT BRAND-IDENTITY AND
REFLECTING THE GEOGRAPHICAL IDENTITY TO
THE PRODUCTS AND THE SERVICES OF
AGRICULTURAL INDUSTRIES

Alexis Şanal

Being There: Creating a Network of Olive Oil and Wine
Destinations in Turkey

Bahar Kürkçü

Branding *Rakı* as a Product with Geographical Identity and a Case
Study: Efe Rakı

Eugenio Merino, Danilo Pereira

The Family Agro-Industry and the Development of Its Visual
Identity Basing on its Source - Beleza Case

Eugenio Merino, Danilo Pereira

The Valorization of Family Agro-Industry Products through the
Design as Differentiation and Competitiveness Factor

Figen Korel, F. Banu Özen, Figen Tokatlı

Geographical Identity and Quality of Olive Oil

L.N. Ece Arıburun

Wine and Olive Oil Boutiques in Istanbul: The Relationship
Between Gourmet Industry, Brand Identity and Interior Design

Pwinn Rujikietkhomjron

Synchronal Development of Thai Wine's Design, Branding and
Agro-Tourism
Case Study: Nakornratchasima Wine Region

Ralph Lawrence

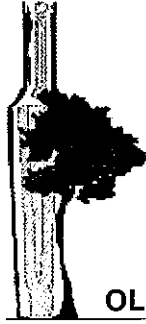
Branding Terroir in the 'New World'
Modes of Representation in the Wine Industry

Seçil Şatır, Serdar Tolun

Bölgesel Kültür Kapsamında Üreticiden Tüketicie Zeytinyağı ve
Donanımları
(*Olive Oil and Its Accessories from Producer to Consumer in the
Scope of Vernacular Culture*)

Şebnem Timur, Özlem Er

The Limits of Culture as a Source of Product Innovation:
The Case of Tea



BEING THERE: CREATING A NETWORK OF OLIVE OIL AND WINE DESTINATIONS IN TURKEY

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ABSTRACT

Deployed with imagination and intelligence the design of 'place' can bring about a new era of brand-identity for the olive oil and wine industry of Turkey. The physical environment of localized industry has numerous international precedents where regions employed architecture and technology to create geographical identity. These regions communicate through the design of 'place-making' and 'narrative environments': its history, its people, 'how it happens', future directions, and the importance of local knowledge to create superior products. Framed by a literature review of 'narrative environments', best practice of 'place-making' and identification of pioneering domestic projects, two action are suggested in order to generate learning, cultural and retail nodes whose whole create a network of destinations for Turkish agro-industry.

Keywords: Place-Making, Landscape Narratives, Place Brands, Regional Planning.

1. Introduction

With imagination and intelligence, the design of 'place' can help create a new era of brand-identity for the olive oil and wine industries of Turkey. There are numerous international precedents where architecture and technology have helped regional industry create an identity for the purpose of enhancing the value of specific products. The physical design helps establish the "narrative environment" - to communicate the history, culture, "how it happens", future directions, and the importance of local characteristics in the creation of superior products. Framed by a review of 'narrative environments', examples of successful "place-making", and identification of pioneering domestic projects; opportunities to develop a network of destinations to enhance the marketing strategies of Turkish agro-industry are identified.

The findings of this endeavor contribute to an understanding of how the physical environment can foster customer participation in the industry processes - termed as "embedding the customer". The customer is broadly defined as any person or organization that can impact the industry; and includes the end-user, distributors, partners, regulators, market analysts, local residents or any person who influences public opinion. The power of place to enhance the customer experience and enrich regional identity demands going beyond themed places or showrooms to creating a cohesive network of places rich in content which reflect the contemporary values, technologies and knowledge of the region. In conclusion, "Being There" proposes specific short term and long-term steps toward creating a network of clustered olive oil and wine visitor sites.

The proposal for "Being There" builds on two methodologies that have been shown to generate memorable and enduring brand experiences. The first, Place Brand Ltd.'s Hexagon Model for Regional Branding, sets six principles of a regional brand. The second is the Location Hierarchy Model articulated in Customer

Experience Places: The New Offering Frontier (Gilmore, J. and Pine, II B.J.) and addresses new trends in corporate marketing beyond sensory appeal. Both models highlight how the design of physical places works with the other dimensions of brand identity (image, value enhancer, affiliation) to engender enduring customer relationship.

The proposed actions engenders programs for the regions' stakeholders to work in concert on a shared vision for the future and to stress the importance of individual organizations in crafting a diverse collection of content driven 'places' whose sum creates a compelling network of olive oil and wine destinations. Being There's two action plans establishes the underpinning for an open network of customer nodes to support and guide the visitor through the region's unique assets and offers visitors opportunities to personalize their narratives. The network is defined by three substance places: Learning Places, Cultural Places and Retail Places.

Where to Start

An assessment and inventory of existing places in the olive oil and wine sector in Turkey is the first step. Meanwhile, the olive oil and wine sector's greatest partner for regional branding and a network of places is the Tourism sector. In 2003, almost 14 million tourists visited Turkey making tourism Turkey's largest industry sector (Republic of Turkey, Ministry of Culture and Tourism). Recognizing the importance of regional identity in tourism branding, Turkey's Ministry of Culture and Tourism has defined eight regions for tourism of which five (Istanbul & the Marmara, Izmir & the Aegean, the Southern Aegean, Antalya & the Mediterranean and Ankara & The Central Anatolia) are regions of olive oil and wine cultivation. These five regions represent 88% of the investment in tourism establishments and 92% in tourism accommodations. Although olive and grape cultivation is significant in these regions, agro-tourism - not olive oil and wine tourism - is among the seventeen special interests promoted by Turkey's tourism "activity" campaigns.

As a starting point, building on the already robust tourism sector has a tangible and direct value-added benefit to regional and organizational brands. This presents numerous opportunities for partnerships and investment. Although the olive oil sector currently only exports 20% of its products, the value added from exporting tourism is unexplored. Turkey's wine sector is aggressively targeting international markets - and foreign wine producers are trying to penetrate Turkey's market. Based on this proposition, further information was gathered from the point of view of a tourist - either local or foreign. We surveyed the tourism opportunities in olive oil or wine, retail opportunities for tourism, ease of access to olive oil and wine places and tried to understand the brand's current use of place.

Agricultural brands by definition have regional identity as they are inter-dependant on climate, geography, political boundaries, transportation networks, settlements, suppliers, knowledge of production and health. Yet, unlike many agricultural products, olive oil and wine have a rich tradition to enhance the customer's knowledge of the products benefits, quality, culinary arts and craftsmanship. We observed that Turkish companies are developing their aptitude in print media as they shift from wholesale markets to retail markets. It is now time to support these efforts by taking action in cultivating the brands in their physical and electronic place portfolios. During a week of searching in electronic places, retail

points, and places of consumption we identified minimal opportunities in Turkish organizations that employed place in their brands. Meanwhile regional brands of olive oil and wine abroad revealed an overwhelming and systematic use of place identity to reinforce brand; many of which employed the narrative environment methodologies parallel to the Place Brand's Hexagon Model and the Customer Experience Place Model.

II. Narrative Environments

A. Location Brands: Regional Brand's Hexagon Model

The brand is comprised of a mosaic of values and it is thought most consumers respond to a brand as they would to a person, asking: "Are you interesting? Will you bring me things that nobody else gives me?" If the answer is yes, they will 'make friends' with it. Beyond its functional use - building of a sense of familiarity and recognition - a brand provides an emotional bond (Landor Associates). Brands are associated with lifestyle preferences and in many instances are setting the actual trends in leisure, activities and human expression. Most importantly the interaction with a brand happens in someplace and influences the customer's relationships to the brand's organization or region.

1. Tourism

Tourism is often a driving force in regional brands built on leisure, geography, history, special interests and recreation. Brands create synergy; when used in conjunction with institutional and geographic brands, regional identity is reinforced. Spain's Jaen Region, famous for olive oil, hosts a wide range of destinations, annual festivals and local culture. An excellent example of the connection between tourism and regional brand, the Jaen region features tours through the historic olive oil grove landscape and the famous Paradores of Spain, a unique state-owned accommodation network situated in historic castles, fortresses, monasteries and other historic buildings. Shared histories, values and expressions work together to take full advantage of a unique geographic area.

2. Exports and Business

Many regions become famous for specific industries and this influences consumer choices; for example, wine from the Bordeaux region in France and architectural marble from Italy. California's Napa Valley built on the combination of wine cultivation, health retreats and sport recreation to become a popular weekend 'get-away' destination for San Francisco's urbanites. Their success has spilled over to adjacent regions making the tourism sector important export to micro-agricultural economies.

3. Policy

Regional strategies are often led or influenced by one or more major cities. Strategies can cross political borders and include the collaboration of multiple stakeholders. A best practice example is the trademarked WineCountry.com, a regional development organization. Wine Country provides services for visitors, local businesses (i.e. over 300 listed wineries), business-to-business relationships, networking, government advocacy, transportation networks, investment opportunities and information dissemination.

4. Investment and Infrastructure

Investment in major infrastructure projects can play an important

part in improving physical links within a region and enhancing the sense of unity and purpose. A "region of origin" brand is nurtured by support services, national brands, global companies, and reputation. This synergy instills confidence and encourages further investment. In this context, communication infrastructure cannot be underestimated for both supply-chain effectiveness and brand experience. With the advent of the World Wide Web, many people have their first encounter with a region directly from their homes or offices giving rise to a new era of location aware information.

5. Cultural and Heritage

Regions often have a distinct culture and heritage. A region's heritage may be based on historical significance, traditional industries, geographical climate, advanced knowledge and/or its agricultural products. Present-day culture also determines a region's brand and supports the culture and heritage. Culture and heritage is often confused with history, but Southern Australia's wine country talks about a contemporary heritage and their unique multiculturalism (Hunter Valley Wine Country).

6. People and Education

The people of a region have a shared past or, as is increasingly considered important, a shared future. Equally important to the development of its workforce is the reputation of a region's industry and commerce. Boutique industries grow based on the added value of people in the creation of superior products and services. The standard of education of a region's workforce is a key driver of its economic health, both in keeping business in the area and in increasing investment. Israel's agriculture sector combined with its energy sector demonstrates local industry exporting "know-how" to adjacent regions and universities research pioneering patents and knowledge transfer to global research centers.

B. Customer Experience Places: Location Hierarchy Model

Strongly rooted in corporate marketing theories, Customer Experience Places go beyond packaging, typeface, logos and 'experiential marketing'. The aim is to engender emotional connections far more powerful than those marketing messages limited to imagery, tactile material, scents, sounds or sensations. Customer Experience Places acknowledge that expensive showrooms and boring customer tours often fail to engage customers and do not allow customers to influence future products and services. The location hierarchy model assists companies in making decisions on where and how to create an arrangement of customer experiences in both the physical and electronic environments.

1. Flagship Location / Site

Create a unique experience situated in a geographic location associated with the company. The narrative is built on the company's heritage and expands the traditional services and products offered. The virtual flagship sites are most successful when they highlight place networks and pre/post experiences. A common example is the wine tasting cultural centers within the winery or Mehmet Kahvecioğlu's website offering a symbol library for Turkish coffee fortune telling adding idiosyncratic local knowledge and imagination to existing products and services.

2. Experience Hubs / Portals

These are sites located where customers naturally congregate. This includes tourist destinations, like Istanbul, Cappadocia or Antalya, but also international destinations. Decisions for situating the brand should be in association with regional identity. Experience hubs can be co-operative ventures between regional products supported by policies for exports and trade and build upon existing relationships. For example with culinary arts in Tuscany, a retail point for Turkish olive oil could be situated highlighting products of excellence while articulating Turkey's influence in the creation of Italy's internationally reputable products.

3. Major Venues / Platforms

Local shops, sector focused events or lifestyle activities to situate primary outlets and services. Coupled with distinct virtual sites to support recreation and hobbies, creative futures can be uncovered in collaboration with customers. An excellent example is the annual Festival of Tbilisi, in Georgia. A traditional celebration of the founding of the city, the annual festival coincides with the harvest season and wine-making. Traditional music and dancing concerts are given in the open air, and today international film festivals, rock concerts and the International Jazz Festival bring visitors from around the world.

4. Derivative Presence / Placement

Association with other destinations and experiences derive value from the surrounding environment and can demonstrate the multi-dimensional nature of a product or service to a customer. This could include distinguished restaurants, hotels or other food and beverage industries. Both in the physical and Internet, these can be considered "places within places". The venues could include creative competitions promoted by Turkey's olive oil and wine sector in culinary arts, or new experiences in games like the virtual olive tree for children (and enthusiasts) - nurture, prune and harvest.

5. World-Wide Markets / Web

Last, situating the brand in every feasible place where customers might encounter a company offering; this includes the location the customer is most likely going to use the product - in the case of olive oil and wine, the dining-room table. Nothing can replace the virtual ubiquity of being available. You want your network of places to appear on Google. An extreme example is an American active wear shoe company "Vans shoes", which yielded 59,300 web pages on Google with those words on them.

III. Being There: Design Where Place Takes the Lead

The design of architecture, landscape and technology has historically expressed the values, aspirations and esthetics of the communities who form them. Despite great economic, material, technological, cultural or climatic constraints, expression remains as a dominant force to determine design. Narrative is a fundamental mechanism for humans in making sense of their world, their personal experience and each other. From myths to gossip, place sets the stage for how we describe events and memories. Places themselves have stories associated with them. Some of these are commonly-known stories like Troy, while others are extreme personalization of places through association with memory - when the later are told our emotions are awakened. The intentional and

creative design of place proposed for Turkey's olive oil and wine sector offers the prospect of constructing unique experiences to facilitate the customer's personalized memories the region's places.

A. Learning from Pioneering Domestic Projects Setting the Standard

The Little Hotel Book is a bi-lingual (English and Turkish) publication that has set the standard for boutique accommodations in Turkey. Its evaluation process established international quality standards and gave prestige to businesses associated with the book. In the Aegean Region, the book highlights a mountain village, Yeşilyurt, and promotes its historic olive cultivation and alternatively priced hotels encouraging visitors to day walks through the olive orchids. "The old stone houses of Yeşilyurt have become popular not only with the families from Istanbul, Izmir, etc. but from abroad too. The fresh and unpolluted air of the village along with the peace and tranquility provides a welcome escape from busy city life and therefore attracts many visitors of all ages.... The air of this region was proved to have the 2nd highest oxygen rate in the whole world (as high as 26.5% at times)".

Extending Service in Technologies and Infrastructure

Unexpected experiences that demonstrate aptitude and innovation construct distinctive identity as contemporary value structures become more sophisticated. Engineering and production processes as well as environmental and social standards of businesses can play a part in raising standards of quality, training and customer service. An exciting example underway in Turkey is use of solid waste from olive oil pressing compacted into logs for burning which yield extremely intense burning and an aromatic scent. This fuel source is environmentally non-polluting and biodegradable. Recently, Selcuk Gıda applied to the Energy Ministry for permission to produce energy from the olive oil cake. The energy power station will cost \$20 million and be established in Aydın's Germencik district. Sixty percent of the energy will be sold to Turkey Electric Distributing Company, TEDAS (Alexander. C.).

Extended Presence

Tariş's electronic place in their choice of colors and exclusive retail experience is pioneering the potential form of multiple places for experience in electronic places. In Tariş's informative website you learn of the acquisition of species, land, planting, growing, picking, pressing, bottling, shipping, point-of-purchase, application, product synergy and consumption. You also learn about this unique farming cooperative lead in knowledge dissemination and best practices for their product. And you learn there are amazing and innovative products in health, culinary arts and even complementary products, yet if a visitor wanted to visit the region of olive oil and wine they would find it difficult to make a connection beyond Tariş's TA ZE retail stores in Izmir and Istanbul. Tariş hesitates to take full advantage of the unique possibilities information technology-physical place opportunities available - what if I could experience the fields, mills, or any movement of the olive and its many forms before my consumption - even through basic webcams.

B. About Here?

To anyone who has visited Turkey, "where are you from?" is an all too familiar question. And visitors are not unlike locals in their curiosity as to regional origins. The value of Turkey's regional

specialties is reinforced at a young age in the primary education of the nation's geography. So why not apply the same expectation of specificity to Turkey's olive oil and wine regarding the unique characteristics of services and products from micro-regions.

The proposed actions have two targets. The first, engenders programs for the regions' stakeholders to work in concert on a shared vision for the future, while the second, stresses the importance of individual organizations in crafting a diverse collection of 'places' whose sum creates a network of olive oil and wine destinations. The first action targets long-term targets whereas the second has immediate, mid-term and long-term planning initiatives.

Being There's two action plans establishes the underpinning for an open network of customer nodes to support and guide the visitor through the region's unique assets and generate memorable experiences. The network is defined by three content driven places: Learning Places, Cultural Places and Retail Places.

Action A: Regional Brand, The Olive Oil and Wine Country of Turkey

Clarity is essential quality of communicating a shared vision for the region. This vision should have a steward to champion a series of important initiatives to ensure comprehensive and methodical regional branding efforts. This steward, a defined non-government organization or company, would represent the organization's that directly or indirectly impact the tourism and trade infrastructure of the olive oil and wine sector. The organization's primary role is to increase awareness and raise the expectations visitors have of the region's offerings. The organization would hold members accountable to strengthen the quality of the regional brand and establish standards for how to meet this quality performance measure. These responsibilities go beyond a visitor bureau and into ensuring a broad range of engagement opportunities in the region:

- Lobbying* local and national government (create a scenic highway program)
- Representation* at the Ministry of Culture and Tourism and other critical government and non-government organizations that influence the region.
- Promote the region brand* and distribute information to target audiences (i.e., a popular website to learn all the destinations and accommodations for olive oil and wine connoisseurs or novices or agriculture adventurers, links to other organization's web places - maybe even hold awards for seasonal best web places to visit)
- Regional activities*, awards and competitions in food, cultivation, innovation, and arts.
- Promote existing annual festivals* and enhance them with more activities/services (as well as create new festivals for the region)
- Clear information* to access the network of places (user friendly maps, trail maps, special interest maps, informative tours, seasonal boutique tours and destination signage / wayfinding).
- Do diligence*: set quality standards, design guidelines, services and qualifications to be met in order to join the network.
- Assist in identifying business-to-business relationships* including financing, investment opportunities, exports and workshops on futures.

-Publish newsletters providing associate and member information on visitors and future partners of knowledge, people, infrastructure, activities and places established and emerging in the olive oil and wine region.

Action B: Wide Range of Touch Points

Every organization in the olive oil, wine, agro-industry and tourism sector can contribute and assume the implementation of one or many of the suggested "design of place" actions outlined below. The proposed actions are highlighting the existing potentials available to create a sustainable and memorable olive oil and wine destination network. A variety of places demonstrate how projects can vary in scale, investment costs, timelines and multi-partner collaborations based on the resources and individual objectives of the regions stakeholders. The three places of "being there" build on the six dimensions of building a regional brand and experience places but look at specific ways Turkish organizations can create the regions back-bone.

Learning Places

They engage all ages, cultures and creative sensibilities as well as innovative associates to the olive oil and wine sector. For example, a trail can be enjoyable for an hour, an afternoon, a day or even a month trekking tour. Along the trail critical vista points are established, signs identify species, origins and composite of natural terrain, cultural/political geography is marked with narratives of the events, and villages that create the beads of the trail's necklace have visitor points/centers with local foods, wines and products (included as a service in a reputable restaurant or hotel). Facilities along the way can be unique follies which include expressions and stories. Facilities could include fountains, restrooms, picnic areas, tea gardens or seasonal nodes. Each landowner would take responsibility for contributing to the integrity and be encouraged to implement follies as trail amenities of different proportions. Follies could be anything from fun signs with location-aware content, a vista point with a refreshing mist-fountain, or visitor centers with seasonal accommodations at destination points along the trail. As each installation would be under the strictest regional guidelines, the aesthetic of the experience would give coherence. Yet each place would have a unique location, characteristic, information content and expression from investor.

Cultural Places

Turkey has thousands of cultural destinations and needs to build a reputation and connect places to the culture of olive oil and wine. This includes cultural places inside and outside the region and inside and outside the sector - for example, many of the wine group's cultural associate sponsorships. A more outward approach is to associate with existing olive oil and wine destinations, like a cultural center of Turkey's olive oil and wine culture placed in the heart of Tuscany, Italy. The center could demonstrate a shared botanical heritage's, give workshops on Turkey's culinary arts and become a resource point for knowledge transfer between the two countries' shared interests. These centers could be established in all cultural nodes with centers of excellence in olive oil or wine - Australia, North and South America, South Africa. Coupled with retail points with many of Turkey's boutique and mass manufactured products, this place makes a powerful introduction and establishes a relationship to Turkey's other cultural destinations, purchase of other complementary products from the region and investment

opportunities.

Eco-Tourism, AgriTourism and Outdoor Tourism hold a significant market share in Turkey's tourism meanwhile Turkey's local leisure culture is also growing, including foreign direct investment in second homes along the southern coast lines. New models for retreats, programmed activities (harvesting, pressing), centers of excellence, ecological explorations and outdoor living are all opportunities for new services, new customers and new experiences in the agriculture industry. Lifestyle hubs could be located within a 2-hour drive of Turkey's urban centers and offer different settings for wellness, regional activities, resource centers and even host business retreats. These centers could be traditional visitor centers of corporations, resource centers of a small boutique mill or even a village looking to create a seasonal a destination. The hubs would be easy to access, provide foundation information, illustrate the region's network, and give clarity to the regions unique characteristics - the Adatepe Village and Museum is an example of such a hub concept.

Retail Places

The spill-over benefits of regional products are invaluable. The idea of concept retail points and activity centers allows the customer to engage the products at multiple dimensions and continue to find new paths to identify with the brand. Retail places should become service oriented and demonstrate the range of the brands. This includes the sensory enhancement of materials, colors, smells, sounds, but extends to give new connections of experience - views of supply chain, associated products built on the same regional characteristics (as often seen with dried fruit or body products), but more importantly to people: tours, stories and brands with a shared vision.

IV. Conclusions and Customer

"Products are made in the factory; brands are created in the mind", Walter Landor.

Turkey's wine industry is in the nascent stages of extending its vision to compete in a global market. After extensive searching for wine destinations in Turkey and journal articles, we discover that unless you know specific Turkish brands, you will have a hard time locating a single place in Turkey's wine region - beyond the broadly defined Central Anatolia. The Ministry of Tourism and Culture even goes as far as to note that there isn't much to see as it is a Muslim country and grapes are typically cultivated for raisins. Yet anyone who has visited in Turkey is aware of the rich tradition of wine cultivation and the local people are only too enthusiastic to share this tradition with visitors. Even as a humble beginning, it would create a compelling experience if visitors knew the complexity of fauna and flora through local colorful stories, information walls in the transportation hubs or even through botanical signage along organized hiking trails.

To realize either action a foundation period is necessary to bring awareness of a shared vision to the region's stakeholders and to organize basic spatial information: scenic images, maps, trails, identified landmarks (including lodging, factories, historical sites or settlements), existing events, identify inherent colors and materials, flora and fauna, climate or even explicit unique natural formations and build upon existing business-to-business networks.

Although this information may be perceived as widely available it currently does not reference the 'place' in the olive oil and wine landscapes. This effort would be an opportunity to kick-off an enduring relationship with the Ministry of Culture and Tourism. Secondly, an inventory of existing places is critical to suggesting a comprehensive strategy at all available place-making opportunities in both physical places and electronic places. Values that constitute the content-based places of Being There are suggested as the basis for evaluation.

In conclusion, more compelling places are networked and coupled with information about the origin, history and socio-cultural role of the product. The starting point is identify imaginative approaches establish enduring relationships with the multiplicity of customers. This is critical to the decision making process in design. The tourism customer has been the focus for suggested actions, but when designing place, the broader definition of customer must always be considered as the places are often recycled for multiple customer engagements. Although measurable results in customer relations due to investments in the design of places is hard to measure in the short-term, immediate action by the sector's stakeholders and regional policy makers is essential for the sustainable advance of regional brands and corporate brands. Importantly, every organization, regional policy maker and investor can employ the place as a powerful medium that when coupled with regional identity can produce new industries, support existing industries and create robust micro-economies.

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BRANDING *RAKİ* AS A PRODUCT WITH GEOGRAPHICAL IDENTITY AND A CASE STUDY: EFE *RAKİ*

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ABSTRACT

Considering its product properties, production techniques and history, it can be said that *rakı* is peculiar to Turkish geography. But, definitions such as "Scotch Whisky", "French Wine" brings out the idea that Turkey cannot take advantage of this cultural heritage. However, after liberalisation, entrepreneurial ideas began to take place in the alcoholic beverages market in Turkey. For example, Efe *Rakı* set its goal as to make the whole world taste Izmir's famous *rakı*. In this paper, the role and importance of geographical identity is discussed with the case of Efe *Rakı*.

Keywords: Geographical Identity, Brand, Rakı.

Introduction

Considering its product properties, production techniques and history, it can be said that *rakı* is peculiar to Turkish geography. Statements such as "Scotch Whisky", "French Wine" brings out the idea that Turkey can not turn its geographical and cultural opportunities into advantage in this market as Scotland or France do.

If we relate it with the monopolist policy of recent years, entrepreneurial ideas have to take place after the privatization in the alcoholic drinks market in Turkey.

As a matter of fact Turkey's first private *rakı* brand Efe *Rakı* seems to have a rising trend and is discussed in this paper.

Turkey, Turks And *Rakı*

When one thinks of Turkey or Turks, *rakı* is nearly the first thing that comes to mind. There are many reasons of thinking *rakı* and Turks together.

One reason depends on socio-cultural issues. As the time went by, "*rakı* culture" has become into being without detaching from Turkish culture. *Rakı* has affected sociological behaviours of Turks and taken a place in daily life.

Another reason depends on geographical issues of Turkey. Water resources, soil structure, suitable climate caused *rakı* to be born in this region. In this case, it can be said that *rakı* is peculiar to Turkish geography. For example, the best anise, which provides the characteristics of Turkish *rakı*, grows in Çeşme-Izmir.

As a result, *rakı* is assumed as the "national drink" of Turks and is accepted as a Turkish drink by all encyclopedias (Zat, 2003:125).

What Is Raki?

It is an alcoholic drink obtained from the second distillation of suma with aniseed. Raki is not a fermentation drink like wine and beer but a distillation drink, so more technical knowledge and equipment are necessary for its production (Zat, 2003: 116).

In the Near Eastern countries there is a kind of drink known with different names such as "Arak", "Araki", and "Ariki" which obviously come from the same origin with raki. Some claim that it comes from the word "Iraqi" (from Iraq) because it was first made in this country and spread to other regions. Others say it got its name from the "Razaki" grapes used in producing it. Another theory says it comes from the word "Arak" which means, "sweet" in Arabic (Gürsoy, 2003: 15). One another theory says that raki got its name from "Arika" which is defined as "Kimiz raki" in Laurousse des Alcools-Libraire Laurousse (Zat, 2003: 122).

From Past To Present

The history of raki is as uncertain as its etymological origin. The thing clear about its history is that it was first produced in Ottoman domain in 17th century (Zat, 2003: 124). The raki produced then is the ancestor of the raki today. Different herbs like mint, carnation, cinnamon have been tried in raki production but anise was finally decided to be used.

Raki was produced in the houses and bars till 19th century. The first raki factory was opened in 1880 -Umrca Raki Factory- (Atilla, 2003: 39). In the beginning of the 20th century, auditing started in production places. By this date, raki's characteristics had come into being. A law, which passed in 1944, prohibited private sector from alcoholic drink production (Zat, 2003: 161).

2002 was the beginning of a new period. A new law, which ended government monopoly on alcohol production, has passed in 2002. With this law it also would be possible to set standards in production to protect the original Turkish Raki.

Many investors want to have a share at this market. Elda Drink And Energy Services Ind. & Trade Inc. was the first private company permitted by this law to produce raki. In 2004, Elda's "Efe Raki" was at the alcoholic drinks market, firstly in Germany and then in Turkey. In 2005 Burgaz Raki entered the market. Another investor is Tariş-Koç. Tariş had changed the understanding of the olive oil market by its approach to geographical identity in recent years.

In 2005, Elda has produced "fresh grape raki" of Efe Raki and also has presented two more brands, which are in different price ranges and have different tastes (Çilingir ve Sarı Zeybek).

As seen, the excitement of the investors gives an idea about the volume of the market. Raki market in Turkey is 60 million liter and 650 million dollar big. In long run it is believed that the market will be 80 million liter when new tastes and brands will take place¹. The average alcoholic drinks consumption in Turkey is 13,6 liter annual adult per capita. Beer is in the first rank by 11,9 liter and raki is in the second rank by 0, 77 liter².

¹ <http://www.gozlemgazetesi.com/20051118/haber.php?haberid=1372>

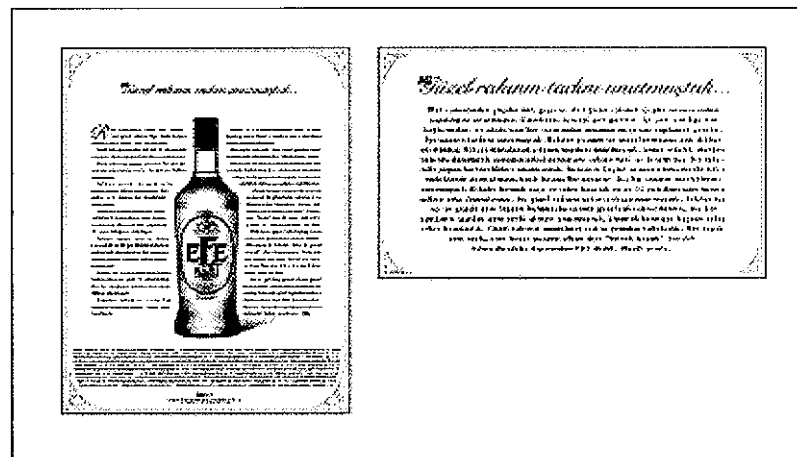
² <http://hursiv.hurriyet.com.tr/goster/haber.aspx?id=282203>

Efe Raki Product and Production Properties

As mentioned before, anise is the herb that flavours and characterizes the Turkish Raki. Best anise comes up in İzmir-Çeşme (Zat, 2003: 135). As being İzmir-based brand, Efe Raki emphasizes this point in its communication activities. Efe Raki informs the consumer about the origin of the best anise, the anise it uses. The other important materials for production are grape and water. Efe Raki mentions these points as it does for anise. And also Efe Raki informs the consumers about the best production techniques and tells the consumers that it uses these techniques with high technology.

Importance of the Brand Name

Efe Raki is Aegean based and highlights this geographical identity in every opportunity. It states that it is from the land of "Efe"s. In this case, the brand name is an important part of integrated marketing communications and provides brand awareness.



Figures 1 and 2.

Innovation in Bottle Design

The bottle of Efe Raki and its tap is different than the common. This tap provides the same taste in every bottle and because of this type of tap; the bottle cannot be refilled or be copied.

Efe Raki uses four types of bottles: 20cl, 35cl, 70cl and 100cl. 20 cl. is the baby size, and this size is first used by Efe Raki.

Figure of the "Efe" is used as the logo. Efe Raki identifies itself with this figure. As the time goes by, this figure can become concrete as in the example of Johnny Walker.

There are 2 groups of colors used in design:

- 1.White and its shades (Metallic, silver, ice)
- 2.Dark blue and its tones

These colors represent the ice and the whiteness of the raki as cleanliness and confidence. These colors could also be picked to set the harmony with porcelains and metals at the table.



Figures 3 and 4.



Figure 5.

Sales and Distribution

Efe Raki started the exportation immediately. It was first sold in Germany and Austria before Turkey. It attracts significant demand from both domestic and foreign markets so that the company wants to export 20% of its production in 2005. The countries Efe Raki is exported: Germany, Austria, Japan, South Korea, Azerbaijan, and Cyprus³.

Advertising

The examples are shown before. They depend on a long informative text. The important thing is that they are not boring and can easily be read.

Importance of the Fairs

Fairs are very important for Efe Raki as it has to be for every brand. Efe Raki interacts with the fair visitor in an unusual way by the help of its original stand.

³ http://www.dunyagazetesi.com.tr/news_display.asp?upsale_id=223669&dept_id=302

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THE FAMILY AGRO-INDUSTRY AND THE DEVELOPMENT OF ITS VISUAL IDENTITY BASING ON ITS SOURCE - BELEZA CASE

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ABSTRACT

The family agro-industry has been spreading in several markets, presenting products of excellent quality with careful processes of manufacturing and production, but with a problem that represents one of the main factors of failure in its commercialization, referring this item to its appearance that in the food products is translated the packaging and labeling. This deficiency was evidenced by a family agro-industry placed on beauty line, on the region next to Itapiranga city in Santa Catarina State countryside - Brazil. From this demand was developed the agro-industry identification project, including the labels for its main products (Cachaça (Brazilian Drink), treacle and brown sugar). The main challenge was to maintain the source identification that in this case was represented by a German colonization, but that should allow to reach the producer objectives that at first moment planned to put their products not only on the local market, targeting possibilities outside Santa Catarina State and in a near future outside the country. It was verified with these producers a very sharp view about the commercialization aspects and prosperous market that is why the actions were centered on the development of a source identification, together with a special package for the main product that is Cachaça (Brazilian Drink). The final results were realized by the producers as being what they would need to reach their objectives and this was corroborated by the defined actions of the group as the trademark register and the presentation of the new product appearance for the potential buyers with concrete business proposals. It is highlighted the producers active participation with the project team, enabling in this way a very successful management in the project development process.

Keywords: Design, Source Identification, Family Agriculture.

Presentation

The Beleza group - Sugar Cane Derived Industry Ltda / Itapiranga, placed specifically at Beleza Line, next to Itapiranga city in Santa Catarina State countryside / Brazil, produces Cachaça (Brazilian Drink), treacle and brown sugar and commercializes them on the markets, shops, bars and supermarkets in the region, having infrastructure and capacity to produce in scale.



Figures 1 and 2. Beleza plant alembic, and Beleza Products: treacle, Cachaça (Brazilian Drink) and brown sugar, situation before the project (2004).

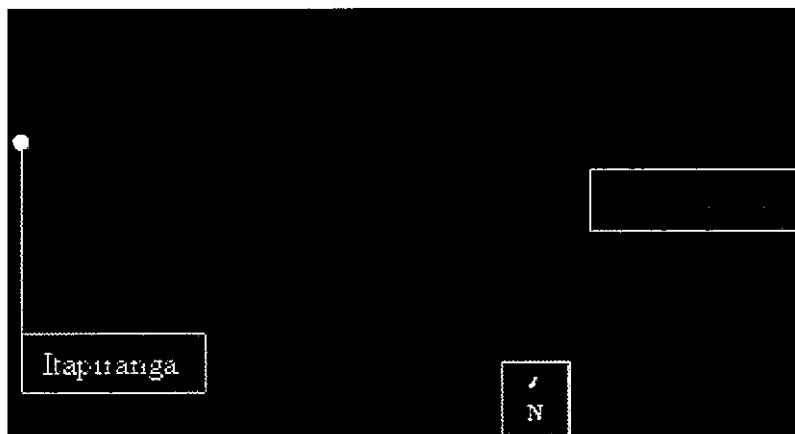


Figure 3. Santa Catarina State Map/Brazil. Itapiranga City Localization (Beleza Line), 2004.

Information Survey

The information survey together with the farmer's families has started with a meeting in Itapiranga/SC city, specifically at Rural Workers Union of Itapiranga, Tunápolis and São João do Oeste. At that meeting attended producers, Cepa/SC Institute and Design management Nucleus/UFSC representatives. Before that meeting CEPA Institute had already kept contact with the group to verify the interest in attending the project.

Initially, it was presented a project and discussed its viability. The opportunity was also for getting to know the producers reality. In this way, it was possible to know that the group denominates itself Beleza Line Producers (sugar cane derived), formed by a group of 12 farmer's families. The production plant (at its final stage) has got installed capacity for: Cachaça (Brazilian Drink) (pure and aged type, 1.200 liters/day); brown sugar (1.000 k/day); treacle (2.000 k/month); and several types of liqueurs.

Nowadays, according to the information from the group members, the plant uses only 50% of its capacity installed. It was launched officially in June, 2003, but just in 16th of December, 2003 began the production with Pronaf/FTE resources (governmental fund that helps financially the family agricultural development) for its construction.

After a category register verification at National Institute of Industrial Property - NIIP - it was chosen for the products the name "Beleza".



Figure 4. Present label used - Cachaça (Brazilian Drink), 2003.

After the first meetings, it was possible to identify in a clear way the needs of the group for the design. In this way, it was defined to develop a new visual identity for the group, considering that the present one (Figure 4) did not present itself in an efficient way and consequently would not be the most adequate for the future objectives that are the growth and expansion in the national and

international market.

In the present visual identity (trademark) was used graphical elements that represented German origin from the local inhabitants, and illustrated the sugar cane itself (main row material). The illustration included a character that reinforces the population origin; the green and yellow colors referring to Brazil; the white and red reminding the municipality colors.

Nowadays, the products are commercialized in several localities in Santa Catarina State (Jaraguá do Sul, Barriado, Itapiranga) and even outside the State (Caxias placed in Rio Grande do Sul).

After the meetings, the producers manifested their interest in participating on the project, saying they could help in the process. Some comments were:

- "...we need the consumer to sell our products..."
- "...we didn't have this type of orientation at the beginning [referring to the project]; that is why we are grateful. We are aware that we need to improve ... if we keep like that it will be difficult to commercialize our products..."
- "...we guarantee the product ...it misses an adequate presentation..."
- "...we must consider and highlight in our products the origin and quality together with the way that the producer's families produce..."
- "...we wouldn't like to fail; before it's attempted by other producers and it hadn't worked...in our case we do not want this...we would like to receive help from you to improve the appearance of our products...we need to aggregate value..."

From the collected information was possible to define the future actions of the project team that together with the ones from the group, were the following:

- Existing label study of Cachaça (Brazilian Drink), treacle and sugar cane identification;
- New label development for these products;
- Pilot sample production;
- Final report, presentation for the group and new labels research.

Finally, it was established that in a term about a month the team would come back to represent the developed proposals.

Development

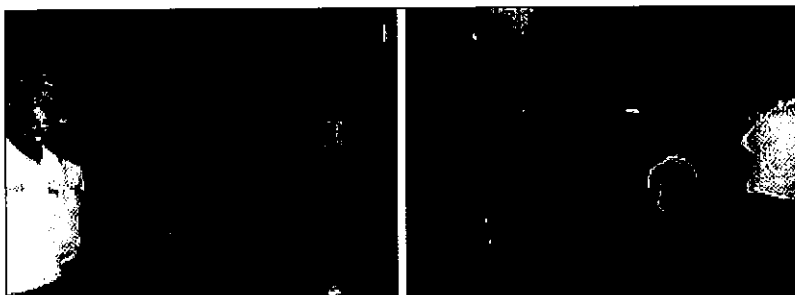
After knowing the producers and getting some necessary information we came back to Florianópolis, Santa Catarina State Capital/Brazil where it is placed Federal University of Santa Catarina (www.ufsc.br) and Design Management Nucleus (DMN). It was kept on the research in other information sources (literature, magazines, journals, industries, internet, among others), as well as market research as similar producers.

Together with this research, after the objective definitions to be reached and observing the available time for the development it was defined action chronograms that predicted the preliminary proposal presentations.

In this way, the defined project parameters predicted the development of a new visual identity, keeping the origin

identification features, as from the region as from the producers themselves.

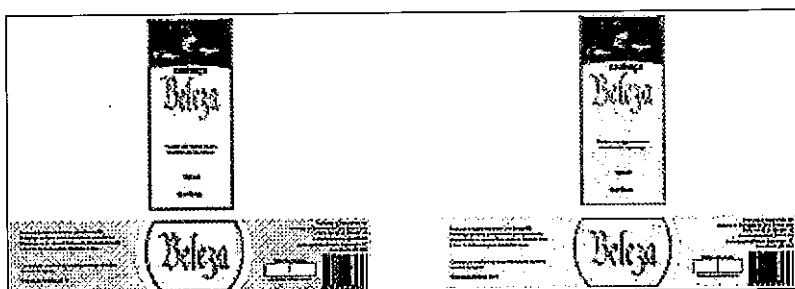
According to the chronogram was held in one month a new meeting with the producers, at this time at the producer unit headquarters of Beleza group, in Itapiranga. It was present most of the group members, Instituto Ceba/SC and DMN/UFSC representatives (Figures 5 and 6).



Figures 5 and 6. Proposal presentations for the producers, Itapiranga/SC, 2004.

The presentation was organized from the existing situation analysis and used parameters on the proposal elaborations. It was also remembered the project proposal, emphasizing that the proposals must be chosen by the group members and that there was not obligation of accepting them, but that it is fundamental the producer participation on the choice and manifestation of opinions and recommendations.

Altogether there were three proposals and respective applications on the product lines, highlighting the specific details on the "origin identification" and "family product". It was also presented a special/promotional packaging proposal, being finally exposed the producer prototypes for the producer's appreciations.

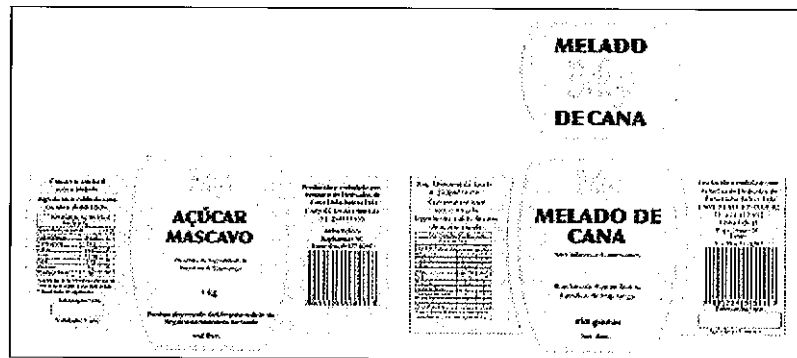


Figures 7 and 8. Proposal for Label 1 for Cachaca (Brazilian Drink) aged and pure, 2004.

The set of labels from the proposal 1 follows a standard that highlights the product type and its name (BELEZA), and a chromatic configuration with shades that remind the products, mainly the sugar and treacle. The letters, (types) used on the group name, remind the local German origin and the members, and with the golden color highlighted the quality and the product refining.

For Cachaca (Brazilian Drink) labels (Figures 7 and 8), there were two proposals according to the types. For this, it was used as parameter the chromatic symbols of silver and golden color. For the format was opted to the front/front side type, with longed and thin forms, in a way to give a differentiated appearance that reminded Cachaca (Brazilian Drink), but with a finer touch, still allowing better product visualization itself. It was proposed to use the group alembic image itself to reinforce the production and to show the

reality, and to highlight the agriculture of Itapiranga what would identify in a clear way the products origin.



Figures 9 and 10. Proposal for label 1 for brown sugar and cane treacle, 2004.

The brown sugar and cane treacle (Figures 9 and 10) follow the same standard with the same specification above described, highlighting the use of a higher stamp for better identifying the product applied on the product cap (cane treacle).

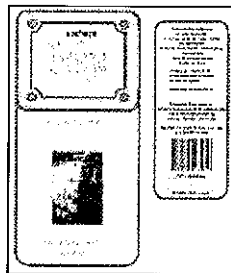
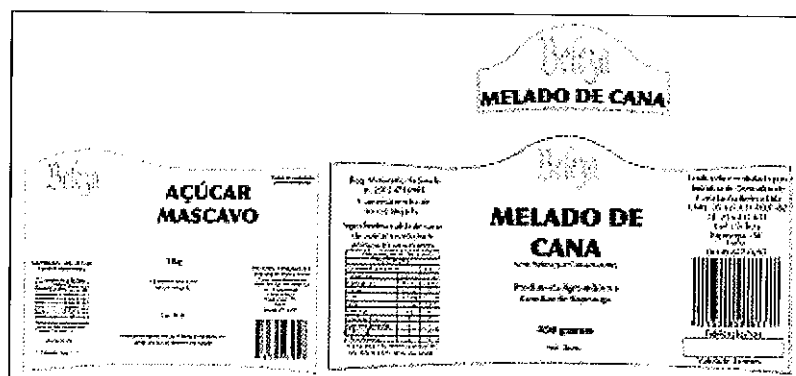


Figure 11. Proposal 2 for Cachaça (Brazilian Drink), 2004.

The set of labels from proposal 2 follows a labeling traditional standard, keeping the chromatic aspects related to the products, as well as the group name. According to the dimensions, it was opted for a medium-sized for being possible to visualize the product in a reasonable way.

For Cachaça (Brazilian Drink) label (Figure 11) was developed a front/back side proposal, in a traditional format, highlighting for the product and name type, using the barrel image (symbolizing the product storage). On the second label was put the secondary information related to composition, legislation, etc., following the same standard.



Figures 12 and 13. Proposal 2 for brown sugar and cane treacle, 2004.

On the brown sugar and treacle labels (Figures 12 and 13), the

predominant color is maintained in the same way as the product name and type. In the specific case of treacle was kept the composition of proposal 1, with a front label and a higher identification stamp, changing the forms and information distributions.

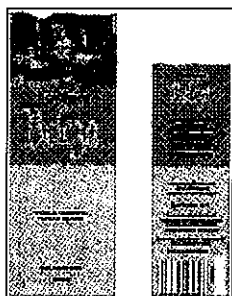


Figure 14. Proposal 3 for Cachaça (Brazilian Drink), 2004.

The last proposal, number 3, maintains the previous concept, searching a chromatic relation with final products (brown), as well as maintaining highlighted the group name and product type.

Cachaça (Brazilian Drink) label (Figure 14), as on the proposal 2, presents front and back separated, maintaining highlighted the product type identification and the producer names. The proposal is to put an alembic, as on the proposal 1; if the alembic is accepted it will be used by the group. About the label size, it was decided to increase it, as on the front as on the back side. Finally, it was used the "handmade" finishing recourse (torn paper), on the higher label, as a way to create a differentiated element and more organic.



Figures 15 and 16. Proposal 3 for brown sugar, 2004.

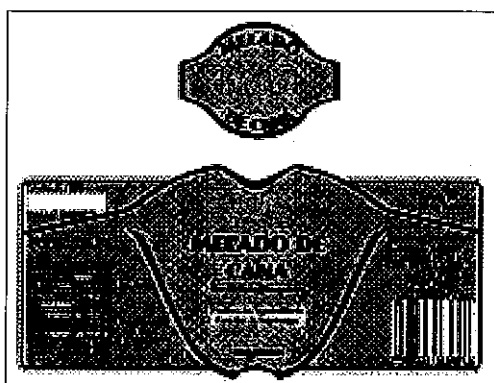


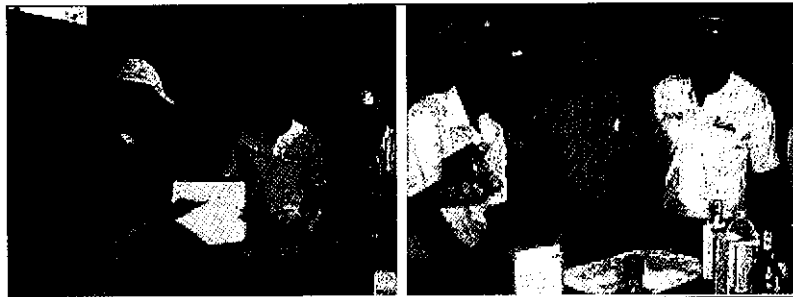
Figure 17. Proposal 3 for cane treacle, 2004.

On the brown sugar and cane treacle labels (Figures 15, 16, and 17) were maintained Cachaça (Brazilian Drink) label predominant color; in the brown sugar case was created transparent areas for

better visualizing the product, enabling a better integration between the label and product. It was developed two alternatives, with different dimensions. Treacle product followed the previous proposal policies, using front and high label identification, with the same chromatic specification and organic appeal.

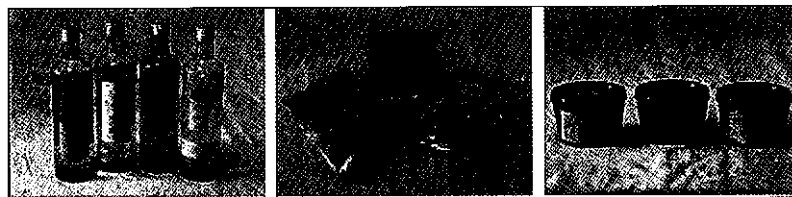
Another important item, applied to all products, was a recommendation of using standard-bottle for Cachaça (Brazilian Drink) (glass), already industrialized, that is being adopted by producers, mainly by the differentiated format and prominence spelling on the glass itself in Portuguese and English of the product type, besides Braille (for carriers of special visual needs).

After the proposal presentations, with visual resources (projection), it was presented the product prototypes to facilitate the choice. With the prototypes were presented the enterprise versions for better analysis.



Figures 18 and 19. Proposal chosen by the producers, 2004.

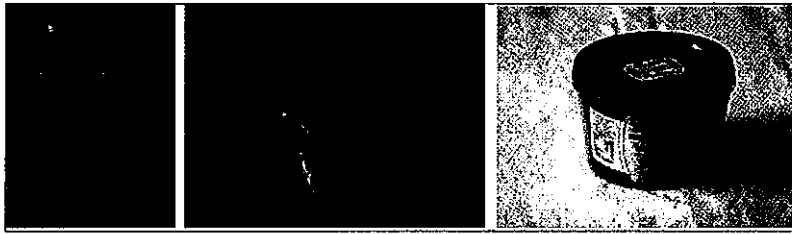
The group member's reaction was very positive, and received very well the proposals (Figures 18 and 19). In this way, the choice was much discussed, but, in general way, the answer was unanimous for both proposal and prototype quality presented (Figures 20, 21 and 22).



Figures 20, 21 and 22. Cachaça (Brazilian Drink), brown sugar and cane treacle prototype, 2004.

In the producer's opinion: *"...it'll be difficult to choose one...I liked everyone...actually, as it's it'd be difficult to get into the market..."*, referring to the label used before.

At the end, it was chosen the proposal 1. Such choice was justified by the group members, due to the great differential mainly of Cachaça (Brazilian Drink) labeling (front/front side) and the lightness that it presents. It was evidenced as an important point, the label size that allows better visualization of the product.



Figures 23, 24 and 25. Chosen proposal (1), 2004.

The following stage, after the choice, was to finalize the chosen proposal and the elaboration of new prototypes, to be finally validated by the group.

Final Proposal

The final proposal of Beleza group, with its technical specification and construction grade to facilitate and standardize its application, concludes the results exposition. In this final stage was observed a great evolution on the labels used and the new project presented.



Figure 26. Visual Identity Specification (trademark), 2004.

The labels were developed for the three group products: Cachaça (Brazilian Drink), cane treacle and brown sugar. The front label choice gives, in relation to the product perception, some important advantages; among them can be emphasized the frontally grouped information and the labels length (thin), allowing the product significant visualization.

From brown sugar label is possible to obtain a greater refining and care with the information distribution, as well as with the border details that accompany the central curving, which is the project remarkable element.

The label applied on Cachaça (Brazilian Drink) packaging presents itself effective to its purpose, allowing to differentiate Cachaça (Brazilian Drink) type, as on a large packaging as on a small one. It is important to mention that the project team recommendation as the glass type to be used was accepted. It is highlighted, however, that the choice is from the producers, being evident, once again, the decision participatory processes, which is an element very important on the proposal.

The brown sugar, with its label applied on the flexible packaging presented a good performance on the predicted items. The information centralized on the product and a great area of transparency enables the great product visualization, fact that is very appreciated by the consumers.

Finally, it is presented an image with all products (Figure 27), allowing to realize a new Beleza group identity. It is important to mention that as the previous group products, the labels passed by an analysis and evaluation of food area specialist to verify its conformity and to hold the necessary adjustments.

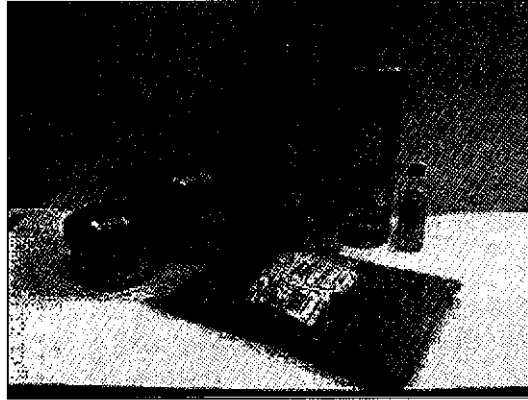
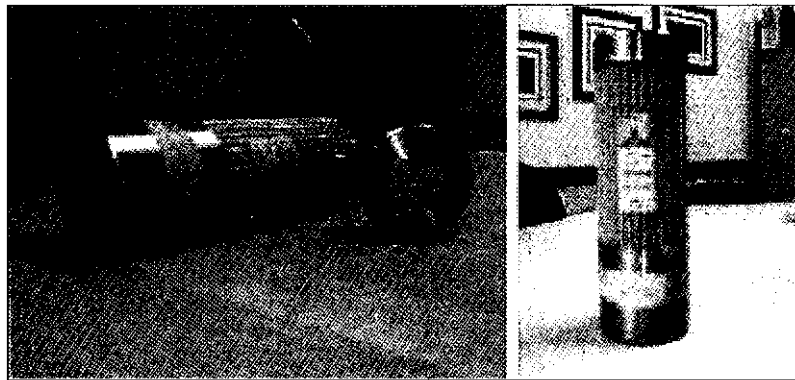


Figure 27. Final products. BELEZA , 2004.

As it has been mentioned before, it was also developed a special packaging for adding Cachaça (Brazilian Drink) bottle, having as principles the ecological aspect and material utilization. In this way, it was developed the packaging presented on Figures 28 and 29, using cardboard and aluminum cap. It is highlighted at this point the partnership with the enterprises, in this case this packaging was developed by Schimpack.



Figures 28 and 29. Special packaging for Cachaça (Brazilian Drink), 2004.

Conclusions

The family agriculture, in the case of Brazil, presents more than 50% of domestic food production. This data reinforce the importance of investing in this segment that besides being an important economical role has a fundamental role on the social inclusion of agricultural sector.

In this way, the incentives through the partnership between the government (Agricultural and Rural Policies Secretariat / CEPA Institute of Santa Catarina) and with teaching and research institutions (Federal University of Santa Catarina) have been allowing that small family farmers to improve their competitiveness, adapting themselves to legal and commercialization issues, as well as the improvement of quality of life in a general way.

Besides, the labels and packaging development, having as principles the origin identification, the project predicted the delivery of a label and packaging pilot lot to start the production, as well as orientations such as commercialization and especially trademarks registered.

It is important to highlight that this type of projects aim an approach between the design and areas less explored, as the case of family

agriculture, enhancing positive results for both parts. Finally, it is highlighted the producers participatory process that was fundamental. With the diversity of opinions, tastes and preferences, it was possible to reach results technically corrects and at the same time "the taste" of the producers.

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THE VALORIZATION OF FAMILY AGRO-INDUSTRY PRODUCTS THROUGH THE DESIGN AS DIFFERENTIATION AND COMPETITIVENESS FACTOR

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ABSTRACT

The valorization of family agro-industry products nowadays is very highlighted, mainly by the consumer demands that are clearer and clearer about the benefits that we can have with food products that are produced in a responsible way, giving attention to ecological cares. In this way, this paper presents a case of an agro-industry (one-family) placed in Palma Sola region next to José dos Cedros city in Santa Catarina State countryside - Brazil that produces Cachaça (Brazilian Drink). This agro-industry was identified through the Agricultural Planning and Economics Institute of Santa Catarina, as being a potential client for the development of a visual identity that assisted also the geographical source of the agro-industry localization. Aiming also the producer reality that distant physically from design centers, with no knowledge about the importance that could have for the future of the entrepreneurship, encouraged the project. It was developed in a way together with the producer and the family. With visits to the property in searching information that allowed the development of an identity that represented faithfully the producer and its source. The result was a personalized package with a label for the product, considering commercialization legal aspects, as well as relative questions of label and package production costs, respecting the limitations and entrepreneurship frame. Graphically, the result was accepted by the producer that verified on the label the source identification, as well as their opinions and information present in the project. Finally, it is concluded that it is possible to develop projects with small producers through partnership between governmental organizations and research and teaching institutions.

Keywords: Family Agro-industry; Design; Differentiation; Competitiveness.

Introduction

The design applied to packaging and labeling development has been taking place among the traditional activities. This can be verified on the great quantity of the projects developed last years and the enterprise acknowledgment as the importance and effectiveness of the design work in this area.

At the same time, it is observed that there are numerous society sectors that have not identified yet the importance and benefits that the design can bring to their business. In this way, it is cited the Family Agriculture case in Santa Catarina State / Brazil, which is the object of this work.

The Family Agriculture represents a significant food production percentage in Brazil, as well as an important number of families that subsist through this activity. According to the data from Cepa/SC Institute, it is estimated the existence of approximately five thousand small rural agro-industries linked in a direct way to family agriculture, this only in Santa Catarina State. The total amount can be assured that there are more than fifteen thousand people involved.

It was verified also through the projects held before that in Canoinhas, Porto União, Itapiranga and Mafra in Santa Catarina State that the main difficulties on the products commercialization by the small producers would be on the products presentation, as well as the type of packaging used most of the time do not attend the obligatory legal issues, harming its commercialization. In counterpart, it was verified that the quality of products, the process production, ecological aspects, among others are largely valued by the producers, meeting the present tendencies of the consumers that more and more search for cultivated products without agrochemicals, or rather, products with ecological appeal.

In this way, the producers assure their products, but it is missing an adequate packaging and labeling that allow a correct identification, as from the products themselves, an adequate packaging, a visual identity (trademark) that permits their recognition and that search for an origin identification, or rather, a greater and better differentiation.

Being that, this project searched for helping through the design the family agriculture, in this specific case a one-family agro-industry, located in Palma Sola (Figure 1), close to São José dos Cedros, in Santa Catarina countryside. The product elaborated is Cachaça (Brazilian Drink), typically Brazilian and derived from sugar cane.

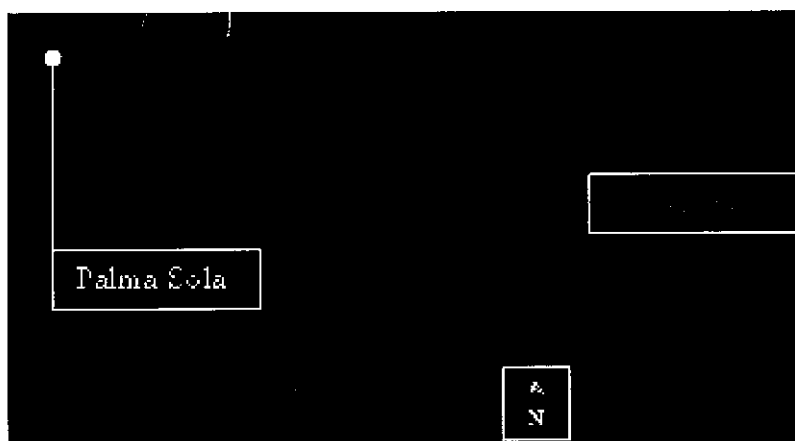


Figure 1. Santa Catarina State Map/Brazil. Localization of Palma Sola, 2004.

As it was mentioned before, it deals with a one-family agro-industry, formed predominantly by women, being the father the only man of the family (Figure 2). This characteristic was a surprise for the team, considering that the work in the agriculture is considered heavy. Afterwards, it will be presented the project development searching to show in practice how the design can contribute on the products differentiation and competitiveness of the family agriculture.



Figure 2. Hermes de Re's Family (wife, 4 daughters and one granddaughter) and technician from Epagri/SC (in the center), 2004.

Initial considerations

The agro-industry identification was held by Cepa/SC Institute that through its deep knowledge about Santa Catarina State agriculture has enough information to follow a correct identification. After this, together with Design Management Nucleus from Federal University of Santa Catarina was chosen due to its characteristics and potentiality.

In the specific case of Cachaça (Brazilian Drink), the producer searched for help in a governmental enterprise that provides aids to agriculture, called EPAGRI/SC that through courses, accompanying skilled techniques, orientations, etc., participates in an effective way in the State agriculture development. Historically, Mr. Hermes has been producing Cachaça (Brazilian Drink) for a long time, commercializing it near to his property, having enough success with the consumers that recognize as an excellent producer. This fact has stimulated him to look for courses at EPAGRI/SC to improve the production, seeking in this type of production the income improvement and consequently quality of life.

Taking courses he searched for structuring his own agro-industry, since the present moment his production was done in a rudimental way. In this way, with a specific credit for family agriculture he has bought his alembic (Figure 3) and he has started the construction of a production unit (Figure 4).



Figures 3 and 4. Alembic and production unit construction. Palma Sola, 2004.

It is important to mention that the producer does not have adequate label or even packaging. The production that he has been having was packed in soft drink plastic bottles (PET) and the trademark known of the product was "Cachaça (Brazilian Drink) of the Ridge", as a reference to the residence geographical localization that is placed in a ridge.

This type of information is fundamental for the project, in a way that allows knowing through the producer experience important elements and in this case was the geographical origin identification.

On the first meetings with the producers, it was possible to evidence other information among them:

- Cachaça (Brazilian Drink) production with installed capacity of approximately 30.000 liters/year predicted with the new agro-industry;
- Alembic capacity of 500 liters, with possibility to produce 4 alembics a day;
- To produce wine and raise cattle, but the main activity will be Cachaça (Brazilian Drink) that has already a great recognition in the region;
- Specifically the region where it is placed the property is

characterized by a ridge, the reason why the first idea of the producer was to denominate Cachaça (Brazilian Drink) as "Cachaça (Brazilian Drink) of the Ridge";

- It should be highlighted his production and handcraft/colonial bottling;
- It is not registered, but it would have been being arranged at EPAGRI/SC, being the first producer at São José dos Cedros to have it;
- The region would absorb the 30.000 liters/year produced;
- The product elaborated by the producer is considered by the technicians of EPAGRI to be good;
- Palma Solá has approximately 34 communities with an intensified social differentiation (many poor families and some very rich) and having the border with Paraná and being very close to Argentina;
- There is much commercial exchange with: Pato Branco, Curitiba, Cascavel and with Mato Grosso (cities and localities of closed States);
- The commercialization happens in bars (poor houses) and in properties of more sophisticated social classes (on the same type of packaging - bottle or PET);
- Production with growth intension and prediction;
- Difficulty in raw material (sugar cane), that is the reason of production drop and farming intention;
- Commercialization of similar products nearby:

- EPAGRI/SC in São Miguel do Oeste: bottle of 2 liters (PET) for R\$ 3, 50 and big bottle of 4.8 liters for R\$ 8, 00.
- Region producers (an average): big bottle of 4.8 liters - R\$ 5,00 to 6,00;
- Coming from São Paulo: big bottle of 4.8 liters - R\$ 2,80, re-packed for 1 liter and commercialized for R\$ 1,20 (doubtful quality);

With this information, the team defined some actions that among them are:

- To think of the regional;
- Packaging for local commercialization: plastic and outside the region in glass bottle (option to be analyzed by the technical team, considering the expenses, target public, etc.), maintaining only one trademark (identification);
- To associate with the producer (name);
- To use as identification of origin the geographical localization and recognition as being "Cachaça (Brazilian Drink) of the Ridge";
- The use of raw material as identification element (sugar cane);
- To be adequate and supervised in relation to legal aspects.

Development

The procedures used for the development of this project follow the Design Management Nucleus proposal - DMN of Federal University of Santa Catarina that has, as the main target the approach between the academies and the social reality, in this way, a team formed by teaching professionals with under-graduate and post-graduate students have been working on it. It also is supported by a participatory management of everybody involved, and in this way the consideration of the producers, as well as the partnership information is associated to researches and studies held by DMN that with a multidisciplinary team develops the project.

In a general way, it is followed a systematic divided in three large stages proposed by Giovanetti: Analytical, creative and executive. In this way, the team has started the alternative development process supported by researches and studies as mentioned before.

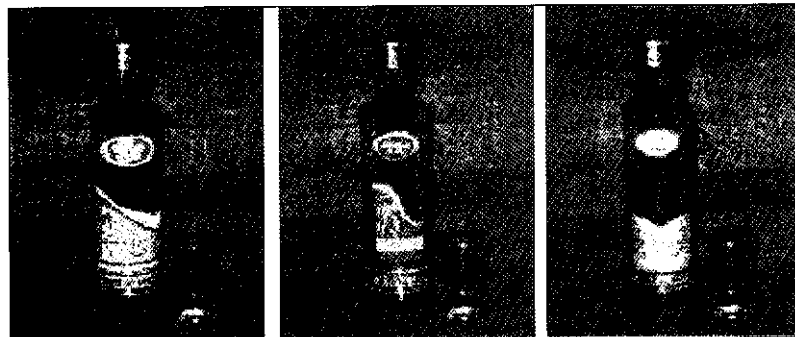
It is highlighted in this way that the first ideas are always presented on paper and pencil where they are discussed and analyzed by the team. This stage is considered of great importance because it allows the solution generation without the interference of other means, as the case of computer that in the opinion of the team limits the creativity process. From this, it was chosen the alternatives that better attend the criteria and parameters defined and prepared from virtual and material prototypes, as well as manual designs for next step that would be the preliminary proposal presentation to the producer and his family.

This happened in another visit to the properties by the team (Figure 5).



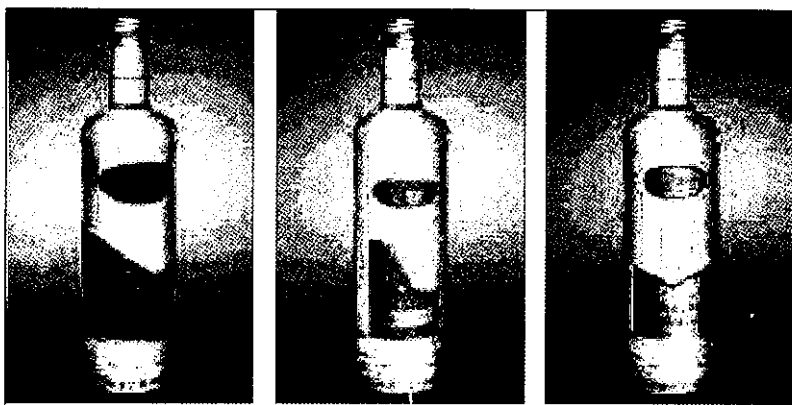
Figures 5 and 6. Preliminary proposal presentation. Palma Sola, 2004.

In this opportunity was presented two proposals, being one of them with two variations, intending to allow that the producer himself manifested his ideas about them. In this way, it was presented the material models that consisted in personalized glass bottles and adequate for Cachaça (Brazilian Drink) product. Figures 7, 8 reinforce the origin geographical identification concept re-passed by the producer about "Cachaça (Brazilian Drink) from the Ridge" and Figure 9 presents a convergence format formally similar to a valley.



Figures 7, 8 and 9. Preliminary proposal presentation (material prototype), 2004.

With the material prototypes were also presented virtual prototypes in pressboards form and portable computer screen taken for the presentation. The Figures 10, 11 and 12 show them.



Figures 10, 11 and 12. Preliminary proposal presentation (virtual prototype), 2004.

After the presentation and discussion, the producer's family chose the alternative presented on Figures 7 and 10, considering that it would be the one that most presented the defined concepts. The Figure 13 presents the flattened label where it is possible to observe that on it was highlighted the ridge format as a way to identify the producer origin and to emphasize the acknowledgment of his product as "Cachaça (Brazilian Drink) from the Ridge".

"...I liked the three of them...it's difficult to choose....but it got too beautiful..." told Mr. Hermes.

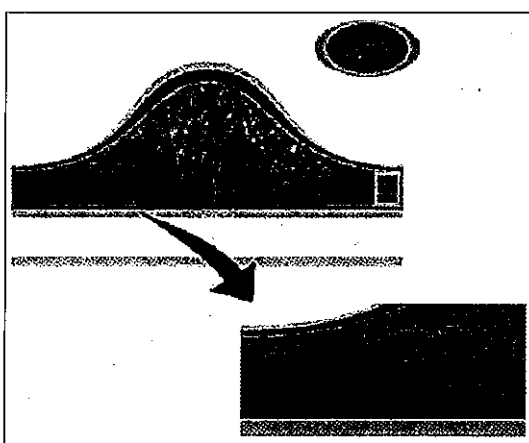
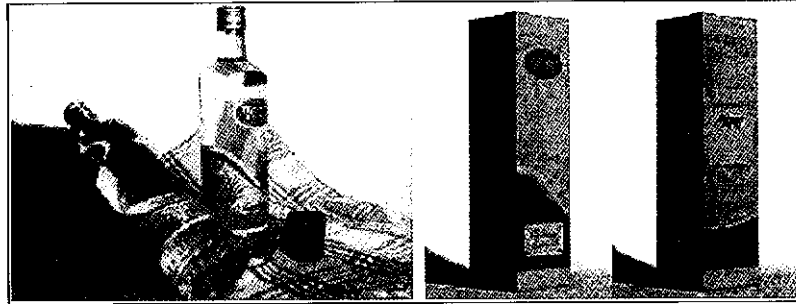


Figure 13. Chosen label (flattening), 2004.presentation (virtual prototype), 2004.

Still in the figure above is possible to verify the presence of the name that the producer himself adopted as visual identification (trademark) of the products. The label also has a raw material illustration (sugar cane) and the "Colonial Cachaça (Brazilian Drink)" as a way to emphasize its origin. Finally, it was included all the necessary legal information to be ready for commercialization.

The packaging and labeling chosen by the producer, according to his opinion and his family surpassed their expectation, as the following comment: *"...it's not needed to be my idea..."* referring to the use of the ridge on the label.



Figures 14 and 15. Material prototype with the final label and individual packaging, 2004.

Conclusions

When it is finalized a study like that and verified the results reached as in technical and practical terms, it is observed clearly that initiatives like that are fundamental for the improvement and optimization of products from family agriculture. In this sense, it is possible to corroborate and more than that to prove the contribution for the Design in this area.

The comments told during the project by the members' family themselves show what was mentioned above: "...the problem is to produce Cachaca (Brazilian Drink) with quality to put there..." (Mr. Hermes), "...that's beautiful it is... who knows..." (Mrs. Hermes).

From the point of view of the design, the product identification and to differentiate from the others, informing about its content and benefits that it can proportionate it, is one of the key elements. Associated to this in a systematized and conscious process, congregating knowledge and information of different areas with the direct clients (producers), it is possible to reach significant results, having as the base the innovation and integration principles, bases for management design, basic element on the proposal of this project.

Finally, it must be highlighted as fundamental element of this type of project the contribution that the design can have a differentiation and competitiveness element. This applied to a small producer that would hardly have access to design because of the distance, available financing resources, among others and that through partnership between the government and teaching and research institutions enable an improvement of quality of life and mainly an increase in growth and development expectation. The producer's own words confirm this:

"...it's said on the telephone that it's got too beautiful...we're going to get a little more excited...the boys have been working hard to keep on the work ...very good!!!!..."

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GEOGRAPHICAL IDENTITY AND QUALITY OF OLIVE OIL

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ABSTRACT

Olive oil is gaining importance and its consumption is increasing since more attention is being paid to natural products. It has been proved scientifically that olive oil has various health benefits such as decreasing cholesterol level and blood pressure and preventing the risk of cardiovascular diseases. A regulation was passed by EU in 1992 to encourage diverse agricultural production, to protect product names from misuse and imitation and to help consumers by giving them information concerning the specific character of the products (Protected designation of origin and geographical indication, EC 2081/92 and 2082/92). This regulation includes olive oil produced in certain areas of Spain, Italy and Greece. Olive oil composition is affected by environmental (soil, climate, altitude), agronomic (irrigation and fertilization), cultivation (harvesting and ripeness) and technological (processing) factors. The variation in composition is reflected to the organoleptic properties of the product. Quality and nutritional, organoleptic properties of olive oil are also affected by the storage conditions. Temperature and light are the main factors playing role in the stability and antioxidant activity of olive oil. Colored glass bottles are more suitable for olive oil since it extends shelf-life by reducing oxidation. While package is designed by taking the requirements of the product into account, it should also appeal customers visually.

Keywords: Olive Oil, Geographical Classification, Packaging.

Introduction

Olive oil has been produced mostly in the Mediterranean region for about 6000 years. It remains predominantly Mediterranean oil in terms of production and consumption since the tree has specific climatic requirements for successful growth. In 2002, the World average consumption of olive oil per capita per year is 0.4 kg (FAO, 2004). Forty-two countries had an intake above the World average in 2002 and eighteen of these were in the Mediterranean region, which accounted for 86% of all consumption and 98% of all production (FAO, 2004; Grigg, 2001). The consumption of olive oil in the three major olive oil producer countries within the Mediterranean region, Greece, Italy and Spain, exceed 10 kg per capita per year. In contrast, consumption in other Mediterranean countries such as Albania, Croatia, Slovenia and Turkey is less than 1 kg per capita per year (FAO, 2004). Olive oil plays a very limited role in the diet and also in cooking in Turkey since diet relies upon lipids derived from animals and vegetable oils other than olive oil, especially sunflower seed oil. However, the narrow coastal region of western and southern Turkey, which possesses a Mediterranean climate, has a considerable production of olive oil and the consumption in these areas is higher than in the interior areas (Baysal, 1991).

The consumption of olive oil has been increased in the last thirty years in areas outside the Mediterranean region, particularly in northern Europe, Australia (Australasia) and northern America. This increase is partly due to an interest in the cooking of the Mediterranean and also to the awareness of its medical virtues. Besides its superior taste and smell, consumption of olive oils has some health benefits. Many researches suggest that consumption of olive oil protects human beings against cardiovascular disease and a number of cancers. Olive oil has a high content of monounsaturated fatty acids, as well as many other constituents such as phenols, tocopherols, chlorophyll and pheophytin, sterols, squalene, aroma and flavor compounds, which exhibits a significant role on the health. It has an effect on the reduction of cardiovascular disease and cancer cases (Gerber, 1994). Free radicals accumulating in the body during lipid oxidation cause serious health problems such as facilitating the aging process, causing a damage to the liver and even formation of cancer by destroying the polyunsaturated fatty acids of the membranes and the DNA. The body is protected from free radicals by free radical scavengers such as phenols and tocopherols. Olive oil has significant amounts of phenols and consumption of almost 25 g of olive oil per day is a considerable amount for preventing oxidation (Kiritsakis, 2004). Olive oil also has an effect on decreasing cholesterol. It decreases the total blood cholesterol, LDL-cholesterol and triglycerides. HDL-cholesterol level, which plays a protective role and prevents the formation of fatty patches, may be raised or not be changed with the consumption of olive oil.

In 2004, Food and Drug Administration (FDA) of USA approved the olive oil producers to say on their labels: "Limited and not conclusive scientific evidence suggests that eating about two tablespoons (23 g) of olive oil daily may reduce the risk of coronary heart disease due to the monounsaturated fat in olive oil. To achieve this possible benefit, olive oil is to replace a similar amount of saturated fat and not increase the total number of calories you eat in a day." It is only the third time that FDA has approved such a qualified health claim for a food label (Burros, 2004).

Protected Designation of Origin and Protected Geographical Indications

In 1992, European Union created systems known as Protected Designation of Origin (PDO) and Protected Geographical Indications (PGI) to promote and protect foodstuffs. These systems are needed since as a food product acquires a reputation extending beyond national borders, there could be a competition with other products which pass themselves off as the genuine article and have the same name. This creates an unfair competition and at the same time it discourages producers and misleads consumers. European Union has developed these systems to encourage diverse agricultural production, to protect product names from misuse and imitation and to help consumers by giving them information concerning the specific characteristics of the product (Anon., 2005a). PDO means the product is produced, processed and prepared within the specified geographical area and the quality or characteristics of the product are "essentially due to that area". On the other hand, PGI means the product is produced, processed and prepared in the geographical area, and the quality, reputation or characteristics of the product are attributable to that area (EC, 2003). "Cilento" virgin olive oil is an example of a product whose origin is guaranteed and is defined as "Protected Designation of Origin" (PDO, EC, 1998). Some of the cheeses such as Asiago, Bitto, Mozzarella di bufala campana and Fontina, some meat

products such as Parma ham, Varzi salami and Tuscan ham, some olive oils produced in Greece, Spain, France, Italy and Portugal, and some other products have PDOs. Piedmont hazelnut, Borgotaro mushrooms, Montella chestnut, Sicilian blood orange, Sarconi bean, Senise pepper and Norcia ham are the examples of products which have PGIs (Anon., 2005b).

Factors Affecting Oil Composition and Quality

Olive Oil is a complex compound made of triglycerides, glycerol, pigments, sterols, phenols and small amounts of other compounds. Primary fatty acids are oleic and linoleic acid with a small amount of linolenic acid. Components such as fatty acids, sterols and some alcohols influence the fluidity and mouth feel as well as stability and health aspects related to the amount of saturated versus mono and poly unsaturated fatty acid. Phenol content is an important parameter that influences the quality of the oil not only by affecting the stability of the oil but also contributing to flavor, aroma and the typical bitter taste of the olive oil. Ultimate flavor of olive oil is determined by volatile aromatic compounds that add certain characteristics to oil such as flower, ripe and fruity aroma. Extra-virgin olive oil has a highly variable chemical composition. This variability mostly depends on four major factors: environment (climate, soil, and altitude), agronomic practices (irrigation, fertilization), cultivation (harvesting, ripeness, and cultivar) and technological (processing) factors.

Environmental factors include factors such as soil and climate variations due to altitude and amount of rainfall in olive growing regions. IOCC reports that there are approximately 2500 olive varieties and 250 of these are classified as commercial cultivars. Cultivar is one of the main determinants of the composition and quality of the olive oil. A list of important olive varieties and characteristics of oils obtained from these olives are provided in Table 1. Although certain cultivars have been associated with certain growing regions, recently versatile varieties have been started to be cultivated in regions where they were unknown before. Since the effect of climate on chemical composition of olive oils has been shown to be very significant, source of the olive oil also gained more importance. According to a study performed with two Italian olive cultivars grown in the first olive production zone, Andalusia of Spain, olive oils obtained from olives grown in higher altitude have more oleic acid and have higher stability, and monounsaturated to polyunsaturated fatty acid ratio is higher for oils that come from higher altitudes (Paz Aguilera et al., 2005). However, tocopherol and linoleic acid content of oils from low altitude were higher and the effect of altitude on the phenolic content of oils varied depending on the olive cultivar. It was found that unsaturated to saturated fatty acid ratio is higher in oils from higher altitude in another study investigating the effect of altitude on oil quality (Mousa et al., 1996). While total phenol content was higher for low altitude oils some phenolics disappeared with maturation as some appeared later. It was reported that virgin olive oils produced from olives grown in high altitude generally are sweeter and have herbaceous fragrance compared to oils from low altitude olives (Aparicio and Luna, 2002).

Table 1. Characteristics of the olive oil produced from some important olive varieties.

Olive variety	Growing region	Characteristics of the oil
Arbaquina	Catalonia, Spain	Recognized for its aromatic ripe fruitiness, low bitterness, pungency, and stability
Aglendau	France	Highly fruity, bitter, pungent, and stable
Ayvalik	North Aegean, Turkey	Fruity
Bosana	Sardegna, Italy	Highly fruity, herbaceous, medium pungency, bitterness, and stability
Coratina	Puglia, Italy	Strongly green herbaceous, bitter, pungent, and stable
Cornicabro	Toledo and Ciudad Real, Spain	Very fruity and aromatic with medium bitterness, pungency, and stability
Frantoio	Tuscany, Italy	Very fruity, aromatic, and herbaceous; medium bitterness and stability; strongly pungent
Hojiblanca	Andalusia, Spain	Fruity, aromatic, mildly pungent, low bitterness and stability
Koroneiki	Greece	Fruity, aromatic, mildly pungent, low bitterness and stability
Leccino	Tuscany, Italy	Medium fruitiness, and stability; low bitterness and pungency
Memecik	South Aegean, Turkey	Average olive fruitiness, with a hint of apple and other ripe fruits, not very bitter although a little pungent, sweet with an almond flavor
Manzanilla	Andalusia, Spain	Fruity, aromatic and herbaceous; medium bitterness and stability; strongly pungent
Moraiolo	Tuscany, Italy	Very strongly fruity, herbaceous, and stable; medium bitterness and pungency
Picual	Andalusia, Spain	When harvested early produces a nicely aromatic fruity oil that has medium bitterness and very high stability
Picholine	France	Very fruity and aromatic; medium fruitiness, bitterness, and pungency

Although olive has been known as a tree grown in dry regions, recent practices involve irrigation of olives to increase the production. Monounsaturated and polyunsaturated fatty acid content of olive oils of the dry farming olive orchard was higher while oils of irrigated trees have more saturated fatty acid (Selas et al., 1997). Polyphenol content was higher for oils of non-irrigated olives and these oils tasted more bitter. Several researchers determined various maturation stages for olives according to color, texture and content. While fatty acid accumulates with ripeness increasing the

oil yield, chlorophyll, total phenol and aroma content of oils obtained from mature olives decrease (Dur n, 1990). Decrease and increase in the specific fatty acids with maturation showed variations depending on the olive cultivar.

Another factor affecting the olive oil composition and quality is processing and storage conditions of the oil. Oil production starts with grinding of the fruit to form the paste then malaxation of the paste, and finally extraction with various methods such as centrifugation, pressure or percolation. Each of these steps has an effect on especially antioxidant capacity and oxidative stability, thereby on the quality of the product. The intensity of bitterness and pungency of olive oils produced using millstones is less compared to oils of metallic crushers due to lower phenolic content. Duration of malaxation is also a factor determining the oil yield and the amount of phenols in the oil. While prolonged malaxation favors increased oil yield it generally reduces phenols (Di Giovacchino et al., 1994). Higher phenol content was obtained with pressure and percolation systems relative to centrifugation systems. Lower phenol contents of centrifuge systems are associated with dilution of olive paste with lukewarm water used during extraction. For Croatia type olive oil, oil obtained with cold press was significantly bitter and has less grassy flavor in comparison to centrifuge systems while more undesirable yeast aroma was also observed for cold pressed oils (Aparicio and Luna, 2002).

Effects of Packaging on Quality and Stability of Olive Oil

Quality after processing and shelf life of olive oil changes with the storage conditions and packaging. The basic factors that are proved to alter the quality of packaged olive oil as listed in Tsimis and Karak sides (2002) are storage conditions such as light, temperature and humidity, packaging material properties as dissolution of some compounds from the package into the product, color of the material, also oxygen in oil and autocatalytic reactions. The applicability or suitability of materials for olive oil packaging is discussed in literature by considering how the package avoids the unwanted affects of above factors. The common packaging materials of olive oil in retail are glass and plastic bottles and tin containers in changing volumes between 0.5 L and 5 L.

Use of tinfoil containers is traditional and very common. Tinfoil containers are molded steel plates both sides of which are covered by pure tin (Cemero lu, 2003, Blunden and Wallace, 2003). The inside of the package is coated with a suitable lacquer for the product. Cylindrical tin containers for 1- 2 L olive oil packaging and 5 L tin containers in rectangular shape can be seen on the shelves in Turkey. They protect the product from light. No oxygen or water transfer through the walls is possible. The hole with a plastic closure has to be sealed properly to avoid any kind of foreign material passage to the product. This could be adulteration of the oil or air diffusion into the oil. However, the main problems with tin containers are the dissolution of lead in the welded side seams into the product and dissolution of tin or reaction of steel or tin with the oil through corroded inner surface of the container. The reaction of oily food products with the corroded tin coating or steel base not only deteriorates the quality but also more importantly may cause toxic effects on consumers.

Plastic containers, too, are used extensively for olive oil packaging. Polyethylene terephthalate (PET) and polyvinylchloride (PVC) are the most common plastic materials although use of PVC is very limited nowadays. The problems encountered with plastic packages

are the permeability of walls to gases (oxygen, carbon dioxide and humidity) and migration of unwanted substances from the package to the product.

Glass containers are inert and preferred for olive oil packaging. Transparent glass is widely used in packaging. However, photo oxidation of the oil and as a result the reduced shelf life is the problem. The colored glass bottles are an alternative because they prevent or slow down the oxidation process.

Packaging conditions affect the loss of flavor compounds and lead the photo-oxidation. Use of colored glass bottles or containers is recommended for storage since they can prevent light and oxygen exposure. Transparent PVC and PET plastic bottles were proved to accelerate the oxidation of the product. Also, light was found to be one of the major influences in increasing the degree of oxidation even the products were stored in different colored glass containers (Kılıç, 2002). In the same study, temperature was found to be less effective in oxidation.

In a study about the shelf life of olive oil, a group of flavor compounds were used as markers due to their high correlation to the storage conditions (Kanavouras et al., 2004). Extra virgin olive oil samples were packaged in PET/PVC/glass bottles and stored under different temperature (15, 30 and 40 °C) and light (40 W fluorescent light bulb and dark) conditions. According to the concentrations of different off-flavor compounds, light is the most significant factor in the deterioration of the quality during storage for all three types of packaging materials. For some of the off-flavor compounds, type of packaging material was found to be an important factor to increase the concentration because of oxygen transfer through the material. At elevated storage temperatures, concentration of off-flavor compounds increases. Extra virgin olive oils packed in PET or PVC bottles under high temperature and light conditions are definitely much more susceptible to quality losses and eventually low shelf life is unavoidable. Therefore, the type of packaging material and environmental conditions that olive oil product is exposed have to be adjusted to be able to keep quality and stability. In another study, it was claimed that under ideal storage conditions, most of the antioxidants did not significantly change over one or two years (García et al. 2002).

Other packaging materials for olive oil are tetra brick cartons and ceramic bottles even though they are not extensively used. Tetra brick containers are inexpensive and considered very suitable for the packaging of olive oil (Kiritakis et al., 2002). In Turkey, some olive oil producing brands sell the product in ceramic bottles. However, this type of packaging is very rare since it increases the retail price of the product.

The cost of package and ease of transportation seems to be the main concern for the choice of the material. Companies sell some of their olive oil products in colored glass bottles while majority of other products are sold in tinfoil, plastic and glass bottles. Olive oil produced from more acceptable olive varieties or olives of preferred regions are packaged in colored glass or ceramic bottles and sold at high prices. As summarized in this section, these packaging materials prevent exposure to light, consequently slow down the oxidation and also are very esthetic. The same care may be exercised for the packaging of all olive oil products to be able to preserve the initial nutritional quality and stability and finally extend the shelf life. Possibility of migration from plastic materials or tinfoil has to be calculated carefully for quality, stability and safety

of the product.

Conclusion

Olive oil composition and quality show significant variability depending especially on the olive cultivation region. Importance of this variability was reflected in PDO and PGI regulations approved by EU, which protect the consumer rights and also producers. Turkey as one of the major olive oil producer needs to identify the main characteristics of olive cultivars and classify olive oil according to geographical origin. Stability and quality are also affected both by processing and storage conditions. Therefore, suitable packaging material has to be chosen and temperature of the environment and degree of exposure to light of the packaged product has to be adjusted for maximum quality and stability.

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WINE AND OLIVE OIL BOUTIQUES IN ISTANBUL: THE RELATIONSHIP BETWEEN GOURMET INDUSTRY, BRAND IDENTITY AND INTERIOR DESIGN

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ABSTRACT

Wine and olive-oil gourmet boutiques are rapidly increasing in parallel to the developing consumption pattern and enabling the cultural and objective values meeting the conscious consumers. Interior design of the above mentioned boutiques plays a complementary role in reflecting important values such as; corporate, brand and product identity on to the consumption perspective.

The primary focus of this study is to examine the wine and olive oil gourmet boutiques located in the European coast of Istanbul and to create a profile by distinguishing the similarities or the differences between them. We specifically seek to understand how the concept of gourmet boutique interior design manifests with the regular retail sector and in general, the influence of design impacts on the consumer habits.

During the research; gourmet boutiques having various different types of interior design have been examined and interviews have been realized. The relation between gourmet industry and interior design was scrutinized by considering the results obtained from detailing the company and customer profiles, brand and product identities and interior design values.

Keywords: Gourmet Boutique, Interior Design, Brand Identity, Design and Consumption.

1. INTRODUCTION

1.1. Affect of Store Atmosphere on Consumers

Physical aspects of retail stores have gained particular interest among the academic researchers for several decades. Past research has pointed out that specific characteristics of stores (most notably: location, store atmosphere, product assortment and service quality) affect consumers' store evaluations and store choices (Louviere and Johnson 1990, Steenkamp and Wedel 1991). The relationship between physical environment and human perception was presented with a theoretical model (Mehrabian and Russell, 1974) in which the effects of environmental stimuli on human behavior was scrutinized. Applying the Mehrabian - Russell model to a retail environment, Donovan and Rossiter (1982) showed that two dimensions of affect: 'pleasure and arousal' could predict customer behavior in retail settings. Furthermore, Donovan et al. (1994) proved that store characteristics had significant effects on store attributes and emotions experienced in the store environment can shape outcome variables of interest to retailers. Lighting, brightness, colors and height were considered as to be important features creating a store atmosphere (Buckley, 1987) and the research of Donovan et al. (1994) extended the idea of components of store atmosphere: including new variables such as design, layout, music and air quality features. One of the important conclusions which the cited research distributed was that pleasure resulting from exposure to store atmosphere influenced such in-store behaviors as spending levels, amount of time spent in the store and willingness to visit again (See: Chart 1).

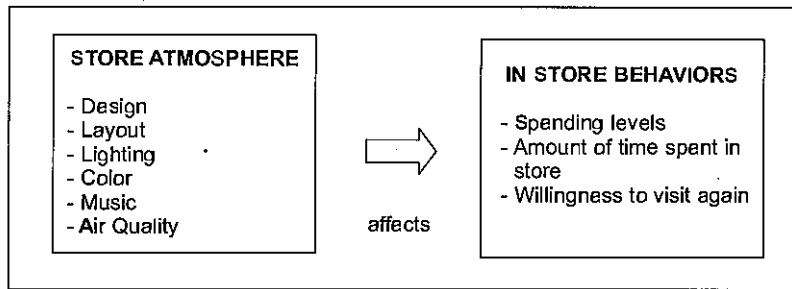


Chart 1. Store Atmosphere Affects on In-Store Behaviors (Donovan et al., 1994)

As the previously mentioned above researches proved that the emotional reaction triggered by the physical surrounding directly influenced the shopping behavior of customers, several other studies begun to point out to the relation of consumer perception and store attributes. The common base of the studies was to demonstrate the importance of the store atmosphere, whereas the term 'store atmosphere' refers to the environment that is brought by a coordinated visual display of merchandise and the ease of mobility within the store (Ghosh, 1994). It is possible to express a well planned store atmosphere as a space which provides 'a favorable environment that blends layout with music, color, decorative features and lighting' (Thang and Tan, 2003). In addition, the results from Wakefield and Baker's (1998) field study of shopping malls indicate that environmental factors (i.e. design, music, layout and furnishings) are positively related to excitement and/or desire to stay at the retail store. According to Berlyne (1971) the attractiveness of environmental stimuli is a function of their complexity and stimuli that are characterized by an optimal level of complexity are assumed to gain maximum interest. Thus, a recent article published in the Journal of Retailing and Consumer Services¹ acclaims the following:

"In accordance with the conception of experience-oriented marketing a store's good condition, careful layout and relatively high information rate, all helping to bring about a pleasant store atmosphere, facilitate goal-attainment. Moreover, a pleasant store atmosphere also improves the customers' mood state."

Clearly, the effect of store atmosphere is obvious and it is a major factor in retail services. If stated separately, the subtitle "layout" can be considered as one of the forward stepping feature of store atmosphere. It can be considered as the foremost aspect, whereas the design process starts with "conceptual design", but the first concrete touch comes up within the organization of the layout. Careful layout of an environment helps people to orientate, to find the way and learn to understand signs, to get the feeling of personal control and mastery (Bitner, 1992).

Other components of store atmosphere, particularly music, air quality and lighting, have gained predominant interest and a vast number of studies have been made upon the subjects. Baker et al.'s (1992) study found that consumers stay longer in stores, which are high in arousing qualities probably as they are perceived as more interesting. In their study, music and lighting were combined as a single ambient factor, thus inhibiting an examination of the interaction effects between two ambient stimuli. Furthermore, a

¹ Thang, Doreen and Tan, Benjamin, 2003. *Linking Consumer Perception to Preference of Retail Stores: an Empirical Assessment of the Multi-Attributes of Store Image*. Journal of Retailing and Consumer Services 10 (2003) 193-200.

research study held by Mattila and Wirtz (2001) provided evidence that improving a store's ambient conditions enhanced customers' evaluations of and behaviors in the shopping experience. The results of the study noticeably showed that when the arousal levels of ambient scent and background music matched, consumers' evaluations of the shopping experience were enhanced. As in the conclusion part of the study, they notify the following indication²:

"In sum, our findings provide further empirical support for the intuitive belief that when the stimuli in the environment act together to provide a coherent store atmosphere, the individual in the environment will react more positively. When ambient scent and music are congruent with each other in terms of their arousing qualities, consumers rate the environment significantly more positive, exhibit higher levels of approach and impulse buying behaviors and experience enhanced satisfaction."

Similarly, Spies et al. (1997) used a basic diagram to put on view the relation between store atmosphere and consumer actions, whereas it was explained that consumers' behavior improved more frequently in stores which were kept in good condition. Their research goes after the idea wherein positive mood changes could be shown to cause a favorable evaluation of the store and to make the customers buy more and make spontaneous purchases. (See: Chart 2)

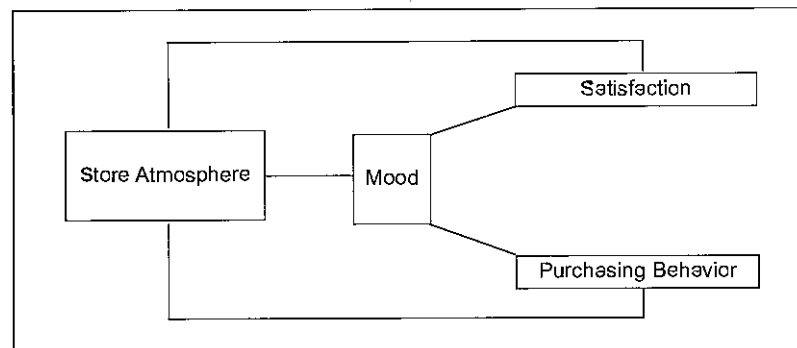


Chart 2. Relations between Store Atmosphere, customers' Mood, Satisfaction and Purchasing behavior. (Spies et al., 1997)

Observably, although the positive experience was the principle aim to be attained through store atmosphere, studies depict the negative characteristics of shopping experiences by which store atmosphere harmfully contributes as well. For example, a very recent research study (Arnold, Reynolds et al., 2005) held on 113 depth interviews, which revealed several factors associated with delightful or terrible shopping experiences for retail shoppers and the resulting consequences from these experiences. The following statement allocates the influence of the negative condition of store atmosphere on consumer behaviors³:

"...the actual atmosphere of the retail setting contributed in the creation of some terrible experiences. Dirty surroundings, crowded fixtures and aisles, and unreasonably loud music were reasons mentioned by informants."

² Mattila, Anna S. and Wirtz, Jochen, 2001. *Congruency of Scent and Music as a driver of In-Store Evaluations and Behavior*. Journal of Retailing 77 (2001) 273-289.

³ Arnold, Mark J., Reynolds, Kristy E. et al., 2005. *Customer Delight in a Retail Context: Investigating Delightful and Terrible Shopping Experiences*. Journal of Business Research 58 (2005) 1132-1145.

Overall, the following statements are achievable by the previous studies:

- a) Store atmosphere includes the harmonized togetherness of features such as:
 - Design
 - Layout
 - Lighting
 - Color
 - Music
 - Air Quality
- b) Positive (in terms of pleasant) store atmosphere contributes in store behaviors by affecting the consumers' mood in an affirmative way.
- c) Customers in a positive mood buy more items and spend more money than was originally planned.
- d) Customers spend more time in the pleasant compared to the less pleasant store.
- e) The more favorable the consumer perception of the store atmosphere, the higher will be the consumer preference for the store.

1.2. Gourmets' Choice on Food Consumption

The studies have shown that food choice determinants range in scope from practical (i.e. price and convenience) and temporary reasons (i.e. mood) to sensory preferences (i.e. taste and pleasure) and personal ideals (i.e. health, weight control and ethical concerns). However, relatively less is known about the natural combinations of food choice motives among normal adults (Lindeman and Starck, 1999).

The term "gourmet" can be described as 'those who are conscious in both of their own health and in ecological means and also linking the enjoyment of delicious food with health to constitute distinctive food choice subtypes.' Evidently, the positive relationship between experiences of pleasure, positive emotions and the quality of life are the key motivations of gourmets' consumption habits (Warburton and Sherwood, 1996).

A research study⁴ to analyze the relationship between personality and the food choice motives included two surveys totally held on 288 informants. According to the results of the survey, five clusters were labeled as the following: Gourmets, health fosterers, ideological eaters, health dieters and distressed eaters. The biggest group comprises 'gourmets' in a total sum of 30%. The gourmet cluster portrayed itself as omnivores who were mainly motivated by the good taste of food and pleasure of eating.

1.3. The Call for 'Delight' in Consuming

According to the knowledge mentioned above, it is possible to say that the consumption patterns of consumers are increasing in the majority of the cluster 'gourmet' and consequently, consumption habits will take change consistent with the rising level of consciousness and positive affects of interest, joy and satisfaction. Oliver and Westbrook (1993) reported that the highest intensities of joy and surprise were labeled as 'delighted'⁵, whereas this

⁴ Lindeman, M. And Starck, K. 1999. *Pleasure, Pursuit of Health or Negotiation of Identity? Personality Correlates of Food Choice Motives Among Young and Middle-aged Women*. *Appetite* 33 (1999) 141-161.

statement might take us to structure the view of the gourmet consumer. 'To be delighted' among the other aspects, can be considered as a feature of gourmet consumption. In the previous chapter, the relation of the quality of store atmosphere on consumers' mood was analyzed; the results demonstrated the parallelism between them. Likewise, based on the theory suggested about the connection between gourmets and delightfulness, it is possible to state that stores which are particularly designed to service gourmets have to articulate more than 'pleasant' effects on their customers, they have to suggest 'delight' in order to attract and service the gourmet consumers.

To obtain a high emotion such as 'delight' in a retail gourmet store could also be related into the change in customers' demands in shopping. Today's shopping experience is increasingly defined by customers as including elements of exclusivity (unique product assortment), identification (customer's desire to identify with certain stores), interactivity (i.e. hands-on shopping or in-store services) and entertainment (Lisanti, 2000).

Additionally, it should be taken under consideration that consumer patronage of retail stores often extends beyond the purpose of acquiring merchandise. Consumers' visit to retail stores often takes the form of a recreational activity whose worthiness is reinforced by the level of service provision with the store (Bitner, 1992). Hence, the quality of in-store services is likely to have a strong impact on consumers' purchasing behavior (Shycon, 1992). The aim of the in-store service is to strengthen store - consumer relationship, increase consumers' pleasure of shopping in the store and encourage their repeat visits (Reynolds and Beatty, 1999).

In sum, the positive harmony of store atmosphere, in-store services, unique product qualifications and interactivity form up as a single element to obtain the emotion so-called 'delight' in consumer, which can be considered as a fundamental effect in gourmets' perspective of consumption.

2. METHOD

2.1. Agricultural Marketing Strategies

To realize a research demonstrating relations involving interior design and gourmet consumption, Kohls and Uhl's report (1990) upon marketing strategies frequently followed by food firms were taken under consideration as an initial point:

- a) Product differentiation, seeking to find a product's unique features which set it apart from its competitors; increased brand loyalty,
- b) Market segmentation, concerning the development of unique product variations that will be better perceived by different consumer classes.

Gourmet consumption is mostly relevant in agricultural marketing; as identified in an increase in consumer preference which has been created for natural foods without ingredients that can affect the organoleptic properties of the product or harm health (Petroni, 1991). A research for EU (European Union) held in 2001⁶ clearly

⁵ The term 'delight' is used by means of 'combination of arousal and pleasantness' (Russell, 1980) and 'highly activated positive affect' (Watson and Tellegen, 1985).

⁶ Siskos, Y. et al., 2001. *Multicriteria Analysis in Agricultural Marketing: The Case of French Olive Oil Market*. European Journal of Operational Research 130 (2001) 315-331.

exposed that agricultural marketing differentiates from the general marketing with respect to the product's attributes and natural characteristics.

2.2. Process of Research Study

Derived from the information above, initially two valuable agricultural products, wine and olive oil were selected regarding to their distinct features and market segments.

The research was narrowed in the European coast of Istanbul metropolitan area. Gourmet boutiques were listed from various shopping guides and were classified in due to their product segment. Subsequently, five out of eight gourmet boutiques were selected which specialized on wine or olive oil. These agricultural products were particularly selected in order to reveal the relation between diversifying product attributes and their reflection on interior design of the selected gourmet boutique.

2.3. Survey

In order to perform a descriptive research, a survey was held through an interview questionnaire involving the five gourmet boutiques. Each boutique's owner or manager answered the questionnaire under confidential protocol. The questionnaire was divided into four subdivisions as regards to the information on company, product, customer profile and finally, interior design. Sample questions from the survey included the followings:

- Description of the display and storage requirements of the gourmet products,
- Explanation of the color and material scheme used in the store,
- Portrayal of special necessities in terms of lighting and air quality (i.e. temperature and humidity),
- The opportunity of consumers to test the gourmet products before buying them, and if so, what kind of space arrangement is provided for this facility.

3. SELECTED GOURMET BOUTIQUES

3.1. La Cave Wine Boutique



La Cave Wine Boutique is one of the prime wine boutiques in Istanbul, regarding the scale of the shop and also in the variety of

the product assortment. Located in the heart of the city, Taksim, it is surrounded by an intense traffic of people and vehicles. The original date of establishment started in 1979 as a food supply supermarket, whereas the company decided to focus only in marketing wine in 1991. Since then, La Cave has built up a wide range of products including the major Turkish brands of wine (i.e. Kavaklıdere, Doluca, Pamukkale) as well as the Australian, Chilean, New Zealander, Californian, Italian, French, South African and Bulgarian brands.

The boutique is composed of two stories: the entrance floor and the upper floor. As the customer enters the boutique, diverse forms of stands are in sight and all walls are covered with displays of wines from ground to ceiling. An alleged 'warm' atmosphere is attained through the intense usage of dark colored wood as a major construction and display material. The lighting also supports this warm atmosphere whereas the boutique is generally held dim and heat-controlled light bulbs are used in order to protect wine from over exposed light. The air quality is controlled by a HVAC system (Heating, Ventilating and Air Conditioning). Due to save wines from harm, the temperature and the humidity levels are controlled with this system 24 hours daily. For the valuable and storable wines, special wine closets with temperature, humidity and light controls (i.e. "Euro Cave") are set. These closets blend in the interior as displays. Some decorative features, such as bunch of grapes, vine stocks and old barrels are used in the interior. The ferreforgé balustrades provide a nuance to the overall "classical" atmosphere. There is a wooden table in front of the cashier, providing the customers the facility to try the product and take a rest. In the upper floor, two bergeré styled armchairs upholstered with baroque styled crimson red fabric and an end table made of old wine bottles are located. Customers have the benefit to have conversations in intimate groups while tasting wine. The knowledgeable personnel supply satisfactory information upon wines and wine culture.



Besides the harmonized classical and prosperous atmosphere achieved through the immense usage of warm materials, the unique touch of 'delight' comes particularly with **music**. It is known that music is capable of evoking complex affective and behavioral responses in consumers (Mattila et al., 2001). The built-in stereo system in La Cave Wine Boutique enables customers to listen to well-known composers (i.e. Vivaldi and Bach) at the background during shopping and comprise a 'delightful experience'. Prior

research has shown that music can affect consumer behavior in retail environments and their desire to affiliate in buyer-seller interactions. Shoppers spent more time and money in a slow tempo retail environment (Milliman, 1982).

3.2. Kav Wine Boutique



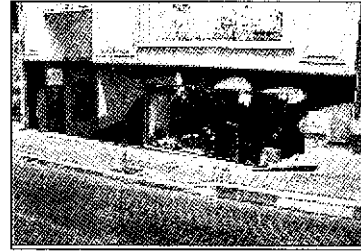
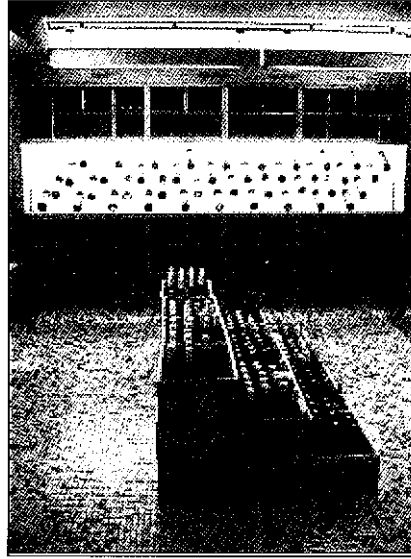
Kav Wine Boutique has opened in 2002 and has two branches in other cities. It is located in the trendy and stylish quarter of the city, Nişantaşı. It is a relatively medium to large scale boutique and the total area includes divisions for exhibition, management, bar and an in-house wine cellar. Kav Wine Boutique is regarded as the 'concept boutique' of Kavaklıdere Wines, a leading Turkish wine brand, and also supplies 250 wine and wine-related items (books, glasses, bottle stands, domestic mini-cellars) from 15 countries.

A comparatively more contemporary atmosphere is dominated through the general usage of materials, layout, facilities (happy hour activities and parties) and different exhibition techniques of wine. The colorful mosaic tiles used as floor covering presents a feeling of energy and movement, along with the light colored wooden displays and contemporary armchairs. To exhibit and store wine, a couple of diverse displays are noticeable: Mobile decorative boxes, fixed shelving made from wood veneering, a system made to display wine horizontally by clasping the bottle through its neck, and some accessories (which are also on sale) for domestic usage. An intense attention to the architectural details is visible: The skirting is curvature, the lighting fixtures are hand made fusion glass and/or laminated glass with real vine leaves embedded as an ornamental nuance, the table is acting like a building block with its 5 meter measurement lengthwise. Similar to La Cave Wine Boutique, HVAC system is also used in Kav Boutique for maintaining temperature and humidity levels, but besides this there is an in-house cellar where costly and storable wine is situated. The cellar is relatively dark and consists of "Euro Caves".

The distinguishing factor of Kav Wine Boutique can be interpreted as addition of art in interior design in the main, as in an 'art gallery' concept, whereas the vivid colors are acting to seize the view by their intensity. Starting from the façade of the boutique, which was painted by a contemporary Turkish artist⁷; colors of wine, grapes

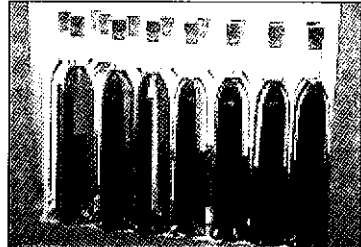
⁷ Yiğit Yazıcı

and vines are used in the interior. Past researches have inevitably cited that color is one of the most dominant aspects in store atmosphere (Donovan, 1982, Donovan and Rossiter, 1994). It can be assumed that the touch of 'delight' is captured by the usage of **color** in Kav Wine Boutique.



3.3. Kürşat Olive Oil Boutique

Held by a family company which has been dealing with olive and its sub-products for almost a century, Kürşat Olive Oil Boutique was recently opened in Istanbul (2004). The company has three other branches in different cities all in the agricultural trade area of olive, olive oil, dried tomato, capari and green pepper grown in their own farms.

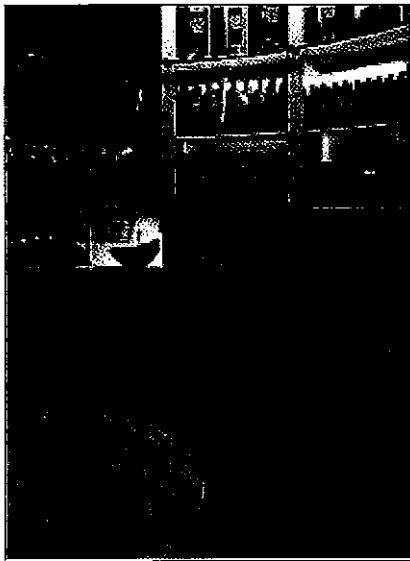


Kürşat Olive Oil Boutique is located in Nişantaşı, the fashionable area of the city. Though it is relatively small by means of scale, a luminous and spacious atmosphere has been created with the professional help of an interior design company. There is a big singular piece of display unit (shelving system) where all the various types of olive oils with attractive packaging are exhibited. Natural soaps (made from olive oil), domestic tools made from olive wood (soap holders, trays and mats), other kinds of gourmet products such as dried tomatoes and capari are secondarily put on view on

the extension of this big display unit. The diffused lighting fixtures installed in the boutique enhance the clarity and purity of the olive oils, while revealing a spacious and contemporary sensation.

The distinctive quality of Kürşet Olive Oil Boutique is the reference it gives to the Mediterranean disposition: All interior design is composed of curves and there is no straight lines viewed. This aspect directly relates to the Mediterranean waves and the idea of hospitality. Traces of olive form communicate through the display, lighting, seating units and the counter-table, together generating a pleasant and familiar atmosphere. The pictures of the family members of the company who held the business for decades are in sight of the customers, as a reminiscence of traditional values and family ties. Past studies have indicated that in order to induce pleasure, store characteristics should remind customers of other positive experiences (Spias et al., 1997). Kürşet Olive Oil Boutique reminds local and cultural qualities in this sense. In sum, it can be supposed that Kürşet Olive Oil Boutique adds 'delight' in its atmosphere by the quality of **design character**.

3.4. Lalali Olive Oil Boutique



Built up as a branch of a family company who has been in service on biological sciences, Lalali Olive and Olive Oil establishment is developed under the Research Lab of the company. The boutique was opened in 2001 and located in Babak, the residential quarter of the high income inhabitants in Istanbul. There is another shop of the company in Ankara.

Due to the flawlessly circular formed interior layout of Lalali Olive Oil Boutique, it has a welcoming and an embracing effect at first sight. Customers enter in the symmetrical axis of the boutique, and receive certain sense of significance given to them at once. Though small in size, this circular effect strengthens the coziness and intimacy provided. Display units are symmetrically located, shelving and mobile boxes are provided. At the back of the counter table there is a small partition wall made from pumice, with an olive tree engraved on it. The color schema is selected from tones of white in order to express the natural color of olive oils, which is greenish yellow. In the middle of the boutique there is a lacquer painted wooden table where customers can try the products, and above this table there is a fixture made of several small glass bottles filled with olive oil. This remarkably decorative fixture was originated from the

idea of oil-lamps in mosques, and it could be said that it has become the center of attention in the boutique.

The scent of olive is most likely to be the unique feature of Laleli Olive Oil Boutique. As customers enter in the circular plan of the boutique, they have to pass closely to the displays where various products derived from olive are placed. This close encounter enables to feel the pleasant scent as much as possible. Relations between scents and shopping have been an interesting subject for researchers, i.e. a previous study developed a conceptual model portraying ambient scent as an environmental cue that influences emotional responses and ultimately shopping behaviors (Gulas and Bloch, 1995). In this sense, the air quality provided by the natural scent of olive oils is the 'delight' feature of Laleli Olive Oil Boutique.

3.5. Alaçatı Wine and Olive Oil Boutique



Alaçatı Wine Boutique was opened in 2001, in a high profit district: Maçka. Recently, by establishing the company's own olive oil brand (as well as their two wine brands) they have increased the diversity of the agricultural product range in their boutique. Differing from other boutiques mentioned above, they also offer a large area so-called "café" in the boutique, where customers can relax and have hot or cold beverages or eat salads during their shopping.

Although there is both wine and olive oil, two precious agricultural products available in the boutique, the wine cellar located in the boutique surpasses the attention. Large in scale and made of entirely natural wood, controlled with sensitive HVAC systems, the wine cellar provides a classy experience for the customers to taste and purchase their wines. The layout of the boutique is organized as separate areas for the café, the wine cellar and the retail displays are all adjacent to each other. In this matter the customer has the full control of the layout. As mentioned before, careful layout of an environment helps people to orientate, to find the way and learn to understand signs, to get the feeling of personal control and mastery (Bitner, 1992). Besides than this positive verity about the atmosphere, a rather debatable fact can also be noted: If two agricultural products, wine and olive oil, with diversifying storage and exhibition qualities as well as product identities come together in the same retail area, so-called boutique, do they intensify each others unique qualities reflected on the store atmosphere or do they tend to diminish them? In the case of Alaçatı Wine and Olive Oil

Boutique, we can possibly comment that in order to reflect both products' outstanding influences on the store atmosphere, they need separate storing and displaying areas. The identities related to each product have a tendency to clash (i.e. well diffused light needed to reveal the clarity of olive oil and in contrary, dim lighting necessary to protect wine) and therefore it can be advised to store and exhibit them individually.

4. CONCLUSIONS AND LIMITATIONS

Depending on the research described in this paper, it is possible to declare that agricultural gourmet boutiques tend to create a more diversifying quality than regular retail shops. Store atmosphere in terms of harmonizing design character, layout, lighting, color, air quality and music have an effect on the in-store behavior of the customer, and therefore present a 'delightful' shopping experience. 'Delight' factor can be considered as a prerequisite in order to attract and service the gourmet consumers.

This study points out to the case of wine and olive oil gourmet boutiques, and partly demonstrates the influence of distinctive qualities of each agricultural product on the interior design of the boutique. As previously discussed, one of the major features of creating a pleasant store atmosphere is the layout of the boutique, which is mostly formed with display and storage units. Both olive oil and wine have certain requirements for proper storage and exhibition facilities (i.e. some of the red and white wines such as Chardonnay, Pinot Noir, Shiraz, Merlot, Cabernet Sauvignon, Riesling and Sauvignon Blanc have to be stored between 15°C and 20°C temperature and 70-80% relative humidity) which affect the design limitations of display units and storage areas. Besides, in order to protect the product from harm, wine is mostly stored and exhibited horizontally whereas olive oil does not need such a constraint. Both products are sensitive to excess light, for that reason indirect lighting is a necessity in the gourmet boutique. But, considering that one of the product qualities of olive oil is 'clarity', the level of luminosity is higher in an olive oil boutique than in a wine boutique.

Regarding the selected boutiques portrayed in this study, it could also be said that products have an effect on the color scheme used in the interiors: Pale colors and light tones in the olive oil boutiques are dominant, whereas rich and darker colors in the wine boutiques are preferred. The relation between cultural values of each product and the store atmosphere can also be sensed through the store atmosphere: Wine boutiques express their interior layout with the terms such as 'sophisticated, elite, serene,' while olive oil boutiques tend to use 'contemporary, energetic, vivacious', to depict their environment.

In sum, it could be said that gourmet boutiques tend to offer the customer a meditation effect on emotions, whereas the interior features of the boutique (so-called 'store atmosphere') acts reminiscent of a providing a scene for this 5-10-15-30 minutes durational 'delightful shopping experience' action. Each feature of the interior, such as the layout or the lighting, ought to be evaluated under the limitations of the product itself: Horizontal display units for wine or indirect lighting for olive oil, etc. Finally, it should be taken under consideration that the limitations of this study is it has investigated only the specific two agricultural products (wine and olive oil) in a specific region (European coast of Istanbul) and therefore cannot act as a global guide for gourmet boutique interior design.

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SYNCHRONAL DEVELOPMENT OF THAI WINE'S DESIGN, BRANDING AND AGRO-TOURISM CASE STUDY: NAKORN RATCHASIMA WINE REGION

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ABSTRACT

This paper proposes the comparative study of implementation of design of agro-industries, product and service of small and medium enterprises in the promoted area for agro-tourism of Nakornratchasima province.

The case study is an investigation of geographic, agriculture cluster management, viticulture dedicated to Design and its service from (1) Granmonte Family Vineyard (2) Khao Yai Winery (3) Village Farm, and was launched in 2001. The methods of research and study were field survey, interview, literature review and printed media from the Enterprises.

Analysis of diagram for illustrated synchronal development of design and wines, Branding and Corporate Identity that contribute to their product & services within the development of Agro-tourism that may suggest to other region.

Keywords: Branding, Wine Label Design, Product & Services, Agro-tourism.

1. Introduction

Nakornratchasima wine region is located at the edge of Khao Yai national park (Great Mountain), The largest of its kind in Thailand, which is located approximately 160 Km. from Bangkok, the capital city. Although Thailand wine industry is in incubation period, some winery employ design to take the opportunity to play the great role to support and promote Nakornratchasima wine region's product and service at preliminary. In case of explore the Development of brand identity, visual communication, graphic design of wine in the region. This paper presents the wine label development of individual brand from this wine region as the tool to investigate the synchronal development of each winery brand identity of the released products from 2000-2004.

2. NAKORN RATCHASIMA WINE REGION

Stuart Pigott discovers evidence to dispel the conventional theory that quality wine can only be produced between 30° and 50° latitude at North and South. From blind tasting with his colleague, "Syrah.....Must be old world," But the bottle that placed on the table on whose label was written:

PB Valley Khao Yai Reserve Shiraz Red Wine 2000 Produce of Thailand

In the year 2004, the member of wine cluster of Nakornratchasima wine region consisted of winery as PB Valley, Granmonte, Village Farm and will be including other winery in the future. The region located at a new wine latitude of 13° and an altitude of 300 metres above the sea level. There were selected best palatable grape

varieties from approximately 50 different varieties planted here since 1992.

2.1 PB Valley, the first and the biggest winery in this region, covered a total of 200 acres with full equipment and temperature control fermentation room. Since then, the winery use the name "Khao yai winery" as the brand for their 1999's vintage which named Khao Yai Reserve 1999. The winery is also making wine for another vineyard under contract by each vineyard's grapes, instead of their idle capacity. On the second release, PB Valley Khao Yai Reserve 2000 with the logo of Hornbill sitting in the cluster of grapes by the inspiration of Khao Yai national park also uses the logo that show fertility of land, follow by third vintage of PB Khao Yai Reserve 2003. Hence, the latest release is Pirom Khao Yai Reserve 2004.

2.2 GranMonte is located adjacent to PB Valley with 40 acres, the first vineyard that employed designer to design it's corporate identity program. It starts to produce grape juice before their grape in mature condition in contract with PB valley for making its own wine and bottled in its own brand. Whilst, Design program for CI included information graphic on signage system that stir the wine region with great attention. The contemporary design motif gets the great respond from customer and this may call the initial point of synchronal development. Within two vintages, that include GranMonte Premier 2001 and GranMonte Celebration 2002 were introduced.

2.3 Village Farm, the vineyard that is located on the eastern side of the wine region, covered approximately 80 acres in the French style winery. The Brand identity is Chateau des Brumes, which means 'a castle in the mist', because every morning a fine mist can be noticed. The first wine released were Chateau des Brumes 2002 and 2003, and at the following vintage, Village Farm Shiraz, Village Farm 2003 Reserve and Village Farm Chenin Blance were the young wine series.

3. MECHANISMS OF SYNCHRONAL DEVELOPMENT

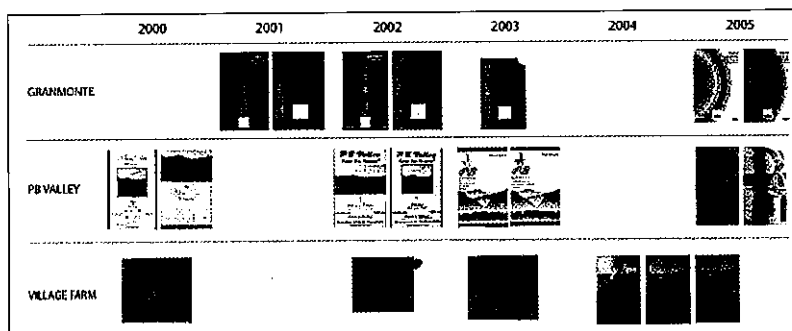


Figure 1. Wine label of Nakornratchasima wine region

To explore the synchronal development of the winery's brand from Figure 1, timeline of label design illustrates the development of each design branding and how to keep the consistency of brand personality.

From the design, each winery label can describe their brand character as, Gran Monte, the first winery was suggested by design consultant that, for the corporate marketing and reasonable production cost of all print media. Corporate identity should show the bold image, not the conventional style wine label. Whilst without their facility to produce wine, GranMonte has to send their grapes directly to PB Valley for wine making under contract of their own

wine-making method. Through, they commit to use PB Valley bottles, cork with Grønmonte logo that can be an advantage for both at competitive purchasing.

Development of PB Valley, the brand for 1999's vintage which named Khao Yai Reserve 1999, PB Valley Khao Yai Reserve 2000, and from the success of design of Grønmonte, PB Valley's develop the alternative design through PB Khao Yai Reserve 2003. Hence, the latest release is Pirom Khao Yai Reserve 2004.

French style of Village Farm alters the wine label into contemporary design like the counterpart. As the newest release, Village Farm Shiraz, Village Farm 2003 Reserve and Village Farm Chenin Blanc were the young wine series.

From the author's notion of Synchronal Development in Nakhonratchasima wine region as:

- Good collaboration between winery that has its own wine making facility to produce for member on the contract basis.
- Brand differentiation can communicate to consumer through label design & branding to provide alternative product.
- Synchronal Development of wine branding may reduce the risk or value added each member's new product.
- By design, the wine region was strengthened through their brand identity, product and service.

Thus, Synchronal Design Development in Thai winery with Design program apply from one winery. Grønmonte, the first winery that used contemporary design to make their wine different from others can demonstrate that success. Since the year 2002, most of the winery has to regenerate individual characteristics and positioning. They develop their identity as we can see PB searching so far for their image of Great Hornbill and great success of Pirom's 2004 brand image, from the good example from its contractor, Grønmonte, so that PB Valley is developing on their brand design and re-imaging brand in synchronization with other product and services. Whilst the French look of Village Farm has to turn into its own name for appropriate brand identity and younger character.

4. IMPROVING WINE CLUSTER'S PRODUCT AND SERVICE

Suggestions for the wine region -to develop overall product and service can be strengthened through design and be supported from government, private sector and academia- such as:

- Establishing wine association of Thailand
- Design management and strategic of individual brand for the consistency
- Promoting new latitude wine region through Thai restaurant abroad
- Wine and design experience program

5. CONCLUSIONS

Synchronal Development in Design Strategy for winery not only in Nakhonratchasima wine region need to be further developed in broader area but also other wine regions can be applied for their appropriate direction. There is highly a need of support from the government body and private sectors through design management strategy, which can strengthen agriculture, product and service.

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BRANDING TERROIR IN THE 'NEW WORLD' MODES OF REPRESENTATION IN THE WINE INDUSTRY

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ABSTRACT

This proposal has the premise that current modes of representation do not reflect the cultural and historical vistas and winescapes of contemporary Aotearoa/New Zealand.

Through the study and application of branding programmes I have uncovered a dichotomy between the visual elements of branding programmes and the decoded written messages.

The essential problem under scrutiny is that currently fashionable representations at times conflict with the need for distinctive working brand identities which honour and reflect the values cultural landscapes and lifeways of indigenous cultures whilst catering to the commercial imperatives of the marketplace.

I intend to show by the depiction of precedents that it may be possible to identify a number of visual and textual motifs and to put in place processes which may anticipate technological developments and which may more truthfully reflect contemporary vistas and cultural landscapes in the wine industry of the 'new world'.

We move steadily towards an entirely mediated virtual world.

In the globalised economy, space, time and difference are compressed, and as the homogenisation of location gathers momentum the 'culture of experience' fragments. Messages read from commonly accepted representations of cultures and landscapes become less certain and unstable meanings commonplace. This fluidity focuses attention on existing notions of representation in the wine industry and asks more questions than slavish technology-led image making is equipped, or might be expected to answer.

The questions I would like to pose in this paper are: "In an entirely mediated and branded environment, what currency might be left in location; and, given the impacts of technology, how might these locations best be represented?"

Picturing the Pacific

Representations of the culture of wine in the 'New World' draw largely on imagined archetypal landscapes in which vines march over the once untouched land. Ancient Mediterranean landscapes dedicated to the production of wine present a metaphor of western civilisation, a culture of plenitude.

Clearly there is power in narratives of symbolic landscapes, which seek to link a relatively new winemaking nation such as Aotearoa-New Zealand with thousands of years of wine culture.

"Every mature nation has its symbolic landscapes. They are part of the iconography of nationhood, part of the shared ideas and memories and feelings which bind people together". [1]

Early representations of the people and places of the South Seas were the work of Dutch, French and British seafarers and cartographers in the employ of commerce. The peak of European exploration in the Pacific - the three voyages of the English seafarer and mapmaker Captain James Cook and in particular his Endeavour voyage (1768-71) - provided the first opportunities for naturalists and botanists to describe the numerous curiosities to be found in these new exotic climes. The individuals involved, coming as they did largely from privileged backgrounds and education, brought traditional European pictorial notions to bear on their work.

Early imperial illustration, with its emphasis on mapping and topography, was traditionally a means of recording sites for possible future military adventure and commercial exploitation. When read from this perspective 'maps anticipated empire'. [2]

This tradition, based largely in attempts to depict sites and specimens as accurately as possible, was irrevocably altered when the artists and scientists involved confronted the 'empty page' of the Pacific with its plethora of new and frightening phenomena. These visions included unpredictable weather, immense space, waterspouts, and a frozen subcontinent, all experienced in the course of military, scientific and sexual adventuring amongst exotic people.

European patrons and public alike hungered for salacious details of fabulous landscapes, human sacrifice and a sparsely populated playground peopled by childlike savages ripe for unfettered trade and commerce along European lines. 'Primitivism', a particularly popular theme with its associations of indolence and eroticism, found an eager reception at 'home'.

Somewhat inconveniently, the Pacific as a discrete entity existed long before this great age of European exploration. The Pacific's human dimension involved considerable populations of traders, hunters and navigators utilizing established networks based on linkages of genealogy, shared interests and sophisticated spirituality and tradition.

It suited colonial aspirations to picture this great-unknown vista as a 'tabula rasa' or blank page. The imagined emptiness might first be possessed and then conveniently inscribed with multiple fashionable meanings.

Early imperial image-making appears to be an earnest attempt to capture what was quite literally confronting the botanist/artist. However, given the lack of substantial training in drawing from the human figure, early renderings by Europeans present Pacific flora and fauna as 'uncommon' and her peoples as hybridised human/botanical specimens. [3]

The Nature of Narrative

As if to reflect traditional Eurocentric viewpoints, tropes of exotic Otherness remain largely in place in contemporary 'story telling'. The nature of narrative demands that, in order for a story to be retained in memory the storyteller must first establish a consistent series of elements, as fixed points for constant reference.

A brand carries a multiplicity of meanings and associated values, and the stories attached to brands are vehicles for the transfer of these meanings and values. As a 'capsule' of anticipated expectations and benefits, the brand itself relies on an omnipresent

set of signs or markers, which complement a pre-existing set of images within the mind of the consumer. In so doing they represent what Sarup calls 'the promise of use value'. [4]

In this contemporary example Aotearoa-New Zealand and her indigenous peoples are yet again presented as;

"Remote and authentic

An exclusive New Zealand opportunity to meet the most remote Maori tribe members in the world (the Tuhoe tribe) is available through Long Island Tours. The tribe will introduce visitors to the beautiful Te Urewera National Park and picturesque Lake Waikaremoana. This is a memorable experience never to be forgotten". [5]

The essential threads, which sustain such a tale, are in this case the visual and textual representations of landscape, history and culture. But where might any essential 'cultural truth' reside in the conditions of flux engendered by virtual worlds and mass travel?

Invisible Dialogues

The consumer-traveler searches for authentic experience, which matches one or more of these visual and textual signs and, confronted with the unusual or exotic, enters into a process of mediation and interpretation. In the culture of wine this occurs between the physical landscape in which the consumer-travelers find themselves and the mental image carried of that landscape, place or experience.

The exact meanings formed by the interaction between viewer and sites are elusive and yet unfold episodically with essential markers and symbols acting to maintain the integrity of the story. The individual elements of meaning are assembled episodically and compared with the imagined site to make up a compelling or seemingly truthful whole, and it is the negotiation between these consistent elements which sustain a story's 'truthfulness' in the mind of the consumer-traveler.

'Shifter'

Acting as a meaning-maker, the designer may respond to a series of cues and consistent elements contained in texts and language. As the real potentialities lie in the 'what is not said', one role of design is to manipulate the conjunctions and silences active in these 'language games' as catalysts for some form of desired action on the part of the consumer.

At this point I would like to introduce a term from linguistics into the discussion. We usually assume that there are two parties involved in any act of communication:

First person=*speaker/sender*

Second person=*listener, receiver, addressee*

However, this schema fails to describe more than fragments of a larger picture, and crucially ignores 'what is not said'. The linguistic term 'shifter' applies to objects "*whose common referent can only be determined with respect to the relationship between the parties engaged in a specific 'speech situation'*" (Roman Jakobson). [6]

The level of comprehension gained depends entirely on the context of the 'speech situation' and the subject of the dialogue. Crucially the accepted model fails to ask three essential questions:

Who is 'speaking' to whom and to what does each party refer?
How can the parties be expected to respond?

With contemporary products, the invisible dialogue engineered by the interplay of text and image revolves around the relationships between objects that are "*hand made*" and objects made by *machine*; in our case between what we may assume to be the intensely localised craft of the estate winemaker, and the endless replication of mass-produced identical commodities.

The first partner in the dialogue, the concept of 'hand made', calls for an active engagement - this object of desire, this seductive wine, is an elemental irreducible thing and the essence of a particular place and time, unmediated by industrial processes. This is wine made not by man but by the hand of God.

"I am drinking the voice of the sun". [7]

The second element is less demanding and familiar to any consumer-traveler confronted with infinite choice. The parties are asked to detach themselves, and do little more than simply relax in the "surface" or pure form of the message.

Secondary Worlds

'Going traveling' elevates the individual both in a personal sense and in the perceptions of others. However, while people travel for numerous reasons, the notion of traveling solely to experience the 'romance of the grape' is a relatively recent phenomenon and firmly linked with status.

The tension inherent in the demands for engagement or detachment is related to the dichotomy of 'home' and 'abroad'. For the consumer-traveler the specific location 'abroad' at which the negotiation occurs, and the social and political conditions, which apply 'at home', are critical to the nature and comprehension of any narrative.

"Tourists are motivated to travel less by specific destination attributes, than by the desire to fulfill various psychological needs such as self-actualisation, social interaction, sexual arousal and excitement". [8]

The consumer-traveler is engaged in an essential but temporary suspension of the demands of 'real life'. In a series of choreographed rituals revolving around nostalgia for past experience, we seek some *secondary world* at variance with our own, but which can only be clearly understood by unceasing reference to our own experience and life ways.

"On the one hand, it is interesting to leave one's homeland in order to enter the culture of others; but on the other hand, this move is undertaken only to return to oneself and one's home, to judge or laugh at one's peculiarities and limitations". [9]

The ever-increasing fascination with 'authenticated scarcity' [10]- and for the consumer-traveler from the West in particular, this includes observation of the activity and necessity of work itself and of those engaged in it - makes even the act of physical labour and its participants objects of novelty, theatre and spectacle.

A Taste of the Land

The contemporary consumer-traveler, utterly removed from the actual means of production and accepting of a culture of 'surface', experiences 'the local' as a quaint and curious place well suited to rituals of nostalgia and the associated suspension of disbelief.

The physical toil of grape growing and wine production however, often takes place invisibly, at all hours of the day and night, in remote locations, and no discussion of wine culture is complete without reference to these activities and locations.

The much-abused French term *terroir* (for which there is no literal English translation) and meaning 'soil' refers to the particular character of a given vineyard, or a part of it, that is ultimately expressed in the wine. *Terroir* signifies a complex series of factors which include soil, geology, weather and day-to-day conditions, rainfall and humidity, the climate (which describes overall trends and patterns related to rainfall, sunshine and hours of darkness) and the topography of the location. However, these bare facts have little meaning without consideration of the social and cultural aspects of a locality, which might be so small and particular as to appear insignificant. The term *terroir* can also be used to describe the 'taste' or 'tang' of a location and even extended to describe 'poetry of the land'.

The locations and landscapes of wine production lie at the heart of branding programmes such as those of Aotearoa - New Zealand's Gimblett Gravels, a collective wine branding strategy from the Hawke's Bay:

"What makes the Gimblett Gravels so special?"

The Gimblett Gravels were formed by the continual flooding of the Ngaruroro River over a period of up to 10,000 years. Each flood laid down more gravel and the locality now has a gravel bed over 50m deep.

In 1876 the river permanently changed course to expose this gravel bed.

Recent research in Hawke's Bay shows that the 'soil factor', the interaction between soil temperature, soil moisture, soil texture and rooting depth, has a significant effect on vine performance. Sites with high soil factors showed earlier flowering, veraison and harvest dates, higher sugars and phenolics, and lower acidity. Soils with the lowest soil moistures and highest soil factor scores produced the best wines.

The sites with the consistently highest soil factor in this research were located in the Gimblett Gravels". [11]

A profound conundrum becomes apparent. Brands colonise the globe so effectively that they can no longer be said to represent any particular location and forms imposed by contemporary technologies negate any notion of fixity. Representations of locations simply present and reinforce some illusion of difference, in effect the place that is no place.

In Vino Veritas?

Representations of winescapes serve to embody each location of wine production as intensely colourful, sun-blessed, timeless and seductive.

As the act of attraction is often figuratively one of seduction, and the advertiser's selection of pictorial and textual messages is centred upon gearing these prompts to capture the sensuality of the individual or group, such images conspire to form part of the patina of cultural and historical experience which surrounds the 'real'.

The associated classical images and typographic styles of the advertiser serve to reinforce these imaginary meanings. It is this 'patina', which is increasingly accepted as the truthful resonance of wine and the culture that surrounds it.

Images represent sites in which the imagination of the reader 'receives or renders meaning'. [12]

While the constant reconfiguring of classical imagery including sun-blessed landscapes is by no means exhausted as a source of symbols, the search for representation built on familiar historical precedent may no longer prove adequate in a new visual environment. Technologies change and relentlessly reconfigure the form of the message. The multiple methods used to form and transmit images (what some term the 'New Hybridity') drawn from contemporary processes may simply mirror contemporary conditions in that the kind of essential immediacy built into the processes of image-making is likely also to be reflected in the eclectic tastes of members of a virtual marketplace.

Essential Paradox

Each visual or textual representation of location acts as a container of values and meanings. A label for instance can be read as an assembly in miniature of trophies and relics "*encrusted around some real or imagined past event*" [13]. However, to describe a wine-related image as both 'readable' and memorable presupposes a storyline composed of "*intelligible allegory, expressive symbol and coherent narrative*" [14].

In the Surrealist Rene Magritte's 1926 work 'This is not a pipe' we are presented with a puzzle. We see an image of a reproduction, the original of which is made of paint on a prepared surface and set within a frame. The individual letters are themselves represented by a series of handwritten daubs. In total it is merely a sign devoid of meaning. The frame that contains the sign 'isolates for attention' [15], but to what exactly does it draw attention?

The sense of what the reader *receives* and *comprehends* is contained within a paradox that operates between what is seen and what is 'read'. The reader's interpretation of the meaning is revealed in the picture space somewhere between the image and the attached letterforms. This process might be likened to the individual frames of an old film in which the individual images or cells are in themselves meaningless but whose meaning the mechanical movement of the film itself establishes. We are all familiar with the movie cliché where one frame shows a bank robber fleeing from the forces of law. We hear the crack of a pistol shot and in the next frame see the offender collapse to his knees in the street. That is sufficient information for us to comprehend that the two events are connected.

Deciphering wine-related images takes considerably more work. This 'reading' is not entirely a one-way process of interpretation and description, but a movement "*from apparent order to a labyrinth of knots, unsolved problems, conundrums and disagreeable absences*". [16]

The Grand Illusion

It is far from certain that mass travel and virtual worlds allow time for any degree of engagement. We have embraced a state of hyper-reality in which a fog of contradictions makes it impossible to separate the original from the simulation. In the search for 'authenticated scarcity' the consumer-traveler is thereby outfoxed.

This 'miasma' now also surrounds collective and personal identities in which the blurring of geographical boundaries by mass travel with its compression of contemporary space and time has led to a degree of disengagement from experience and location suggesting that in a virtual world all experience, including that of the world's geographical and cultural diversity, might just as happily be experienced vicariously. Given the overwhelming power of the image-makers in a culture of seemingly infinite choice and overproduction, it is far from certain that an 'authentic experience' is possible at all.

Yet wine by its very nature is a culture of sight, sound, smell and taste, and the promise implicit in each related image is that the product will deliver the entire genesis and experience of the wine to the consumer.

"Do not trust the teller. Trust the tale". [17]

However, as we have seen, the consumer-traveler is naturally uneasy when dislocated from the 'deep truth' of the tale by the overwhelming power of mediated images and by the act of traveling itself. As it to compound this sense of unease, everything associated with travel has become commodity.

It all is now commodity, then wine and the locations of winemaking are themselves merely tenuous objects, and the images built on these illusory places are mere tools of a seduction in which buyers and sellers, senders and receivers are complicit.

Conclusion

One of the critical factors in establishing a wine's point of difference in a branded world, and consequently the brand's equity in the marketplace, is the establishment and relentless reinforcement of the winemaker's location. However, image making which merely attempts to 'truthfully' depict locations simply re-presents and reinforces some illusion of difference, in effect presenting the place that is no place.

Nevertheless, along with official regulations, the historical conventions and rules attached to the international culture of wine largely dictate the form of representation in the wine industry in Aotearoa New Zealand.

In the process of representing the wine industry of the 'New World', the future may no longer lie in a search for imagery built on conventional historical precedent as contemporary hybrid technologies involve both the form and content of the messages in constant change and reconfiguration. Attempts to sell an individual wine as a premiere product using historical precedents, generic images, large promises and broad appeals to 'taste' are no longer sufficient. The demand for immediacy built into the processes of image making is likely also to extend to the individual and ever-changing tastes of consumer-travelers in the networked future.

While hybrid technologies continue to inform and alter the process of designing, new and significant themes are revealing themselves over time as individual cultural elements which play upon an 'image bank of the mind' drawn from our collective experience begin to crystallise into a coherent tale.

In the meantime, we experience a blank page or flickering screen, which parallels that of the redundant eighteenth-century European imagination.

An appropriate image, given the questions I pose here, is that of each contemporary wine-related text/image as *Wunderkammer* or casement (a window opening from one side) which is seen and experienced as a threshold, or aperture for looking through and looking back.

At the same moment we may realise that, in the contemporary virtual environment, the 'New World' is no longer a fixed geographical place but continues to expand at speed - and the designer as meaning-maker and the one who holds the mirror, for better or worse, has unprecedented powers.

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BÖLGESEL KÜLTÜR KAPSAMINDA ÜRETİCİDEN TÜKETİCİYE ZEYTİNYAĞI VE DONANIMLARI

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ÖZET

Akdeniz kültürünün çok eski bir varlığı olan zeytin ağacı, yetiştiği iklim itibarıyla, tüketildiği toplumlarda farklı bir yaşam tarzına zemin hazırlar ve özellikle zeytinyağı sağlıklı bir beslenmenin simgesi gibidir. Tarih öncesi devirlerde zeytin ağacı, yetiştiği bölge, yetiştiricilerin yaşamlarından kesitler, ağacın meyve vermesi ile başlayan zeytin hasatı, toplanan zeytinlerin selekler ya da çağdaş yardımcı donanım olan kasalarla fabrikaya taşınması, fabrikada bir bant işlevi ile tanelerin boyutlarına göre ayrılması, böylece kahvaltılık zeytinin kalite gruplaması, bu arada yağı çıkarılacak zeytinin ayrılabilmesi vb. sofralara gelene kadar geçen zeytin ve zeytinyağı süreçleri, ayrıca zeytinyağlılar, mutfak kültürü dahilindeki donanımlar konu kapsamındadır.

Çağdaş fabrikalarda zeytinyağı üretimi "kontinü" sistemler denilen, son derece hijyenik koşullarda, zeytini en az fire ile sızdırarak saatte 300-500 kg. "sızma" yağ elde eden tarzdadır. Ancak bu modern tesisler Anadolu'nun zeytin üreten bölgelerinin hepsinde henüz mevcut değildir. Üretim koşulları daha az gelişmiş fabrikalarda da üretim yapılmaktadır. Geleneksel ve modern koşullardaki üretim tarzları, yetiştiricilerin yaşadığı çevrelerdeki zeytinyağı tüketim senaryoları ve yaşam stilleri bölge kültürünün temelini oluşturmaktadır. Dünyanın başka hiçbir bölgesinde bu denli yoğun bulunmayan zeytinyağı kültürü, Akdeniz Bölgesi'nin kimliği ile eş değerdedir.

Anahtar Sözcükler: Zeytinyağı Üretim Sürecinde Donanımlar, Toplumda ve Yaşamda Zeytinyağı, Zeytinyağı Kültürü ve Tasarım.

TARİH İÇİNDE ZEYTİN AĞACI

Akdeniz ülkelerinin oldukça köklü tarihi geçmişleri içinde zeytin ağacının yaşam döngüsü bu tarihleri adım adım yaşarcasına uzundur; normalde 300-400 yıl yaşadığı, ender bir durumda ise bin hatta ikibin sene yaşayanlarına rastlandığı öğrenilmektedir. Zeytin ağacının tarihi geçmişinin "insanlığın 39.000 yıllık dostu" olduğu tanımlanarak, "Ege Denizi'ndeki Santorini adasında yapılmış olan arkeolojik çalışmalara.."dayandırılmakta ve"..bu çalışmalarda 39.000 yıllık zeytin yaprağı fosillerinin ortaya çıkarıldığı" kanıtlanmaktadır; aynı kaynaktan, Kuzey Afrika'da, Sahra bölgesinde yapılmış olan kazılarda M.Ö. 12.000 yılına ait zeytin ağacı bulgularına rastlandığı; M.Ö. 5000 yıllarında yabani zeytin ağacının Ön Asya ve İtalya'da ehlileştirildiği ve meyvelerinden yararlanıldığı; M.Ö. 4500 yıllarından itibaren yaklaşık 3000 yıl boyunca Giritliler'in ticaret yoluyla zeytini ve zeytinyağını tüm dünyaya yaydıkları ve Girit'te Knossos ve Faltos saraylarının yıkıntıları arasında 2 metrelik zeytinyağı küplerinin bulunduğu; o günkü zeytinyağı ticaretinin nerelere yapıldığını, zeytinyağının nerelerde üretildiğini açıklayan tabletlerin bulunmuş olduğu; M.Ö. 4000 yıllarında Mısır uygarlığının da bir zeytinyağı kültürü olduğu, bunu "Hayfa'da yapılan kazılarda ortaya çıkarılan zeytinyağı değirmeni"nin kanıtladığı ve M.Ö. 2500 yıllarında inşa edilmiş olan Sakkara Piramidi'nin duvarlarının, zeytin sıkma işleminin sahnelendiği resimlerle süslenmiş bulunduğu; zeytin ağacının Nuh Tufanı'nda yeri olduğu, tufanın geçmiş, bitmiş olduğunun, gemiden salınan bir güvercinin ağzında bir zeytin yaprağı ile geri dönmüş

olmasından bilindiği; tufandan erte kalan zeytin ağacının bu nedenle kutsal ve barış sembolü olarak kabul edildiği ve daha pek çok benzeri bilgilerle öğrenilmektedir[1].

Ege kültüründe Giritliler, Fenikeliler, Helenler, Yunan, Roma ve daha sonra da Osmanlı ve Türkler için zeytin ve zeytinyağı önemli birer besin maddesi ve kültürlerinin vazgeçilmez unsurları olmuştur. Ege'nin doğu kıyılarının tarihi geçmişi içinde, bugünkü Urla civarında antik Klazomenai kentinde yapılmış olan arkeolojik kazılarda 2500 yıl öncesine ait zeytinyağı üretim kültürü hakkında bilgiler edinilmiştir: Klazomenaililer "Zeytinyağı ayrıştırma işleminde birleşik kaplar esasına göre çalışan üç gözlü bir düzenek geliştirerek kesintisiz üretimi" ve "...zeytinleri kırmak için aynı mil etrafında dönen taş silindirleri... büyük bir pres ve bucurgat, yani bu presi kaldırmaya yarayan alet"i ilk kez kullanmışlardır[2]. Kazılarda aynı zamanda bu antik kentin bir zeytinyağı ticaret merkezi olduğunu ortaya koyan çok sayıda amforanın bulunmuş olması önem taşır.

Zeytinyağı ve kültürü Akdeniz'in bu bölgesinden İtalya, Kuzey Afrika, Portekiz, İspanya, Güney Fransa'ya kadar yayılmıştır.

ÇAĞDAŞ YAŞAMDA ZEYTİN TARIMI VE DONANIMI

Zeytin ağacı, eğimli, kireçli, zayıf topraklarda yetiştiği için, ayrıca sulanmaya ihtiyaç olmaması nedeniyle Türkiye'nin özellikle Ege Bölgesi başta olmak üzere kuzeyde Artvin'den, Güneydoğu Anadolu'da Mardin'e kadar bütün kıyı bölgelerinde, deniz seviyesine çok yakın yerlerde yetişir. Fakat 700-1000 m. yüksekliğe kadar olan alanlarda da zeytin tarımı yapılabilmektedir. Bu ılıman bölgelerin iklimine ve bitki örtüsüne uyumlu olması, köklerinin derinlere gitmesi nedeniyle sulamaya daha az ihtiyaç bulunması, tarihteki ve mitolojideki yeri ve önemi gibi nedenler zeytin ağacının "ölümsüz ağaç" adını alma özelliğini ortaya koyar. Ölümsüz zeytin ağacının canına can katmak ve verimini artırmak için yılda belli zamanlarda toprağının havalandırılması, gübrelenmesi, dallarının budanması, ilaçlanması gibi bazı bakımlar gerekmektedir. Bakım için gerekli donanımlar konunun ayrı bir boyutudur.

Zeytin ağacı en verimli ürününü iki yılda bir verir. Buna göre bir yıl çok, bir yıl az ürün vermektedir. Zeytinlerin olgunlaşma zamanı ağustos-kasım ayları civarında ve hasat edilme zamanı ise kasım-mart ayları arasındadır. Zeytinlerin hasat edilmesi, tarihin en eski devirlerinden bu yana temelde hiç değişmemiştir: Meyve yüklü ağacı silmek ve düşenleri toplamak. Dolaysız olarak ağaçtan toplamak da diğer bir yöntemdir; fakat, zeytin ağacının en uç dallarına kadar çıkıp dallara zarar verme riski ve toplamının güçlüğü, silkme yönteminin daha çok kullanımına neden olmaktadır. Silkme yerden ve ulaşılabilen dallara çıkılarak yapılır. Tasarım bakış açısı ile silkme yöntemine kolaylık sağlayacak araç ve gereçler söz konusu olduğunda: Ağacın yanına, dibine kadar getirilebilecek silkme ve toplama makineleri düşünülebilir. Yerden hidrolik ya da makaslama sistemi ile yükselebilecek makineler dalları bölüm bölüm sarsarak, düşen zeytinleri huni ağzı gibi çok geniş bir açıklıktaki toplama kabı ile aynı anda toplayabilir. Çok modern koşullarda var olabileceği düşünülen böyle makinelerin bulunmadığı ortamlarda, silkilen meyvelerin temiz olmasını sağlamak için ağacın dibine örtüler sermek gerekmektedir.



Dalda zeytin

Zeytin toplama (silkme)

Silkilmis zeytin

Türkiye koşullarında zeytin toplama işi insan emeği ile yapılmakta, aynı anda zeytinler ayıklanmakta ve dökülmüş yapraklardan da ayrıştırılmaktadır. Sepetlerde, selelerde, sentetik malzemeli kasalarda toplanmış zeytinler, işlenecek fabrikalara traktörlerle taşınır. Zeytinleri iyice olgunlaşmadan, yeşil iken toplayıp birtakım işlemlerden geçirdikten sonra sofralık ve kahvaltılık yeşil zeytin elde edilir. Zeytinyağı elde edilecek zeytin ise olgunlaşmış ve belli ölçüde kararmış olmak durumundadır.

ZEYTİNYAĞI ÜRETİM SÜRECİ VE DONANIMLARI

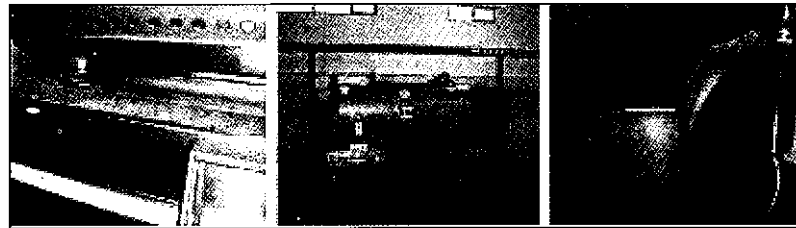
Toplanmış ve fabrikaya getirilmiş zeytinler öncelikle uzun bir banttan geçirilerek elenir. Eleme işlemi siyah zeytinlerin bir kısmının sofralık olarak ayrılması ve yağı çıkarılacak zeytinlerin de ayrı bir grup oluşturması için gereklidir. Yağ çıkarma işlemi için zeytinler soğuk pressten geçirilirler. Presleme işlemi, tarih öncesinden kalma ilkel yöntemlerde, bir merkezden tekerlek gibi döndürülen silindirik taşlarla yapılmıyordu. Hamur haline getirilmiş zeytinler çuvallara doldurulup önce ayaklarla eziliyor ve sonra da çuvalar sıkılarak yağ elde ediliyordu... Güncel olanda da, çuvalar taşımak ve gerektiğinde yağ yapma aşamasından önceki bekleme süreci içinde hala kullanılmaktadır. Zeytinlerin çuvallarda bekletilmesi bir eleştiri konusu olabilir. Özellikle sentetik madde ile üretilmiş çuvalar zeytinlerin fermentasyona uğramasına ve asitinin artmasına sebep olabilir. Zeytinlerin kasalarda taşınması ve 18 °C dereceden sıcak olmayacak ortamlarda bekletilmesi sağlıklı sonuçlar verir. Ege'de bazı köylerde hala işe yarayan eski bir sistemde zeytin, ortalama 6 kişiyle çalışan, günlük sıkma ortalaması 20 tonu geçmeyen, sulu baskı denilen bir yöntem ile sıkılıyordu. Diğer taraftan hidrolik preslerle sıkma yöntemi çağdaş bir yöntemdir.



Fabrikaya taşıma

Zeytin eleme

Zeytin yıkama



Zeytini hamurlaştırma

Zeytin hamurundan yağ
çıkartma

Hamurdan sızan
zeytinyağı

Daha da gelişmiş modern bir yöntem ise merkezkaç kuvveti ile çalışan, mükemmel sonuç alınan "kontinü yöntemi" denilen yağ elde etme sistemidir. Zeytinlerin merkezkaç kuvveti ile sıkılmadan önce, preslenerek azılması ve hamur haline getirilmesi gereklidir. "Kontinü sistemi" (continuous: devamlı) sayesinde, yalnız bir kişinin çalıştırılması ile, günlük sıkma ortalaması 120 tonu aşan kapasitede verim alınmaktadır. "Kontinü sistemi"nde, genellikle saatte 300-400 kg. zeytin işleyen bir zeytinyağı tesisinde bulunan başlıca üniteler:

"Vibrasyon eleği ve zeytin yıkama ünitesi (yaprak ve sapları ayırır tazyikli suyla yıkar),
Malaksör (zeytinleri ezerek hamur haline getirir),
Hamur pompası (zeytin hamurunu dekantöre iletir),
Dekantör (zeytin hamurundan santrifüj gücüyle yağ çıkaran bölüm),
Seperatör (yağı filtre eder ve doluma hazırlar)[3]".

Elde edilen yağlar krom-nikel yada fiberglas malzemeden yapılmış kaplara konulmaktadır. Sıkma işleminden elde edilen yağlar %1 oranında posa ihtiva eder; posanın yağdan ayrıştırılmasına süzme işlemi denir. İşlem ilkel durumlarda yağın kaptan kaba aktarılmasıyla ya da içerisinde pamuk olan filtrelerden geçirilmek suretiyle yapılır. Zeytinlerin elenmesi ve yıkanması işleminden, filtrelanmesine kadar bir bütün olarak sistemleşebilen "kontinü" tesislerinde ise zeytinler el değmeden zeytinyağına dönüşür. Görülüyor ki, ister en mükemmel donanımlarla yağ elde ediliyor olsun, isterse ilkel yöntemler kullanılsın, işlemler hep aynıdır: Eleme, yıkama, ezme, sıkma, süzme. Sonuç olarak elbette çağdaş sistemlerle son derece temiz ve sağlıklı koşullarda, ayrıca daha az emek ile daha kısa sürede, yağın en sağlıklı olan tipi, yani "natürel" zeytinyağı elde edilir. Diğer tür zeytinyağı, örneğin rafine zeytinyağı elde etmek için ayrıca fiziksel rafinasyon işlemlerinden geçirilmiş olan zeytinyağı, kaliteyi bozan asitli maddelerden arındırılmış olmaktadır. Riviera tipi denilen zeytinyağı, natural ve rafine yağların sentezi bir türdür. Natural zeytinyağı ise kalitesine göre organik, natural sızma, natural birinci gibi, işletmelerin üretimleri doğrultusunda tiplere ayrılmaktadır.

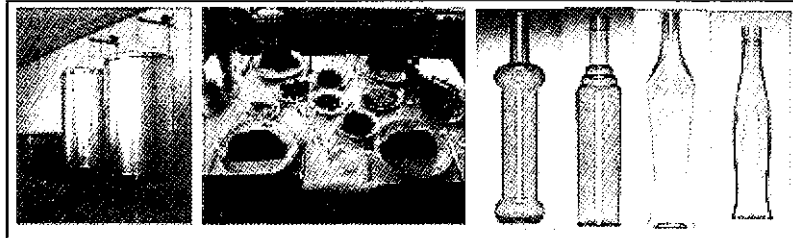
ZEYTİN VE ZEYTİNYAĞI KÜLTÜRÜ

Doğası gereği tarihin en eski devirlerinden beri, üretiminde ve lezzetinde sonuç ürünün temelde hiç değişmediği son derece önemli bir besin maddesi olan zeytinyağı, tüketiciye ulaştırılma tarzında da önemsiz farklar ortaya koymaktadır. Çok eski devirlerden taşıyıp getirdiği yaşam stillerindeki kullanımlar ve donanımlarla, hatırı sayılır yoğun bir kültürün meydana gelmesini sağlamış olan zeytinyağı, Akdeniz ülkelerine özgü yeme-içme-beslenme alışkanlıklarını ortaya koymaktadır. Dünya'nın ılıman bir bölgesinde yer alan, Akdeniz'i hemen bütünüyle sarmış olan zeytinyağı kültürü, her ülkede temelde aynı olsa da, ülkelere göre farklı kültür özelliklerini gösterebilmektedir. İnançlara göre ölümsüz kabul edilen zeytin ağacının, Nuh Tufanı'ndan arta kalan bir canlı olarak, güvercinin ağzındaki zeytin dalı ve yaprağı ile, sonsuza kadar, barışı da temsil ediyor olması, bütün Akdeniz ülkelerine yayılmış bir bilgidir ve bazı ülkelere geleneklere yansımıştır; örneğin Tunus'ta yeni evlenen çiftlerden damat, düğün merasimi esnasında elinde zeytin dalı taşımaktadır; böylece evindeki, yuvasındaki barışın sonsuzluğunu sağlayacağına inanılmaktadır. Anadolu Uygarlıklarının Roma dönemi, zeytin dalının barış simgesi özelliğinin oldukça gelişmiş bir dönemidir. Çünkü bu dönemde yarışlarda başarı göstermiş olanlar, hatta Romalı komutanlar zeytin dalından yapılmış taçlarla ödüllendiriliyorlardı. Türkiye'de de "Güvercinin ağzındaki zeytin dalı" barışı temsil etmektedir.

Zeytin yaprağı gümüşü yeşil bir ton ve nüans ile özel bir renk oluşturur. Zeytin tanelerinin biçimi ile ahsap oyma ya da işleme desenine konu olduğu, "zeytin silme" adını alan bir zincir oluşturduğu ya da bordür meydana getirdiği bilinir. İri siyah taneleri ile güzel gözlerin benzetildiği, "zeytin gözlüm" yakıştırması şiirlere ve şarkılara konu olmuştur. Ağacının siyah ince damarları ile mobilya hammaddesi olarak kullanılması diğer tipik bir özelliğidir. Nuray Yıldız araştırmalarında Homeros'un "Odiseia" adlı eserinde tanımladığı karyola yapımından söz eder. Homeros, bu eserde, zeytin ağacından yapılmış ve ağaca açılan deliklere sığır derisinden parlak kırmızı kayışlar geçirilmiş, "Ithaka" sarayı için özel yapılan bir karyoladan söz etmektedir[4]. Ağacın sert ahsabı ince marangozlukta kullanılır. Zeytin ağacından yapılmış mobilyanın sarı-beje yakın açık kahve ahsabının üzerindeki koyu renkli damarları, mobilyaya farklı bir özellik kazandırmaktadır. Mobilyanın masif olarak çok pahalıya mal olacak olması, zeytin kaplama malzemesinin tercihine neden olur.

Yağının kullanıldığı yemek türüne adı verilerek "zeytinyağlılar" adı altında yemek grubunun yüzyıllardan beri artarak gelişmesi, Anadolu'nun zeytinyağı kültürüne büyük katkısı sayılır. Zeytinyağlılar başka hiçbir Akdeniz ülkesinde bu kadar köklü ve çeşitli gelişmemiştir. Genellikle sebzelerin pişirildiği yemekler, soğuk türler ya da salatalar olan zeytinyağlılar, çoğunlukla sebzelerin adları ile anılırlar. Fakat karnıyarık, imambayıldı gibi, pişirildikten sonra sebzenin aldığı biçime göre, benzetmelerle ad verilmiş olan zeytinyağlılar ilgi çekicidir. Zeytinyağlıların içine konulduğu kaplar, daha çok pişirildikten sonra aktarılmış olan porselen, cam türü, derin olmayan servis tabaklarıdır. Pişirirken sebzelerin renklerini fazlaca kaybettirmeden pişirmek, sofraya koyarken iştah açıcı renk ve düzende sunmak bir sanattır. Bu yemek sanatı zeytinyağlılarda kendini en iyi şekilde gösterir.

Zeytinyağı kültürünün Akdeniz ülkelerindeki köklülüğü ve yoğunluğu, turistik ve sağlık açılarından, insanlara, zeytinin yağa nasıl dönüştüğünü göstermeyi amaç edindirmiştir. "Fransa'da Aix en Provence kentinde...", "...minyatür şeklinde hazırlanmış olan bir tesis saatte sadece 40-50 kg. zeytin işleyebiliyor. Sistemi tamamen kompakt hale getiren Fransızlar..."gösteri amaçlı bu mikro işletmede, istek üzerine beş on kilo zeytini, izleyenler önünde sızdırıp, kısa bir süre içinde tüketilmesi gerekli olan, çok taze bir zeytinyağını müşteriye sunuyorlar[5]. Benzer zeytinyağı tesisleri, zeytinyağı üreticisi olan diğer bazı ülkelerde, örneğin İtalya'da da bulunmaktadır.



Minyatür sistem Zeytinyağlı bir sofa Oya Akman tasarımı zeytinyağı şişeleri

Elde edilmiş olan sızma yağ, genellikle cam ambalajlara dolum yapılarak müşteriye sunulur ya da satış yerlerine ulaştırılır. Cam ambalajların markalara göre değişen ara yüzleri, etiketleri, zeytinyağının "natürel" olarak tanımlanan sızma zeytinyağı mı, "rafine" zeytinyağı denilen, kaliteyi bozan maddelerden arındırılmış türden mi, ya da tüketicilerin "riviera" olarak tanımladığı, natürel ve rafine zeytinyağının karışımından elde edilen tipten mi olduğunu en iyi sunacak ve kolay algılayacak şekil ve bilgilerle görselleştir.

Yakın zamana kadar cam şişelerde ve pöslanmeye karşı önlem alınmış teneke ambalajlarda satışa sunulan zeytinyağı, son dönemlerde cammış gibi görünen PVC şişelerde de ambalajlanmaktadır. PVC şişelerin avantajı, kırılmaya karşı dayanıklılığıdır. Cam şişelerin eğilip bükülmeye karşı direnci yanında, PVC şişelerin bükülme dezavantajı bulunur. Tasarım ve üretim adına PVC şişelerin et kalınlıkları, diğer su, kolé vb. içeceklerin şişe et kalınlıklarının iki misli civarındadır. Fiyata da yansıyacak olan bu et kalınlığı artırışı, zeytinyağını şişeler içinde daha berrak ve şeffaf görebilmek içindir. Daha az et kalınlığı şişeyi profillemeyi gerektirdiğinden, yağı billur görmek zorlaşacaktır.

Evlerde ve lokantalarda zeytinyağlı yiyeceklerin bol bulunduğu sofralar, Anadolu'nun batı bölgelerinde ve en çok da Ege Bölgesi'ndedir. Ege sofralarında zeytinyağı kültürü kahvaltıda başlar: Baharatlı ve özellikle kekikli zeytinyağını kızarmış ekmekle yemek bu bölgeye özgüdür. Böyle bir gelenek, sofrada kahvaltılık zeytinyağı tabağı ya da tabaklarının bulunmasını; öğle ve akşam sofralarında tuzluk-biberlik, sirkelik yanında zeytinyağı sunum şişesinin de bulunmasını gerektirmektedir.

Akdeniz beslenme kültürünün çeşitli tahıllar ve sebzeler ağırlıklı beslenme modeli içinde, zeytinyağının önemi süt ve ürünleri kadar önem taşımaktadır. Bu bilinç içinde olan Komili ve Tarih gibi köklü markalar ve kuruluşlar, kendi ürünleri için özel satış yerlerine sahiptirler. Örneğin Tarih, birliğin üyesi olan ortaklarının ürünlerini, süpermarket, bakkal vb. dağıtım kanallarından farklı olarak "TA-ZE" adı altındaki "franchising" konsepti denilen mağazalarında pazarlamaktadır[6]. Yurtdışındaki pazarlama sistemlerinde ise internet aracılığıyla da kullanılmaktadır.

Beslenme değeri oldukça yüksek olan ve sağlık açısından bir iksir olarak nitelenebilen zeytinyağının tüketicilere sunumu da aynı oranda değer ifade etmektedir. Marketlerde ve özel dükkanlarda satışları, zeytinyağının köklü geçmişine uygun kimliktedir. Ambalaj şişelerinin biçimleri genellikle en eski ambalajlama tiplerinden farklı değilse de, yağın türlerine göre farklılaşan etiketlemede, özellikle eski tip taş baskı yöntemi ile elde edilen zeytinyağında biraz daha farklı cam şişe-ambalajlar kullanılmaktadır. Zeytinyağının natürelilik oranı arttıkça, ambalajlarının doğal malzemelerden üretilmiş ve klasik tipli olma özellikleri de artmaktadır. Hafife alınmayan, et kalınlıkları gereğince düşünülmüş, yağı billur gibi göstermesi için sade, yalın tasarlanmış, çok az düzeyde kaburgalandırılmış PVC şişe tasarımları, büyük serilerde, ABD ve Japonya gibi uzak ülkelerin marketlerinde ve yerli marketlerde satılmak üzere zeytinyağı için en uygun ambalaj türü olduğu düşünülebilir. Bu özelliklere örnek olarak cam tasarımları konusunda uzmanlaşmış olan Oya Akman'ın zeytinyağı şişe tasarımları dikkate değer. Tasarımcı, çok sayıda farklı şişe tasarımında hem klasik özellikleri belli oranda değerlendirmiş, hem de şişe tabanında ya da boğazında alışılmışın dışına çıkabilen biçimlerle zeytinyağı şişeleri gerçekleştirmiştir[7].

SONUÇ

Uluslar geçmişten gelen yaşantıları ve kültürleri ile farklılaşırlar. Kültürler, ülkelerin bulundukları bölge, coğrafi konumlar, bu konumların gerektirdikleri iklimlere ve iklimlerin insanlar üzerindeki etkilerinden dolayı yaşam tarzlarına yansımalarıyla gelişirler. Dünyadaki yaşam tarzlarının ve kültürlerin beşiği addedilen Akdeniz kültürü, zeytin ve zeytinyağı ile özdeşleşmiştir. Tarih öncesi devirlerden gelip, sonsuza gidecekmiş gibi görünmektedir.

Akdeniz kimliğine damgasını vuran bu tüketim ürününün, varlığının ve değerinin daha iyi anlaşılmasını sağlayıcı önlemler içinde, tasarım önleminin ayrı bir yeri olmalıdır. Bu kapsamda, üretici işletmelerin kurum kimliklerinden başlamak doğru bir karar olabilir. Kurum kimliği, zeytinyağı üretimlerini binasından işçisine, üretim koşullarından logosuna ve tanıtımına kadar en sağlıklı ve güvenilir ortamların hazırlanmasında rol oynayacaktır.

Markalaşmak tüketicilerin güvenlerini kazanmak demektir. Gerek kurum kimliği için çalışmak, gerekse markalaşmak, öncelikle ürünlerin kalitesinin yükseltilmesini zorunlu kılar. Bir uç alan gibi görünmesine rağmen, ürünlerin tüketicilere sunumu, ambalajlanmasının mükemmel olmasına bağlı olarak daha çok değer kazanacaktır. Ambalaj, ürünlerin tanıtımına bağlıdır. Öncelikle ürünün hangi bakış açısı gösterilmek istenirse o kısmı ön plana çıkarılabilir. İşte zeytinyağı şişelerinde bir parça ön plana çıkarılmak istenen de, zeytinyağının köklü geçmişi ve bir sağlık şurubu gibi olma özelliğidir. Tasarımla zeytinyağı satmak, Türkiye için, diğer Akdeniz ülkelerinin rekabet ortamında, daha ön saflara ilerlemek ve ülkeye katma değer kazandırmak anlamına gelir.

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THE LIMITS OF CULTURE AS A SOURCE OF PRODUCT INNOVATION: THE CASE OF TEA

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ABSTRACT

Although the shape of the object is defined by specific cultural conditions, they are also operational in making changes in it. The Turkish teapot set is an object that is shaped by the socio-cultural habits of people over time. However, the impact of globalization on the Turkish society and the changing lifestyles of people create a demand for alternative ways of tea preparation and drinking. The need for tea brewing products is typically fulfilled by local manufacturers. By carrying out minor innovations on the traditional two-piece teapot sets (by using different materials, shapes, sizes, etc.), the local manufacturers created a large spectrum of product offerings. On the other hand, the manufacturers of electrical goods refrained from developing innovative solutions to fulfill the domestic need for automatic, rapid, hygienic but at the same time traditional tea brewing. This attitude changed with the introduction of an electrical teapot set, Tiryaki, to the market by a major manufacturer. The introduction of modern alternatives to the traditional way of tea brewing contributes to its evolution towards new product forms and behavioral patterns.

In this paper, by demonstrating the diversity and the richness in the tea making product models that are currently produced, sold and being used in the Turkish domestic market we aim to show how culture can be a rich source of product innovation. We also aim to question the possibility of providing these products a global appeal as a way of overcoming the limited market barrier.

Keywords: Turkish Teapot Set, Culture, Innovation, Local-Global, Tea Universe.

Like olive oil and wine, tea is among the agricultural and geographical identity based products in Turkey. Although the production of tea can be defined in a specific geographical setting, the consumption of it is widespread throughout the country. The role of design in the tea sector can be related to the formation of the tools, objects or accessories in tea preparation, serving and consumption as well as the various forms of packaging of the raw material as part of different lifestyles and marketing strategies. Tea preparation and consumption patterns and the material culture around it form the general scope of this paper. The limits of culture will be analyzed in the sense that how the borders of culturally set objects and practices are/can be transformed, interpreted and redefined within the changing dynamics of the global economy.

Tea Production and Tea Drinking in Turkey

If we are to look at tea production and consumption in Turkey, finding out the fact that tea is a rather phenomenon would be surprising. Farouqi (1995) argues that it has been accepted as an exotic plant in the last years of the Ottoman Empire, which is largely associated with coffee drinking. According to Manchester (1996), "the Turks were bartering for tea on the Mongolian border of China as early as 475. Kinaylı (1965) says that there were teahouses in the Reign of II. Sultan Abdülhamid. However, tea has become a tradition and a national beverage in Turkey with the starting of its

production as part of a government plan (Timur, 2001).

The history of tea production in Turkey goes back to the early years of the 20th Century when the Eastern Black Sea Region is identified as a suitable place to produce tea. Following the years of preparation in the first half of the Century, the first tea factory was established in 1947 in Rize. In 1965, the production of dried tea had reached the level that it matched domestic consumption (www.caykur.gov.tr, 20.3.2005). The tasks of purchasing, processing and selling tea, conducted by the Tekel General Directorate until then, was transferred in 1971 to the Tea Corporation, a state owned enterprise. In 1973, the Tea Corporation which was established with a special decree in 1971 and given the rights of tea plantation, production and marketing in Turkey, started to operate.

According to the data provided by the Tea Corporation, Turkey is among the 40 countries around the world where tea is cultivated. The global tea production is around 2.8 million tons (black and green) and Turkey is the fifth with 6%. In 1984 the monopoly on tea given to the Tea Corporation was lifted and private sector was given the tea production and marketing rights. This step coincided with the radical transformation that the Turkish economy has undergone beginning from the 1980s.

Liberalization of the foreign trade regime and hence the opening up of the domestic market to foreign competition, the alteration of the law relating to the protection of Intellectual Property Rights (IPR) in 1995 and the Customs Union Agreement with EU in 1996 created a competitive environment for domestic companies to engage in new product development activities. As a result of these developments, the Turkish domestic market for tea and tea related products that we call the tea universe has become very active.

The Tea Universe in Turkey

The concept of the tea universe involves tea as the raw material and its packaged forms, the tools for making, serving and drinking it and the accompanying lifestyles and rituals. This "universe" is structured differently according to different cultures. In Turkey, tea as a socio-cultural phenomenon has

its own universe that can be positioned right in the middle of the debate concerning the "local-global" dilemma. There are two factors determining the dual nature of this specific tea universe. The first factor is that there is a certain tea brewing process that requires special tools, objects and accessories specific to the local culture. The second factor is the so-called globally accepted way of tea preparation that is also conveyed in the social practice in Turkey. (See Figure 1)

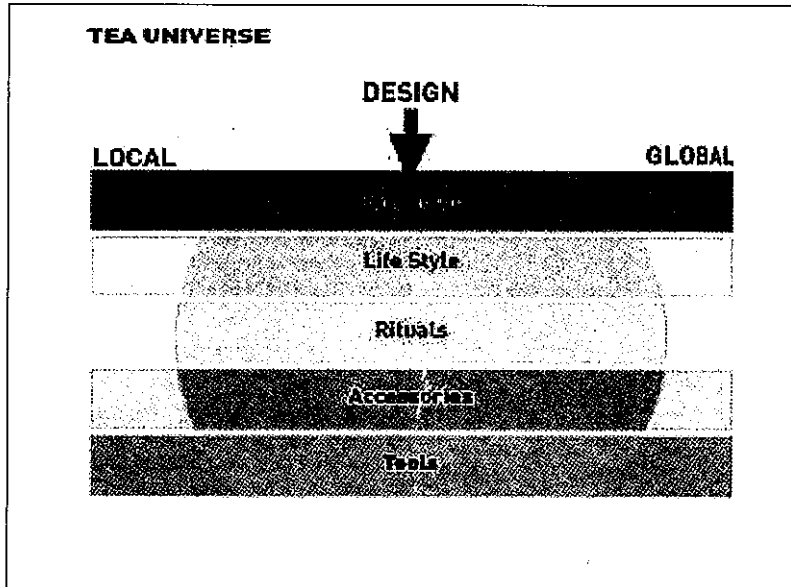


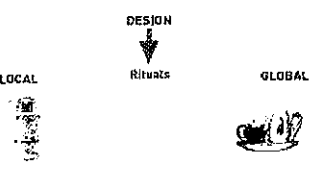
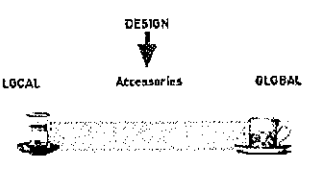
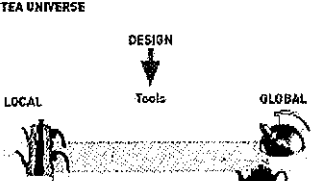
Figure 1.

Design, in the modern sense of the term, that is a tool to create difference in the market place that rationally separates and organizes the design and production processes, acts as an agent that holds the two different spheres of the local and the global together, closer and also at a certain distance at the same time. Design is the key element combining or crosscutting these spheres or domains of local and global. The more the objects that are in the sphere of the local get designed, the closer they get to the ones belonging to the sphere of the global in terms of marketability, not as tourist items or authentic objects, but more as objects of everyday life. By the help of design, the "local" can have the chance to compete in the global marketplace, whereas the design of the global products have the power to affect and transform the local production which is the case in the Turkish tea culture.

Illustrative Examples	Elements Forming the TEA UNIVERSE
	<p>Packaging: As part of the marketing activities, packaging enables new product development especially in agricultural food items. In terms of packaging, tea in particles or as leaves is packaged in paper bags or tin boxes, while it has been packed in tea bags for mugs or round teabags for teapots. There are also innovative designs such as special plastic cups that contain tea in their bottom and brewed instantly when boiling water is poured in them; or the concept of tea bag is interpreted in the form of a spoon, so that by holding and stirring the spoon tea is maintained easily.</p>
	<p>Life Styles: Changing lifestyles are rather important in the changing habits of tea preparation and consumption. As the speed of life increases, the amount of time that is required to brew tea in the traditional way becomes more and more difficult, so alternative ways like the use of tea bags are adopted in people's daily lives. Depending on the change of priorities in his/her life, a person who uses tea bags rapidly in the morning before going to work might also enjoy a full brewed traditional tea occasionally.</p>

Figure 2.

Figure 3.

<p>TEA UNIVERSE</p> <p>DESIGN</p> <p>LOCAL</p> <p>Rituals</p> <p>GLOBAL</p> 	<p>Rituals: Cultural habits and ways of conducting those habits form the rituals. In terms of tea drinking, Turkish tea brewing like the use of samovar, involves a two pieced tea pot set along with a certain duration and temperature. These rituals that demand time are often replaced with more rapid practices when they enter the realm of the global economy, unless marketed otherwise.</p>
<p>TEA UNIVERSE</p> <p>DESIGN</p> <p>LOCAL</p> <p>Accessories</p> <p>GLOBAL</p> 	<p>Accessories: Among the basic tea drinking accessories there are the so-called ince belli tea glasses and saucers in Turkey. They are used in tea and coffeehouses, households, offices, etc., everywhere tea is brewed traditionally. On the opposite side of the local and traditional, there are the various cups, mugs and other modern porcelain or ceramic tea drinking accessories.</p>
<p>TEA UNIVERSE</p> <p>DESIGN</p> <p>LOCAL</p> <p>Tools</p> <p>GLOBAL</p> 	<p>Tools: Tools are used to prepare tea. In our case, the local usage is dominated - as discussed earlier- by the two-pieced teapot set. Globally, both in the East and West of Turkey, tea is prepared by a single item called the teapot. The use of teapot in Turkey, including the English or Chinese fine porcelain teapots is generally over the other teapot that boils the water underneath. The one-piece teapot is seldom used.</p>

The two-piece teapot sets are transformed by the introduction of the kettle to the Turkish market. Arçelik as a major producer and distributor made the first hybrid object that combines a kettle and a teapot: *Tiryaki* (see Mutlu and Er, 2003). Later other producers have followed the trend. The main reason for this transformation is that, in a Turkish kitchen, apart from other necessities, boiling water is mainly used for tea brewing and the brewing pot has to stay on this boiling water. So, kettle as an object only to boil water is by definition confining as brewing tea and the act of boiling water is in a sense naturally combined in most of the Turkish kitchens. Due to the limited shelf space in the kitchen environment and by other forces of modernity, like the lack of time for a proper brewing, kettle had to be transformed by the local manufacturers.

Technical Innovation and Design

Today there are various alternatives that combine the brewing pot and the electrical kettle to boil water in the domestic market. The manual time and energy demanding operation involved in the tea brewing process is tried to be developed and made efficient by different technical solutions. The firms realize the need for such devices for professional use and focus their energies in developing such products. Some national registered patent applications to the Turkish Patent Institute (covering the years between 1983-2004) listed in Table 1 show that Turkish type tea brewing and its accompanying usage patterns both in home and official

environments are a rich source of product innovation in the domestic market. As can be observed from the table, most of the innovations are towards making the two-pieced teapot set "a machine that can brew tea automatically". Through different technical solutions, the tea making process is tried to be transformed into an automatically controlled one becoming less dependent on human involvement. It can be said that through the development of new products capable of brewing tea in the Turkish style automatically, the local manufacturers explore the possibility of sustaining the Turkish style tea brewing in modern life.

As these registered patents show, there is a diversity and richness of products developed in Turkey in relation to the tea consumption habits specific to the Turkish culture. As well as this richness and diversity what is significant about this table is that it shows how a *culturally specific object* can act as a source of product innovation. Generally culturally specific objects are associated with crafts or traditional production methods that require no or very limited technology. In the case of tea, the mechanization of the tea brewing process triggers the need to turn the two pieced set into an automated machine. This enables total and radical changes in the design of these tools while interpreting 'traditional' with 'technological'. Still, this technological pursuit does not mean that in terms of design these tools are handled properly. Most of the time, given the fact that they are generally for public places like café houses, canteens or other catering purposes in hotels or within companies, these objects are often neglected in terms of design, as if they are heavy duty industrial machines. The firms who have been working on the technical solutions for about 20 years are now establishing links with designers to combine the technological know how with the design expertise.

Table 1. Some National Patent Registrations concerning Tea Preparation Utensils (Covering the years between 1983-2004. Taken from the Turkish Patent Institute.)

Some National Patent Registrations concerning Tea Preparation Utensils (1983-2004):			
Number	Name	Description	Year
21480	Oyak-Renault Otomobil Fab. A.Ş.	Automatic tea brewing machine	16.09.1983
21977	Muammer Bayındır	Programmable full automatic tea brewing machine	19.04.1985
22543	Mehmet Günaydın	Economical tea preparation boilers	08.01.1986
22464	Ülkü Gürel	Special part in saucers to prevent the sugar to be melted	06.03.1986
22239	Bozkurt Domaniç	A teapot system that enables to put the teapot on top when there is a lid	06.08.1986
24629	Bozkurt Domaniç	A steel teapot that the strainer is attached to the lid of it	16.11.1988
25225	Mustafa Seyfi Gürsel	Full automatic Turkish style tea brewing machine	02.01.1990
TR200201483	Bayiner Elektronik San. ve Tic. A.Ş.	Teapot that automatically transfers water to the brewer	03.06.2002
TR200200452	Jumbo Madeni Eşya San. ve Tic. A.Ş.	Teapot set system	21.06.2002
TR200300068	Mehmet Yunus Asılsoy	Bakelite covered teapot and teapot handle	22.01.2003
TR20021992	Şükrü Akgül	Self brewing teapot	21.02.2003
TR20030452	Yalçın Tuğcu	The opening and closing mechanism of the taps that are used in samovars and tea boilers	07.04.2003

TR20030013	Nami Can	Full automatic hot water boiler	21.04.2003
TR20030756	Nurettin Uğur	Electrical tea brewing machine that is not effected by the changes in the main voltage	26.05.2003
TR20037778	Zass Ev Aletleri San. ve Tic. A.Ş.	Electrical tea brewing machine	30.05.2003
TR20030931	Bülent Yerli	Improvement in the strainer that is attached inside the teapot	18.06.2003
TR20030965	Nurettin Uğur	Electrical tea brewing machine that has an integrated circuit	23.06.2003
TR20030649	Orhan Seyfi Aksakal	Fast tea brewing machine	21.07.2003
TR20030539	Nurettin Uğur	Improvement in the electrical tea brewing machines	21.08.2003
TR20031459	ARDA Mutfak Eşyaları Ltd. Şti.	Self brewing teapot set	03.09.2003
TR20032069	Turgut Özdemir	Automatic tea brewing steel teapot set	02.12.2003
TR20032158	Adem Karaca	Improvement in the tea strainer	12.12.2003
TR200302374	Uğur Hidrolik Makina San. Ve Tic. A.Ş.	Self brewing teapot set with timer	31.12.2003
TR20040192	Mesale Kazan Makina Bakır San. Tic. Ltd. Şti.	Full automatic tea brewing boiler with digital display and an electronic control panel	30.01.2004
TR2004 1062	Mehmet Türk	Strainer to be hung inside the teapot	11.05.2004
TR2004 1078	Yasar Toko	Tea boiler with a pool structure	13.05.2004
TR200401128	Tahsin Öztiryaki	Tea brewing machines working with gas	18.05.2004
TR200401700	Korkmaz Mutfak Eşyaları Tic. A.Ş.	Teapot set with an isolation unit	13.07.2004
TR200401699	Korkmaz Mutfak Eşyaları Tic. A.Ş.	Steam controlling lid for the boilers that have an upper handle	13.07.2004
TR200401698	Korkmaz Mutfak Eşyaları Tic. A.Ş.	Teapot set that prevents steam outlet with an inner lid spring mechanism	13.07.2004
TR20040431	Uğur Hidrolik Makina San. ve Ticaret A.Ş.	Improvement in the heating systems of tea brewing machines	16.07.2004
TR200402166	Muharrem Görgel	Stainless steel teapot set with heat control	31.08.2004

Local-Global Issues

Tea related objects produced according to Turkish habits and lifestyles have a difficulty in finding a 'natural' place in the global market. The difficulty of tea related objects to become globally appealing is that there are not shared practices that rule the form and structure of the two-pieced teapot sets in foreign markets. Defne Koz's redesign of the Turkish style tray known as askı is a good example of how a culturally specific item can be turned into a globally marketed product. Defne Koz's askı can find a natural place in foreign markets because functionally it corresponds to the same need of carrying. On the other hand, the two-pieced teapot set does not correspond to the same tea brewing function in anywhere outside Turkey.

Table 2. Stages of latecomer development: from OEM to ODM and to OBM
Source: Amended from Hobday, M. (1994) *Export-led technology development in the four dragons: the case of electronics, Development and Change*, 25, pp. 333-361.

Technological transition		Market transition
1960s/1970s OEM (Original equipment manufacture)	Local firm learns assembly process for standard, simple goods	Foreign TNC/buyer designs, brands and distributes/gains non-manufacturing value added
1980s ODM (Own design and manufacture)	Local firm learns process engineering and detailed product design skills	As with OEM, TNC buys, brands and distributes. TNC gains non-manufacturing value added
1990s OBM (Own brand manufacture)	Local firm conducts manufacturing, product designs and conducts R&D for new products	Local firm has own brand, organizes distribution and captures all value added

As argued before, in case of tea, "local" creates difference in terms of design within the market and acts a source of product innovation*. In order to be successful in the global market, the function has to be interpreted within a global setting. For domestic companies there are several options: They either have to enter into the international network of production as being Original Equipment/Original Design Manufacturers (see Table 2) or through the strategy of Own Brand Manufacturing. The latter choice requires a very effective marketing campaign, which would promote the Turkish way of tea drinking globally. In terms of tea production tools and accessories, the dynamics of the shifts from OEM to ODM is rather different. It can be suggested that OEM is mostly suitable for electronic or technology based industries. If we refer to the patent applications in Turkey, it can be said that most of the firms are positioned to enter into the international production network at the level of Own Design Manufacture (ODM), as they try to develop their own designs with the technologies they are adopting or developing for the certain culturally defined functionality. The problem is that unless these products are sold to the foreign markets, the requirements of the domestic market will not be sufficient to drive product innovation efforts. The barrier for the Turkish style tea brewing and serving products to be marketed globally seems to be cultural differences effecting functionality; and in connection with this issue of cultural difference, the difficulty to establish a globally appealing brand.

In an effort to develop a product satisfying the local way of doing something with a globally appealing design, Beko introduced a Turkish coffee maker called *Keyf*¹. This product received an IF Design award² in household/residential category as it interpreted a traditional object for a global market (See Figure 7). The product description is as follows: "...To make coffee with *Keyf*, you have to put well grinded coffee and sugar (as preferred) in the brewing pot. The rest will be handled by the hidden technologies beneath the cover. Unlike the traditional way of brewing, supervision, stirring and waiting for the ideal moment to remove the coffee from the heater are not necessary (p.327)." Similar to the tea brewing process there is a certain skill, knowledge and labour is involved in traditional Turkish coffee preparation. As they mention in the press release,

¹ For the domestic market the same product is marketed under the name of Telve, by Arçelik.

² For further information see http://www.aydabir.com/basin_bulteni_goster.asp?ID=145

there have been eight patent registrations in order to enable the secret technology to be able to make the traditional coffee. Turkish coffee is much more advantageous within the global market compared to tea, as it is better known throughout the world. The main reason is historical; tea is a rather recent phenomenon in Turkey with a span of approximately 50 years, but coffee has been part of everyday life since the Ottoman times more than 400 years. The discourse behind the new automated coffee machine reveals that it is possible to compete in terms of design interpreting a culturally specific object globally with the advance of technology.

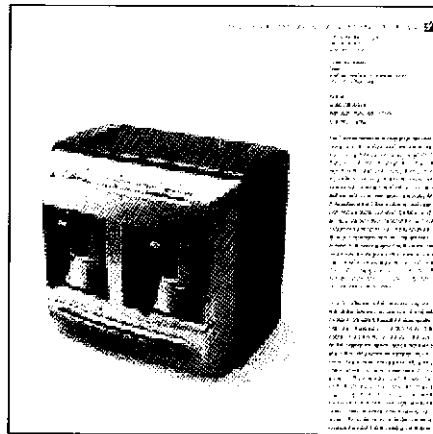


Figure 7.

In the future the local-global intersection within the Turkish tea universe may lead to well designed public tea brewing machines that have a global appeal with a distinct brand or national identity.

Conclusion and Outcomes

There are several outcomes out of this discussion about tea in Turkey:

- The domestic market is composed both of traditional and modernized versions of tea preparation and consumption tools & accessories (see Figure 8). This is why we call it a tea universe. It is a market that does not reject the global while making use of it to sustain the local within the social, economic and cultural dynamics. This openness creates an environment that enables a wide variety of products to survive simultaneously in the market. It is an area open to new product development for producers.

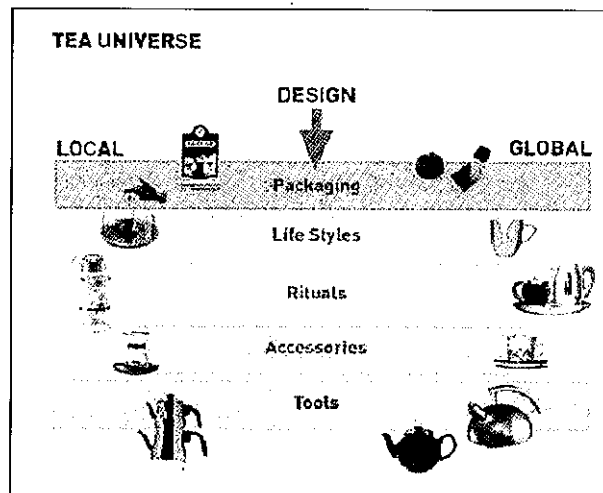


Figure 8.

-Starting with its production, the rise in the marketing of teabags for the last ten years by Doğuş, Lipton, Ülker (under the name of Doğadan) and recently Sabancı (by Deren), etc., has increased the consumption. This is due to the growing interest on the concept of 'healthy living'. While the main habit of brewing tea with a teapot set does not involve the imported way of swinging teabags from cups, the appropriate marketing strategy for the firms to increase the sales is to sell those products mainly under the title of 'herbal' tea in Turkey. Lipton's 'New Collection' of herbal teabags is a good example to this strategy; providing a wide range of 'colortul', 'aromatique' and 'special' range of small but pricey packages.

-The two-piece teapot set, apart from defining a completely new way of combining water boiling and tea brewing for a foreigner, putting these two pots on top of each other also invokes certain safety problems in addition to the difficulty in the brewing process. These kinds of problems can be overcome by concentrating on new product designs which would make the brewing process easier and safer as well defining an alternative way of making tea for foreign users. If these kinds of products can be promoted as special "lifestyle" objects, like the Italian espresso machines that have a distinct Italian identity, designers then can turn this cultural limitation into an advantage in terms of opening up new marketing opportunities.

-In this paper the phrase 'limits of culture' is used not only to imply the constraints of culture in new product development like the difficulty of promoting a specific way of doing a certain task, but also the word 'limit' refers to the borders that can be enlarged by the help of design and technology within a global economy. So, the limits of culture should be read as new possibilities or potentials within culturally set functionalities and usage patterns that define certain boundaries.

Rituals in the anthropological sense, give shape and substance to social relations; they fix or anchor social relationships, making sense of the flux of events and containing the drift of meaning. They are a kind of ballast against cultural drift; as such, they are a fundamental component of all societies (Lury 1996, 12).

As argued, tea preparation and drinking has a specific ritual in Turkey. This ritual has its own tools, methods, objects, accessories and manners associated with it. The interesting part of the tea phenomenon in Turkey is that while the tools and objects involved in this ritual are being transformed by the forces of modernity, the ritual is sustained in some way. It becomes resistant to change by being flexible and dynamic. The ritual stays alive and is an important part of the everyday life by its ability to adopt itself to change, in harmony with the basic rule of evolution.

Note:

* This issue is also dealt with in the paper titled as "Culture as a Source of Product Innovation: New Product Design for a Major Sanitary ware Manufacturer in Turkey" by Ö. Er and G. Akay presented in *Desire Designum Design Conference* in the University of Aveiro, 10-12th April 2001, Portugal.

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PART III
SUSTAINABILITY AND ECOLOGICALLY
APPLIED DESIGNS IN AGRICULTURAL
PRODUCTS AND SERVICES

Anna Meroni

Strategic Design for the Food Sector: Food-System Innovation

Arzu Vuruşkan

The Importance of Organic Agriculture for Vegetable Based Textile Fibers and Organic Fashion Concept

C. Anna Catania, F. P. La Mantia

Design and Eco-Design in Wine Industry

Deniz Deniz

Sustainability and Ecological Design

Dilek Himam

A New Lifestyle of Metropolitan Individual: Organic Life

Marcelo Geraldo Teixeira, Sandro Fábio Cesar

Design Requirements to Prevent Pollution:
Using Agro Industrial Residues in New Products

Mina Hamamcioğlu Turan

Concepts that Shape Traditional Olive Oil Mills and Some Aspects
for Their Sustainability



STRATEGIC DESIGN FOR THE FOOD SECTOR: FOOD-SYSTEM INNOVATION

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ABSTRACT

It is widely recognised that there are many possible and desirable links between food and industrial design. However, the expression food-design still generates misunderstanding and does not clearly describe any particular activity. The scientific design community agrees that designing food does not mean merely embellishing products, if indeed it means this at all. More than anything else it especially means planning new ways of food production and distribution within cultural systems marked by deeply entrenched patterns of social life. This essay seeks to present a proposal for the methodological structuring of designer planning in the ambit of food systems: In particular, it proposes a sustainability-orientated strategic design approach, structured over three application fields:

- 1-Advanced agribusiness
- 2-Enabling food solutions
- 3-Transparent food networks

Keywords: Strategic Design, Product-Service-System Innovation, Local Food Identity, Industrialisation.

01. Food: An alimentary system

Food is to be found at a particularly complex intersection between continuity and transformation, characteristic of contemporary industrial society¹. The role of designers in planning food is formally quite new, but is substantially consistent with their professional skills and the nature of the issue. An overview of both past and future will help to put their role in perspective.

Historically the great creators of food patterns have been, on the one hand, ordinary people who have silenced their hunger with the food available in the area, and on the other, the great chefs who have made and make an art of contingent factors². Duly set against this historical background, these same paradigms are still at the base of contemporary food systems: the culture of the "everyday" of ordinary people that builds its system on the basis of what is normally obtainable by reasonable effort; and the elite culture that re-elaborates and intellectualises options and food models, offering new ideas and feeding our fancy. There has always been an intense exchange of knowledge and know-how between these two paradigms, which has over the centuries given rise to the various alimentary identities.

However, modern food culture is characterised by a third player, industry, which has necessarily created a third paradigm. Industry, unlike the other two, has its own, independent logic. It plays a

¹ Capetti, De Bernardi, Varni, "Introduzione", in Capetti, A., De Bernardi, A., Varni A. (edited by), *L'Alimentazione*, Anelli 13, Storia d'Italia, Torino, Italy, Giulio Einaudi editore, 1998.

² Capetti, Montaneri, *La cucina italiana. Storia di una cultura*, Roma-Bari, Italy, Editori Laterza, 2002.

special role as supplier of useful raw materials but is less able to create acceptable reference models.

With industrialisation, food has undergone a similar destiny to other consumer goods; indeed, the food system has had to deal more with large numbers and technological innovations than have other goods. Transformation in the technology of food preparation, preservation and distribution occurring over recent decades, has been so big as to frequently require the planning of new alimentary identities, shaping different values to those at the basis of traditional language about food. It is this state of affairs that leads us to think of food as "designable" in just the same way as other contemporary goods and products.

However, in a traditional approach to industrial design, food "designability" lies in factors that often either just do not coincide with or cannot be reduced to the simple dimension of artifacts. "What" is designable in food using industrial design tools is linked to "why" design can involve itself with food. The use of the expression *food-design* is mushrooming in the western world, so it is essential for the purposes of positioning any approach and contribution to the theme, to define the field of possibilities identifiable at the intersection between food and design.

01.01. Food-design

It is now 15 years since Claude Fischler talked of "Unidentified Edible Objects"³, coining a particularly successful expression to refer to a common condition in contemporary food culture: not only an aesthetic problem, but a deeper problem of the general identity and recognizability of a product. Such a plight is apparently due to food products and services often seeming unable to hit on the important aspects of up and coming lifestyles, and so to work on those values that make a novelty plausible if not actually interesting.

However, the crisis is also generated by the uncritical transferral of a creative model from other production sectors, to the world of food. In Italy for example food, which together with fashion and "design", shares the destiny of standard-bearer for *Italian Style* and *Made in Italy* is rapidly joining or rather yielding to the logic of these sectors and is moving in a direction where consequences should not be underestimated. Even the fact that furnishing (emblem of our national "design") has largely taken on the phenomenology of fashion is worrying, because it means that furniture has progressively become almost as rapidly obsolescent as a clothing collection. Yet the conditions for enjoyment of the two are different and such acceleration burns the value of products before their time. If the phenomenon extends to food, the prospect becomes even more aberrant: an individual does not change his food habits like an article of clothing.

The factors that steer our options in food (apart from personal inclination) are far more rooted in our value system and cultural identity than are those that influence the choice of other goods. Food is a somatic artifact, our bodies "think" about it when they look at, smell and eat it. It is invested with a different, physiological or emotive rationality (or irrationality) dictated by our organisms. The application or simple transliteration of a model that governs innovation in another kind of product and service into food must therefore be pondered very carefully. If we hold that there is space

³ Fischler, L'Homnivore, France, Editions Odile Jacob, 1990.

for *design* in the contemporary world of food, we must understand the conditions of this knowledge transfer and avoid being tempted by superficial similarities that risk diluting the paramount value of the different production and cultural fields. In this field, the drivers of innovation and change are indeed original: the production and consumption models of the contemporary industrial system collide with extremely rigid cultural and behavioural models, especially in the South of Europe. In order to interpret the demand for innovation that is assailing the food system, we must understand this contraposition. We must understand what can be modernised in a food system and why this modernisation is necessary. When talking about food, it is truer than ever that the process by which whatever is *different* and *new* is transformed and adapted as *our own* is complex and tortuous⁴, is difficult to generalise and is conditioned by the emotive waves that periodically flood the sector. Furthermore, against all evidence and common sense, the unconscious conviction, maybe even the need, lodges in our hearts that all food should be handmade, lovingly prepared after a one-to-one model.

01.02. Food product design

The added value of food can be defined as the difference between its nutritional powers and its non-nutritional function: it includes the dreams, symbols, socialising potential and *convenience* value that food carries. As a whole, this part of food value is even greater than its nutritional value both in terms of perception (and therefore preference) on the part of the consumer and of cost, which constitutes the end price of the goods. From here arises the consideration that designing food does not only mean making it good and wholesome from a nutritional point of view, but also making it *look good* and wholesome according to a synesthetic principle, and *be good* and wholesome from a psycho-social point of view. In other words, to borrow Norman's categories⁵, it should be good according to *behavioural* and *reflective* design criteria.

This is the premise for designability in edible artifacts using the tools of *product-design*: even those elements of appraisal that Norman calls *visceral*⁶, those associated with aspect and form based on immediate emotional impact can in this respect become material for a designer's work.

Nevertheless, why cannot we leave all this to industrial chefs? Because the factors conditioning the appreciation of industrial products reproduced by their thousands are many and complex, and an industrial designer is the figure best qualified by dint of training and creative aptitude to govern them. This does not signify that, for designers, designing food does not mean direct consultation with experts (food technicians), who in the industrial dimension operate to give products substance and form, especially working alongside *consumer scientists*, who traditionally consult the consumer about perceptive and organoleptic aspects.

Designers too, on a product level, must work on the edible material with the general intention that it should be perceived as appetising, as well as actually being so. In this sense, the original nature of their contribution lies in their capacity to foresee elements that will influence how the pleasure deriving from food will be judged, over

⁴ Capatti, Montanari, 2002.

⁵ Norman, *Emotional Design. Why we love (or hate) everyday things*, New York, USA, Basic Books, 2004.

⁶ Norman, 2004.

and above the objective reasons of relish or disgust, bearing in mind also the conditions in which the user will consume it.

Indeed, judgments on food enjoyment largely depend on these conditions, determined by the sum of the physical, emotive and perceptive factors belonging to the personal context and situation of the user: the perceived quality of the product is conditioned by how the subject is ready to receive it, by the objective conditions in which the product is presented and by contingent environmental conditions. Before it is savoured by taste buds, food is "tasted" by the eye and by touch, within its material and cultural frame. Whatever the intellect "anticipates" in this way must be matched by what the senses perceive. This correspondence between aspect and perception is one of the fundamental instances of design planning. It is what enables artifacts to be used correctly, the buttons to be pressed, the handles turned and the appliance switched on.

In this respect, in the ambit of food the concept of *synaesthesia*, the transferral of meaning from one or more sensory systems to others, is fundamental. According to this concept, food of a particular colour and appearance evokes "instinctively" its taste, consistency and therefore its appropriateness with regard to what is desired at a given moment. Synaesthesia links the *visual quality* of food to its *quality of use*, and influences the elements that determine the so-called *interaction aesthetics*. Indeed value judgments on food never disassociate pleasure from the nutritional function or from the conditions in which the food is made available for consumption.

Once again it is within the abovementioned field of *visceral* design that activities are targeted to set product characteristics able to strike the basic "biologically predetermined" preferences of the user-consumer. This is design involving the body and senses through the touch, taste, smell and physical sensations that the product stimulates⁷, including appraisal by the palate and sensory organs. It is the dimension by which food is "good to eat"⁸. However, talking about *interaction aesthetics* we must also talk of so-called *behavioural* design. This is design that determines a product's quality of use in relation to the conditions of its context of use.

Everything that can be traced to the areas of visceral emotion and behaviour mainly affects the individual at an unconscious level, determining a *phenomenal* type appraisal, i.e. linked to sensations arising from visual, taste and tactile contact with the product. This area includes the sphere of the artifact and its immediate material surroundings. If the sphere extends to the context in which the food product is consumed, then an evaluation of relational aspects and of opportunities relating to circumstances and needs will also come into the appraisal: in this way an individual's "experience" with a good comes into play.

01.03. Design for food experience

Designing the *interaction aesthetics* of food means imagining a process that includes the symbolic dimension, timing, preparation process, product appearance and how the food will be made available. These are characteristics that together make food into an inseparable unit of edible material, packaging and service. They highlight the importance of reflecting on the whole experience underlying the consumption of an item of food. Pleasure in its "use"

⁷ Jordan, Designing pleasurable products, London, UK, Taylor and Francis, 2000.

⁸ Lévi-Strauss, Le Cru et le Cuit, France, Librairie Plon, 1964.

lies not so much in the result of the action (nourishment), but principally in undertaking the action itself, in the process, in its perceptive enjoyment and choreography.

From observing Italian food behaviour, one can hypothesize that solutions most likely to meet user approval are those "open" to activities of co-elaboration of value and meaning. In fact, Italy like much of southern Europe, is marked by a declared reticence to accept conceptually and materially pre-packaged food; this can undoubtedly be considered a positive phenomenon testifying to an emotive and practical attachment to rich, persistent, traditions. The significance of the process of appropriating and elaborating a food-system is very great: in this field, users mainly ask for "enabling" services to which they give a sense, autonomously. The best a design intervention can do is therefore to offer ideas and prompts to follow; solutions that users can turn into personal *experiences*.

Is it possible to speak of *experience design*? At first glance, these premises for autonomy in value building seem to contradict the prevailing interpretation of the expression, which suggests a kind of planning of other people's "experience". However, if we agree to shift from "planning experience" to "planning for experience"⁹ where a designer sets up a situation in which the user can interact in such a way as to favour the occurrence of a given experience (obviously positive), we can see how for this to happen, the designer himself must keep an open ear to the complexity of phenomena and experience. It is a way of shifting attention from a functional performance to the "process of it happening", where elaborating value can be an "open" process and the end user plays a primary, active role.

So, talking about design for an alimentary experience is also a way of casting a designer eye around and beyond food, to see how we can make it easier and more pleasant to use. It is the dimension in which food is mainly held to be "good to think about, because good to eat". Finally, it is a way of concentrating thought on building up the emotional, "non nutritional" value of an alimentary system.

Wherever we wish to appeal to symbolic or cultural values, and therefore to the consumer's critical judgment, a project must intervene on the strategy by which the product-system is presented on the market and in society. It is this field that Norman calls *reflective design*, where the distinguishing values of a food system are shaped.

01.04. Design of a food product-system

Through the concept of experience, we have introduced that of product-system, or more generally of food system: the set of products, services and knowledge belonging to the complexity of actors, habits and customs that food establishes within a historical-territorial context. The expression *food system* lends itself to being used in the plural, highlighting the existence of alternatives both in substance and meaning, and hence of differences. It is through differences that, even in food traditions¹⁰, identity emerges; an identity presented as partly given and partly designed reality.

A "food system" can be defined as the technical footprint given by a society's food culture. Thus, talking about the design of food

⁹ Pine, Gilmore, *The Experience Economy. Work Is Theatre and Every Business a Stage*, Boston, Massachusetts USA, Harvard Business School Press, 1999.

¹⁰ Capatti, Montanari, 2002.

systems instead of food design, means focusing on the *strategies* by which to plan new solutions within existing structures that are part of a society's cultural heritage. On one hand, the strategic dimension of a project is given by the need to define long-term goals: starting from an interpretation of the present we then sketch possible, desirable scenarios. On the other hand, it arises out of the ambition to introduce innovations able to generate long-lasting, shared realities that are both self-perpetuating and able to adapt flexibly to changes in the system of which they are a part.

How then can designers intervene on the distinctive qualities of a food system? First and foremost they must take care that the result is "good to eat and think"¹¹. Our task today, among others, consists in bridging the gap between the industrial dimension of production and the "homemade" dimension of affectivity projected onto eating, by designing *solutions* that are effective and efficient in the logic of an advanced industrial society.

The term "solution" refers to a particular interpretation of the concept of product-system¹². A solution is first of all a result: an effective personalised response to a user demand. As such, it is in turn the result of a creative, intentional combination of a set of elements (products and services) that interact to produce benefits of various kinds.

The value and *raison d'être* of food, more than for other goods, lies in its relationship with the system it belongs to. It therefore obliges the designer to think in terms of solutions, since in the modern food system the product alone is losing value and competitiveness. Furthermore, the concept of "result achieved by combining elements" opens the possibility to an innovation that does not only occur through *ex novo* invention of elements, but also through new forms of interaction and connection between existing elements, in an approach that is advantageous for contexts of use resistant to radical innovation.

On the scale of a food system, strategic planning seeks first of all to work on the sense of an innovation in a socio-cultural sphere (it later concentrates on organisational patterns, services, places and products), and therefore on its value aspects. So what we plan here concerns:

- how a given scenario interprets the elements of meaning it refers to
- how it determines the positioning of a solution on the market
- how it facilitates social interaction and promotes correctness between the actors involved and transparency with the consumer
- what its position is regarding environmental and social sustainability

This is the dimension where food is above all "good to think".

What we shall now discuss in terms of approach and projects refers to this last mentioned work dimension: strategic design for the food system.

¹¹ Lévi-Strauss, 1964.

¹² U. Tischner, Verkuilj, (edited by), Suspronet Report. First draft report of PSS review, 2002.

02. Strategic design for food systems

We have said that the strategically designable aspects of a food system are mainly those associated with values, in so far as they define the identity of a solution within its socio-cultural context.

The approach presented in this paper is clearly orientated towards certain value objectives, such as:

- supporting natural methods and conditions of cultivation and preservation;
- safeguarding and enhancing the local identity of products as demonstrations of the cultural heritage of an area, triggering a constructive confrontation with the modern food industry;
- promoting the quality of products as an expression and recognition of particular skills and expertise;
- promoting better informed, healthier, eating styles linked to local area and seasons as well as to an awareness of one's own nutritional needs;
- establishing conditions for a transparent and correct relationship between producer and consumer.

In short, what we are proposing here is a strategic design approach orientated towards sustainability and set up according to a multi-disciplinary vision of planning, where the designer is constantly in contact with experts from other disciplines.

Among the various possible themes and design opportunities identifiable under this umbrella, we shall be concentrating on the following:

- 1.Advanced agribusiness
- 2.Enabling solutions
- 3.Transparent food networks

02.01. Advanced agribusiness

This is the advanced point of the classic agribusiness model: an industrial system that adapts and rethinks the needs, methods and processes of large quantity industrialisation according to rules dictated by environmentally, socially and economically sustainable local development.

It is an industrial model that:

- applies biodynamic, organic or integrated cultivation methods, rationally, wherever local conditions require or allow;
- applies advanced technological systems of pre-treatment and *minimal processing* to facilitate the arrival of food rich in nutriments, fresh to our tables;
- reintroduces seasonal and regional recipes and food solutions;
- shapes relationships with intermediaries and distributors on principles of collective value building, correctness and respect for specific characteristics;
- operates on the market basing diversification on contexts of use.

National and international legislation aiming to safeguard and guarantee organic products, or products typical of a specific region, area, tradition or production process (DOP Denominazione di Origine Protetta (*guaranteed origin*), IGP Indicazione Geografica Protetta (*guaranteed geographical area*), STG Specialità

Tradizionale Garantita (*guaranteed traditional specialty*) constitute the legal umbrella for this industrial model.

The motives for its development arise first and foremost from an awareness of a demand from society: industry has acknowledged a request coming from a growing segment of consumers, for goods of guaranteed quality that safeguard at the same time both product and producer.

On one hand, this demand is associated with the organoleptic and emotional qualities of the "gourmet product" and on the other, with safeguarding the environment and health, along with a desire for correct dealings with producers. In both cases we can see a demand for personalisation, which means the capacity on the part of both products and services to respond to the individual and the context.

Advanced agricultural industry gives a different slant to traditional demands on design, but also poses new demands, such as:

- designing a product as identity, often completely new, conveying new ways of relating to food;
- rethinking packaging, as a relationship and transparency facilitator, service provider and carrier of targeted information;
- thinking the product-system as a "contextualised solution", produced by several actors in partnership and guided by a shared vision.

The food delivery solutions¹³ developed under the European research project HiCS¹⁴ (*Highly Customized Solution*, funded by the European Commission, 5th Framework Programme, Growth) concluded in March 2004 are examples of this kind of product-system. Stakeholders of very different kinds were able to collaborate, for widely differing reasons, in the production of highly contextualised services thanks to the combination of advanced industrialised and logistic solutions with bottom-up management.

02.02. Enabling solutions

We have already said that the concept of solution is the starting point for the most evolved service models and that, even in the field of food, the need to develop the offer of products and services as an offer of solutions has emerged. In other words, we need precise, articulated responses to precise demands. We have also said that these solutions can be of an "enabling" type, i.e. able to enrich users with skills and give autonomy of decision, option and action¹⁵. Enabling solutions are those that:

- open spaces for active co-elaboration of the values and results of a service, creating new relationships between producers, designers and users;
- create the conditions for possible forms of autonomous action towards solving a problem, while at the same time generating

¹³ Jégou, Joore, (Edited by), Food Delivery Solutions. Cases of solution oriented partnership, Cranfield University, UK, 2004.

¹⁴ HiCS is a 3 years (2001-2004) EU funded research, in the 5th F.P., involving 6 European countries (Italy, The Netherlands, Belgium, Spain, Portugal, Great Britain), and 9 main partners (Politecnico di Milano, TNO The Netherlands Organisation of Applied Scientific Research, Cranfield University, INETI The National Institute of Industrial Engineering and Technology, CDN Competitive Design Network, Philips Design, BioLogica, Duni, ACU Associazione Consumatori Utenti).

¹⁵ Cottam, Leadbeater, Health. Co-creating services, Design Council, London UK, 2004.

- a gratifying experience e.g. products and services which help put high quality dishes on our table;
- help individuals or systems to organise themselves in order to manage present and future changes competently, for example in meeting specific alimentary requirements associated with pathologies. In this way, they foster new habitual behaviour;
- encourage individual initiative, according to "bottom-up" reasoning.

This approach acknowledges and develops what sociology literature calls "valorising residual capacity in the individual". This is one of the general guidelines put forward by the European Commission for service planning. Especially when talking of food, this means activating or re-activating deeply entrenched skills and expertise basic to the individual.

Designing enabling solutions is in first place a part of service design; however, the project demand it triggers (which can be referred to the general competence of strategic design) is relatively new and as yet unstructured. On the basis of experience accumulated so far, we can assume that when establishing the conceptual and structural base for an enabling service, the designer operates to:

- facilitate user-friendly access to information that is relevant to a given activity, when required and in appropriate form, by creating platforms for sharing and exchanging ideas;
- put individuals in contact with others in similar situations, voicing similar needs, for the purposes of mutual help and support;
- plan "modular" services, in other words services able to perform at different levels so that each user can easily understand and choose the desired kind of relationship, and make use of the required support.;
- help users to map out in their own minds the solution and the system in which they are interacting, in order to help them grasp the various behavioural options open to them.

Examples of enabling solutions can be seen in some of the services provided by the Food Atelier proposed in the project "Sustainable Everyday"¹⁶; especially in those that correspond to the "Slow" behavioural scenario characterised by an active and collaborative attitude on the part of the user, who tries to expand his capabilities through what he does.

02.03. Transparent food networks

Modern food intermediation, i.e. the chain of steps in the process of conveying food from producer to consumer, demonstrates with increasing clarity the inadequacy of a series of factors, both on an international and a local level:

- the pattern of excessive costs that raises the end price, but pays producers inadequately
- over-standardisation of products, which drastically reduces variety, above all to the detriment of small scale production and small producers;
- growing dissatisfaction among consumers who do not have transparent access to information about the source of the

¹⁶ The Sustainable Everyday Project starts from the exhibition "Sustainable Everyday. Scenarios of urban life", by E. Manzini, F. Jégou, that took place at the Triennale of Milano in September - December 2003.

product;

- indiscriminate disassociation from season and region that leads to a lack of food awareness and unsustainable environmental costs.

Planning services and solutions that facilitate the creation of transparent food networks able to shorten these chains, means generating systems that:

- support small producers and small scale, regional and quality food production through various strategies;
- safeguard biodiversity and our heritage of local food lore and expertise
- safeguard both producer and consumer, rendering them more transparent to each other and fostering relations of trust
- establish a fairer system of costs, prices and earnings;
- help consumers assess the value of what they buy and purchase more economically

The contribution of design in setting up transparent food networks, can be divided into three macro areas:

- facilitating interconnection between producers with a view to reinforcing the identity of the numerous entities distributed throughout local areas, whose single identity is weak. To do this, technological solutions can be used, but also creative forms of organisation based on the network of interrelationships existing in the local community.
- facilitate interconnection between (intermediate and end) consumers, to bring demand together and organise it into a coherent voice towards producers. Again this can take place through technological facilitators, but also by generating occasions, products and solutions that make consumers transparent to each other.
- plan innovative interfaces, i.e. intermediation models, between producers and purchasers (whether individual or organised into networks), bearing in mind the capacities of the actors, their context, their interests and their readiness to participate over and above their traditional role (active or passive).

Various kinds of transparent food networks can be seen in contemporary life. These constitute the starting point for designing and planning, as, for example, in the project EMUDE¹⁷ (*Emerging user demand for sustainable solutions*), now in progress with the backing of the European Commission. These are activities promoted in small local situations or by associations set up in the quest for communicative transparency, correctness and product quality.

03. Conclusions

The picture we have drawn does not exhaust the possible field of action for strategic design in the world of food, but it marks out an area.

¹⁷ EMUDE is a 2 years (2004-2006) EU funded research, in the 6th F.P., involving 9 main partners in several European Countries (Politecnico di Milano; Sifo, National Institute for Consumer Research; TNO The Netherlands Organisation of Applied Scientific Research, SDS Strategic Design Scenarios; Doors of Perception; Philips Design, JRC-IPTS, Joint Research Centre - Institute for Prospective Technological Studies; CEU, Central European University; Consumer International; UNEP DTIE United Nations Environment Programme) and 8 "Antennas", that's to say design schools acting as researchers and disseminators of EMUDE findings.

Thinking in strategies means thinking in the long term: thinking up self-fuelling and self-improving systems and solutions able to prosper and improve their context in the future.

In contributing to building scenarios of more sustainable situations, such projects go hand in hand with the capacity to adapt to socio-territorial realities, and changing life and production styles. In the end, they are so able to mould themselves with a context that they naturally find there the reasons and resources for their own productive survival, and even continue to generate new ones.

Those projects that are, ideally, set at the intersection of the three thematic areas analysed (Fig. 1), are very likely to possess these sustainable characteristics, as are systems that, to borrow a concept from complexity theory, can be called *sustainable adaptive systems*. In other words, they are able to adapt, they are open and interactive, they "learn" from events that happen, and on the basis of what they learn, they find inner resources to organise or re-organise themselves. They are based on the interaction of local actor subsystems, linked by interests of various kinds but able to act autonomously: "... for a system to be an autonomous agent, it must exhibit adaptive behaviour, behaviour which increases the chances that that system can survive in a noisy, dynamic, uncertain environment"¹⁸.

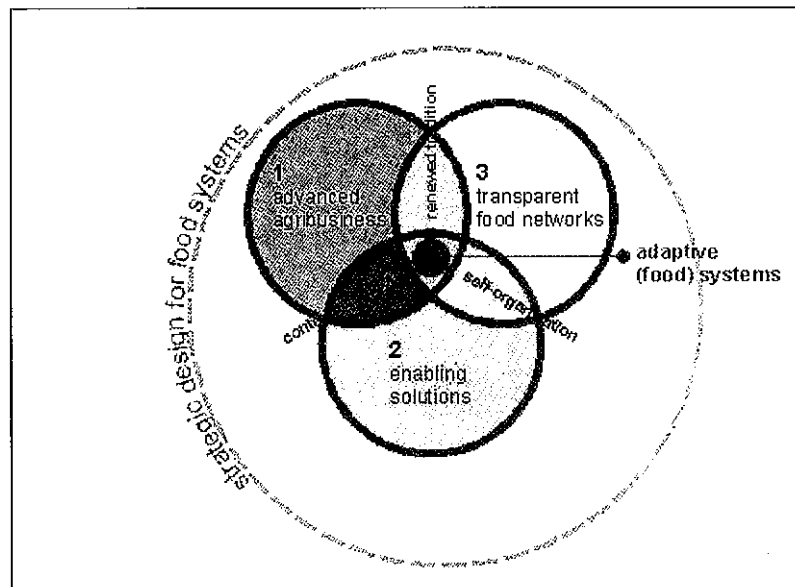


Fig. 1.

Looking at the conceptual model describing the relationship between the three thematic macro-areas, other significant intersections come to light, which pose fundamental problems for planning in the field of food systems:

-between advanced agribusiness and transparent food network lies the issue of revived tradition: a problem area that gravitates around the necessity to rethink and empower certain models of production and traditional organisation, in the light of new transformation and communication technology, and utilises the potential of modern industry to facilitate the birth and prosperity of new food networks that are highly contextualised in local tradition;

¹⁸ Wheeler, "Active Perception in Meaningful Worlds", Cognitive Science Research Paper, Department of Informatics, University of Sussex, UK.

-between transparent food network and enabling solutions lies the issue of self-organisation, meaning the capacity of an individual or group to autonomously and competently respond, in part or completely, to the knowledge and organisational requirements that will enable them to stay in the market, or manage their own well-being;

-between enabling solutions and advanced agribusiness lies the issue of contextualisation, meaning the possibility of matching the concept of mass-customisation to that of context of use and so, on one hand, achieve personalisation through a sophisticated capacity to read the situation, carried out by the solution system, and on the other, achieve it by integrating systems "opened" for the purpose, with user participation.

In general, this framework suggests a structure for a strategic design contribution to the planning of food systems and, at the same time, a possible line of conduct to be adopted every time projects are concerned with highly localised systems, characterised by the active involvement of different actors united by shared motivations and visions, and directly controlled by those taking part.

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THE IMPORTANCE OF ORGANIC AGRICULTURE FOR VEGETABLE BASED TEXTILE FIBRES AND ORGANIC FASHION CONCEPT

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ABSTRACT

To avoid the effects of chemicals on human beings and to the environment, ecological lifestyle and organic agriculture is getting more important day by day and trends are going through this way. With the words such as "natural", "organic" and "agricultural", people mostly remember the food industry and accordingly; with the organic food concept, people are mostly alarmed for the health thread represented by chemicals in food. How about cotton and some other agricultural products, which are not used as food but which still, can create a danger? Organic textiles and organic fashion terms are new concepts to most people. Consequently, organic textiles are as important as organic food. Cotton, linen and hemp are the major vegetable based fibres. Moreover, jute and sisal are a few more examples. The overuse of chemicals in the growing and processing of crops like cotton should seriously be concerned since cotton can be one of the most environmentally damaging crops as well and the organic production of these textile fibres should also be searched. To spread the trend of the usage of ecological and organic products, there is no better way than to "wear organic" to reflect the idea.

Keywords: Agriculture, Cotton, Organic Fashion, Recycle.

1. Introduction

The word "organic" itself, simply, refers to the 'living things' or the 'organs of the body'. Anything related to or derived from natural organisms -whether plant or animal origin- can be called as organic. Organic is used in various subjects to represent different terms. Organic life, organic chemistry, organic diseases, organic forms and organic architecture are few example terms used with organic. The word is also used synonymous with "natural" or "ecological" and with this meaning, organic as a word and as a concept seems to become the buzz-word of the new millennium. The reasons for this fact include a growing concern for the environment and human health. Living an organic life is mostly about being healthy, but it is also related with re-creating a healthy planet for the future and protecting the environment. These are also philosophical trends as well.

Nowadays, organic farming, organic agriculture and organic food are terms that are used commonly. When the term 'organic' is applied to farming, it describes a whole system of growing and producing the agricultural products by natural methods and by using chemicals, which are agreed by the ecological standards. The terms 'ecological agriculture' and 'biological agriculture' can sometimes be used instead of 'organic agriculture'. However, organic agricultural methods are not only related with the food industry; there are various sectors trying to adapt organic production methods since being organic is also important for some other industrial branches such as cosmetics, machine oils, wooden products and the textile industry. For the textile and apparel industry, some of the main raw materials include vegetable fibres. The major plant or vegetable based fibres are cotton, flax and hemp. These fibres are also agricultural products and organic agriculture can be applied to these textile raw materials. To protect the environment and the human

health, the overuse of chemicals in the growing and processing of crops like cotton should seriously be concerned since cotton can be one of the most environmentally damaging crops as well and the organic production of these textile fibres must also be searched. All processes from fields through ginning¹, spinning, knitting or weaving, washing, dying and manufacturing the garments should be done by using eco-friendly methods and renewable resources. For the textile and apparel industry, organic refers to producing fibre, yarn, fabric and apparels by working in harmony with nature. For fabric and apparel, sustainable is the general term used to identify ecological textiles instead of organic.

1.1. Organic Agriculture and Development of Organic Agriculture in Turkey

Before starting to mention the importance of organic textiles and apparels, some important points of organic agriculture and the development stages of organic agriculture should be underlined in order to understand the general principles of the system: Organic agriculture is a system based on the usage of organic substances which are eco-friendly and which give no harm to the environment. Plants are grown on these fields without the use of any artificial fertilizers, insecticides, pesticides and herbicides. While no one can claim that organic farming is entirely natural, organic methods do try to follow nature's example as far as possible. In nature, there is no need to bring in resources from outside as everything is recycled within the system [1].

After 1950s, agricultural production showed a sudden rise with the increasing consumption of chemicals, artificial fertilizers and some other chemical additives. However, it was soon noticed that the harm given to the environment and people's health is also rising with these chemicals used in the agricultural products. Accordingly, people realized the importance of organic agriculture. In the world and especially in the countries where personal capital income is high, organic agricultural production became a commercial activity during the late 1970s, due to the consumer sensitivity about the chemical residues in their food [2].

However, since the cost of organic agriculture is higher, organic agriculture concept started to spread especially in wealthy countries and it is not preferred because of its higher costs and lower product quality. Earlier, family farms were carrying out their business with organic agriculture, and these small farms were the first to go organic. Following these small businesses, with the understanding of organic concept, this matter started to carry a commercial aspect as well. In Europe, some supermarkets have been founded just selling organic products and a new sector started with organic concept. Especially after 1990s, production and sale amounts of these products showed a great increase [3].

Organic farming developed in the countries such as the USA, Canada, Japan and European Union. In Turkey, organic farming is relatively new, but the number of producers involved in organic production activity has been increasing rapidly. By the mid 1980s, mainly with the relationships of some multinational companies to export organic products to the developed nations especially to the EU, also caused an increase in the development of organic production [4].

¹ Ginning is a mechanical process applied to the raw cotton to remove the seed from the cotton fibres.

The sector, though, has been developed rapidly, especially during the period between 1990 and 1999. Covering many regions, sub-regions and microclimates with different ecological conditions and having a biological affluence with abundant varieties adapted locally, Turkey has a considerable potential for the production of organic products. This situation is being considered as an indication that Turkey should play an important role in the rapidly growing organic agricultural products market. In addition, since small family type farms are dominant in Turkish agriculture, the dissemination and development of organic agriculture is believed to be an important tool for increasing the incomes of the agricultural producers [2].

In Turkey, 267 companies are reported to be applying organic agriculture [2004 report of the Ministry of Agriculture and Rural Affairs.] [5].

2. Being Organic For Textile and Apparel Industry

Textile and apparel production chain begins with fibre production, continues with forming the yarns, producing the fabric surface either by knitting or weaving processes. When the raw fabric is produced, it needs to be dyed, printed, dry and wet processed and during all these stages, chemical treatments take place; finishing processes are also included in this category. The last step will be apparel production, cutting and sewing operations.

Going organic can be an issue in all these production stages. To analyse the organic concept through this chain, production of natural fibres by organic agricultural methods is an important issue to search.

2.1. Natural Fibres

Textile fibres are examined in two main groups as natural fibres and man-made fibres. Cotton, silk, wool, flax, hemp and mohair can be shown as examples of natural fibres and viscose, modal, polyester, nylon are the examples of man-made fibres. Natural fibres are also grouped into two main categories as shown in Figure 1; animal based fibres and vegetable based fibres.

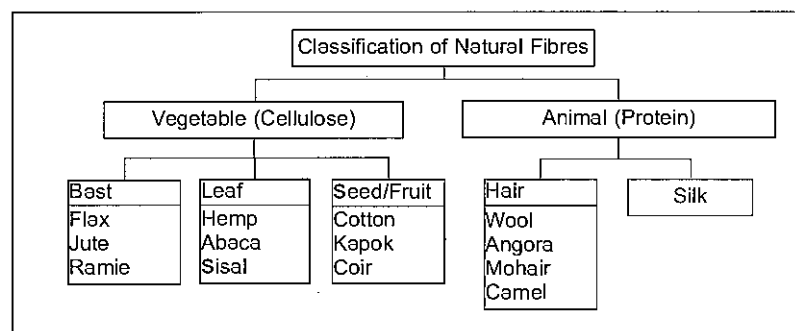


Figure 1. Classification of natural fibres

To make an overview for the usage of man-made and natural fibres, it is noticed that, the period between 1950s and 1970s was the time of development of chemical fibres industry. The chemical fibres were cheap, simply and efficiently produced, thin and delicate fibres; all of these facts were really attractive for the fibre industry. Yarns with chemical fibres started to eliminate natural fibres from clothes. Among these, which suffered most, were flax, hemp, wool and silk. However, people soon recognized the physiological, hygienic and health properties of chemical fibres are inferior to

natural ones and the replacement of natural fibres with synthetics seems impossible, both because of the physical properties that can never be achieved with the synthetic ones and because of the ecological reasons as well. Therefore, the producers of natural fibres started to pay attention to the health properties of clothes and environmental protection and natural fibres gained importance [6].

Economic production of natural fibres requires fertilisation and irrigation of the land. Plants must be protected against pests and diseases. Some precautions to reduce the negative impact of the agriculture of vegetable fibres upon the environment include improving agronomic practices, such as breeding new varieties integrated pest management, soil conservation, computer controlled fertilization and irrigation, use of non-persistent pest control chemicals [7].

Some general and ecological properties of the most important vegetable fibres are analysed below.

2.1.1. Cotton

Among all produced textile fibres, including the man made fibres, cotton is the most important one. The main purpose of growing cotton as a crop is to use it as a raw material for textile production, since 85% of a cotton crop is composed of the cotton fibre, whereas it is also used for some auxiliary purposes, such as oil production and the animal farming as fodder. Regarding this, it is related with agricultural, industrial and commercial events. Cotton has a 40% usage among all textile fibres in the world. In the last 30 years, total consumption of cotton reached approximately to 19 million tons. Although it is a reality that the total usage of man-made textile fibres has a bigger ratio than the natural fibres, the desire for the naturalness causes a tendency to natural fibres, which can also assure better physical properties than the synthetics. Some basic physical properties of cotton are its ability in quick water absorption, lower conductivity of static electricity, air permeability and being hygienic. These properties are reasons to prefer cotton fibres during ecological textile production. In Figure 2, a comparison chart of cotton and other fibres are shown between the years 1960 and 2002. As it is seen with the chart, cotton had an approximately 70% share among all fibres in 1960s. However, with the increasing production amounts of synthetic fibres, its share lowered to 40 percent in 2002. For the year 2002, total usage amount of cotton is 20 million tons whereas this amount reaches 30 million tons for synthetic fibres [3].

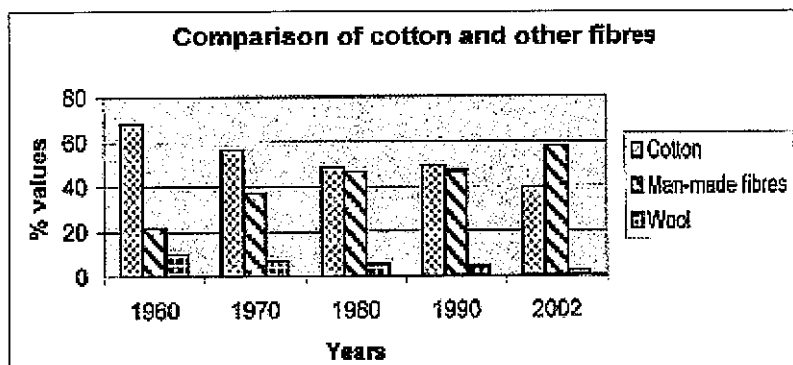


Figure 2. The comparison chart with cotton, wool and man-made fibres.
Source: World Bank, 2004.

Since cotton is the most important raw material of textiles, producing cotton in organic ways is also a rising issue for cotton

producers. Although cotton fibre has some advantages for ecological textile production, there exist some negative effects during the production of cotton. That is the reason why 'organic cotton' has become a rising issue. 'Organic cotton' is produced from organically grown cotton plants. It is being spread especially in wealthier countries. Turkey also has a growth potential in organic cotton production. The main purpose of growing organic cotton is to protect the environment. Cotton can be one of the most environmentally damaging crops grown in the world. A quarter of the world's insecticides are used to grow conventional cotton.

Using organic cotton does not directly affect human health. Only allergic reactions of the body can be prevented by using organic cotton. However, the chemicals used in conventional cotton production mostly give harm to the environment, and indirectly give harm to the human health with the wide scale water pollution and all other negative effects to the environment.

Producing organic cotton is not a method of giving up all chemicals. For organic cotton production, chemicals need to be used; however, they must be compatible to organic standards. Each farm applying organic cotton production has to be certified and all production applications have to be done under the control of authorized people. For the organic agriculture of cotton, generally physical removal is preferred for the weed instead of chemical destruction, and rotation of crops is a necessity, providing nutrients to the soil, helping to prevent pest, weed and disease problems and maintaining the soil structure. Thus a rotation must be applied to the fields with various crops such as wheat. Furthermore, biological methods should be used to fight with the insects and herbs. For a farm, to apply organic cotton production methods, a period of approximately 3 years needs to be spent. After this period, the products of the field can reflect the expected properties of organic cotton, as a result of this, the costs will also lower for organic farming and this cotton will show the real characteristic properties of organic cotton. When organic cotton production was first started, the cost of producing organic cotton was about %50 higher than conventional cotton. For today, producing organic cotton is only %20-30 more expensive than conventional cotton. Costs that cause a difference from conventional cotton production include fertilizer materials, mechanical weed control costs, organically-acceptable insect and disease management materials, additional hand weeding labour and costs associated with being certified organic. The quality of organic cotton is close to the conventional and for the end product of textile and apparel chain, which is the garment; therefore using organic cotton does not cause a great cost difference. It is not a highly affecting factor to increase the unit garment costs.

In Turkey, the applications of organic cotton agriculture have been continuing since 1989. There exist some governmental standards for organic agriculture, but they mainly include food industry. Çakmak (1996) carried out a research experiment to determine the effects of organic and chemical fertilizers on cotton and to analyse the quality differences between organic and conventional produced cottons by conducting on *Nazilli-84* cotton variety, on an organic field in a village of *Manisa*. Three organic and one chemical fertilizer, totally five variants were used in the experiment. The highest seed cotton yield was obtained from chemical fertilizer application and the lowest one was non-treatment cotton. For the fibre length, non-treatment has also given the lowest value. It can be stated that, in 1990s, when organic cotton production started to get spread in Turkey, results were not at the expected level. The characteristic properties of cotton fibre were much worse than the

conventional cotton. For today, with the development of eco-friendly chemicals and techniques, the characteristic properties of organic cotton (fibre lengths, strengths or micronaire values) are nearly the same as the types produced with conventional methods [8].

It is claimed with a report of "Organic Exchange"², a non-profit organization for organic products, that Turkey is shown to be one of the two largest producers of organic cotton in the world due to the relatively low prevalence of cotton pests, the quality and the presence of a well-developed textile industry. In this report, it is stated that there are two important regions in Turkey where organic cotton is grown. One of them is the Aegean / Izmir region in the West and the other is Kahramanmaraş, in the Southeast of Turkey. According to the report, products from the Aegean region totals about 20% of the fibre. The company "Egedeniz Textile" has organic cotton projects in this region of Turkey as well as Boweevil³. It is also mentioned that 80% of the organic cotton is grown in the Southeast region. Boweevil also grows in Kahramanmaraş. Turkey is mostly exporting these organic products to US or EU countries [9].

Fibre production is the first link of the apparel chain. Using organic cotton does not create a difference for the apparel as the appearance; however, the philosophy and idea reflected by the organic concept carries the main importance. Using organic cotton as a raw material is also a factor showing the quality standards of the companies and is thought to be a quality factor for apparel producers. Organic cotton can also be used with blends as flax-cotton, or synthetics-cotton, conventional-organic cotton mixes. Companies using such blends as a raw material cannot get an organic certificate; instead, they get a declaration showing that they are using organic cotton in their products. The blends of fibres change from the demands of the companies.

2.1.2. Flax and Hemp

These fibres are also vegetable based fibres and can be searched in organic agriculture concept. Although their production showed a decrease in recent years due to the superiority of cotton that is more easily handled by machines, flax⁴ and hemp still remain among important plants in the world because of the long, strong fibres found in the outer layers of the stem. The cultivation and utilization of flax and hemp in textile industry has been a subject of research for many years, mainly because they are very attractive raw materials for the textile industry. The cultivation of fibre crops allows obtaining relatively high amounts of raw materials compared to other plant raw materials. These fibres are strong, and as a result of this fact, they are applicable for production of threads and technical textiles. However, while the strength of these fibres is high, the elongation values are rather low (%1,5-4,5). The swelling of flax and hemp fibre in water is quite high because of the high pectin content which results with the fabrics made from these fibres to prevent water permeability. Thus, they can also be suitable for such purposes as to produce tent fabric or fire hose. Flax and hemp

² The Organic Exchange is a non-profit organization committed to expanding organic agriculture, with a specific focus on increasing the production and use of organically grown fibres such as cotton.

³ Boweevil is a company which has been involved in growing organic cotton since 1989, in SouthEast Turkey in Kahramanmaraş, and Western Turkey- the Aegean region, near Tire and Golluca.

⁴ Flax: Fibres extracted from the flax plant. / Linen: Yarns made from flax fibres and fabrics made from linen yarns.

fibres are rather stiff. This can sometimes be a required feature according to the purpose. The smoothness of flax fibre is connected with its cool feeling. In the past, fabrics made from these fibres had the tendency to crinkle easily, which was a disadvantage. However, development of anti-crinkle solutions helped to prevent easily occurring crinkles. The most important mixtures of flax are with cotton, and apparel uses of hemp are being developed. With all the mentioned physical properties, textile products made from these fibres are more expensive than those made of cotton or chemical fibres. However new technologies on flax and hemp production methods allow to spin them in blends with other fibres. This improves the economical aspects of ecological clothes based on these two types of fibres. The flax and hemp fibres are very good raw materials of ecological, environmental friendly clothes. All clothes produced from flax or hemp from the beginning of their production process to final disposal are fully ecological products. The process of production of these clothes involves no pollution of the environment neither in production and processing of fibre nor at disposal of final products [6].

2.2. Ecological and Sustainable Textiles

Ecology is the study of the relationships between life and its physical environment. Textiles are worn in intimate contact with the body; they form a personal environment, which should be protected by appropriate systems of manufacturing and eventual dispose [7].

Ecology can be explained in clearer terms if it is divided into three specific areas as explained by Oeko Tex Association [10]:

- Production Ecology: This covers all of the stages of manufacture, from fibre production to the make-up of the finished garment. The production processes should be environmentally fulfilling suitable criteria.
- Human Ecology: This deals with the influence of textiles in their close "environment" to the consumers or end user of the products.
- Disposal Ecology: This is concerned with the disposal of a product once it has completed its useful working life span, addressing suitable recycling methods as well as the natural biodegradability of the product.

To maintain the ecological balance of nature, some precautions were started to be taken especially by some wealthy countries' leading. And this movement has also affected the textile and apparel sectors. Since Turkey is one of the most important textile exporters of Europe, Turkey also had to follow the trend and eco-textiles, which started to be an issue of textile exporters. Eco-textiles are ecological friendly products and no harm is given to the environment during their production and usage and these products can be destroyed easily, as well. This means that all processes from fields through ginning, spinning, knitting or weaving, washing, dying and manufacturing the garments are done without using ecologically dangerous chemical substances or methods by using eco-friendly farming methods and renewable resources.

The interactions between man, textiles and the environment are demonstrated by life cycle analysis of a given product through the whole textile pipeline as shown in Table 1[7].

Table 1. The textile pipeline

Fibre Production	Yarn Production	Fabric Production	Dyeing and Finishing	Clothing Manufacture	Wearing Aftercare: Laundering, Dry Cleaning	Recycling Incineration, Burial
Manufacturing					Utilisation	Disposal

Apparels made of pure or blended organic fibres can also be non-ecological if they are treated with different finishing chemicals. Through the textile and apparel chain, yarn spinning, weaving, knitting, sewing and apparel producing steps are mainly mechanical processes. Regarding this, non-ecological chemical treatments mostly occur during dyeing, wet and dry processing stages. Companies should conform the necessities of some international standards. These standards are the results of long lasting trials of different chemicals. Certification is a necessity offering assurance that an acceptable standard is followed. Organic farming, as well as other organic related entities, could easily become mistrusted if not placed under some guidelines and regulations that are set by qualified specialists in the field. In Turkey, there exist seven control and certification companies providing certificates for the firms which process and market organic products. Six of them (BCS-ÖKO, BIOAGRICOO, ECOCERT-SARL, IMO, INAC, SKAL) are representatives of foreign control companies, and one of them is a Turkish company called ETKO. SKAL is especially important for organic cotton and sustainable textiles [2].

2.3. "Organic Fashion"

The terms organic and fashion do not seem to match with each other. When people think about "organic clothes", they first imagine colourless, boring clothes, whereas, fashion seems to remind a glamorous world with fantastic costumes. Is there a contrast to use "organic" and "fashion" together?

Does fashion serve for "organic concept" or can "organic" be a fashion concept? Fashion is a way of saying something to people and fashion plays an interactive role having a high impact on people through the trends, fashion shows and fashion events. It is clear that the using organic cotton and sustainable textiles does not create a difference for the apparel as the appearance and for the designer, but the philosophy and idea reflected by the organic concept carries the main importance. A recycling and protecting approach to minimize the use of resources, energy and environmentally damaging substances can be spread by the help of fashion language. Designers have to consider the environmental impacts of textiles and clothes since they are the people who have a key role to play in finding creative solutions to environmental issues. The fashion and textile industry has a poor record of environmental performance, but there are innovations taking place that pay attention to the protection of the planet. Through the way of going organic, organic cotton is the most popular advertising event and the number of brands offering consumers apparels, which contain organic cotton, is increasing rapidly.

Organic and ecological vision is also used as a marketing strategy. Using organic cotton and environmental friendly textiles is a factor showing the quality standards and may symbolize a premium-quality of garments. Companies try to make a difference by the organic and ecological concept. At the end of a market research regarding the organic textiles, it is noticed that organically produced garments are generally basic garments. They do not seem to be

fashionable garments. At this point it is understood that the target market and consumer demand defines the line of organic fashion. Consumers of organic fashion are people who are sensitive to the environment and who are aware that the natural resources should be protected. It is noticed that mainly sports and "outdoor" companies choose to use the organic concept. The brand 'Timberland' can be shown as an example of this. It is a company marketing footwear, apparel and accessories for consumers who value the outdoors and their time in it. Their target market consists of people who care about the environment. Timberland dedication to making quality products is matched by the company's commitment to "doing good and doing well". Timberland aspires to make a difference by driving the conversion of conventional cotton to organic cotton and playing a role in the sustainable growth and development of the organic cotton market.

To make an overview of organic concept, many brands and organizations can be taken into consideration. However, only a few example names, one of which is the brand 'Marks & Spencer', are mentioned in this study expressing the social responsibility and aiming to gather customers around this concept. As well as traditional types of product quality, they also try to take a progressive approach to social responsibility issues and use organic concept within this aim. Through this aim, they try to meet the demands of consumers especially for sportswear. Marks & Spencer's sportswear brand is an example launching a new range of organic cotton yoga wear in 10 stores in February 2004 [11].

For well-known fashion designers, Giorgio Armani is as an example of the leading designers of the movement, with an eco-friendly record dating back to 1995. Recycled jeans and organic cotton are a part of the Armani Jeans collection since 1995. A respectable percentage of Armani's clothing is made of eco-friendly fabrics, including organic cotton and hemp.

Lots more companies are starting to put test orders with 5% organic cotton garments. They go with 95/5% conventional/organic cotton as a start. Besides the movement of these companies, different associations try to approach organic and ecological clothes with conferences, advertisings, fashion events, catwalk shows.

Organic Trade Association (OTA) is the membership-based business association for the organic industry. OTA's mission is to encourage global sustainability through promoting and protecting the growth of organic trade. An event of the Organic Trade Association (OTA), Wear Organic™ Fashion show is an example fashion event to spread the organic fashion concept [12].

Organic Exchange is another non-profit business organization focused on creating environmental and social benefits through the expansion of organic agriculture. They give special importance to cotton since it is one of the world's most important agricultural crops. The Organic Exchange brings together brands and retailers with their business partners to learn more about the social and environmental benefits of organic agriculture and to develop new business models and tools that support greater use of organic inputs such as organic cotton. They also work and make organizations to help increase consumer awareness of the organic cotton products [13].

Another event was held by the 'European Conference on Developing the Organic Cotton Market' with the participation of large and small companies and institutions in Europe, Africa, Asia,

Latin America and the US. The subject was how organic cotton could contribute to environmental and social sustainability in order to improve the livelihoods of farmers, while offering consumers an attractive, high quality alternative to conventional cotton textiles. At the end of the event, the latest trends in organic cotton clothing from a range of companies and designers were introduced with a fashion show [14].

In Turkey, there are also some companies working with organic cotton and sustainable textiles. Since Turkey is an important textile and apparel exporter to US and EU countries, organic concept has also affected the textile and apparel companies in Turkey. Furthermore, organic cotton is also a rising issue in Turkey. Regarding these facts, the number of companies exporting to organic producers showed an increase. Egedeniz Textile is an example company founded in 1993 with the aim of producing apparels with organic cotton. Egedeniz is one of the leading manufacturers of garments produced with certified organic cotton in Turkey. The company involves in all stages from the cotton to the end product. All processes are done under strict supervision of experienced colleagues and certified by a Dutch controlling and certifying organization Skal. In addition to these, they produce linen and cotton mixes, for which linen is also organically grown. The company is also selling cotton, yarns, and knitted or woven fabrics to the industry all around the world. The examples of companies and events aiming to spread the idea of organic fashion can be extended.

3. CONCLUSION

Going organic for textile and apparel industry starts with fibre production, which is the beginning product of the apparel chain. Since cotton is the most important fibre as well as being an agricultural product, organic cotton gained an importance comparing with the other fibres. Organic cotton and ecological textiles offer consumers an attractive, high quality and environmental friendly alternative to conventional textiles. For all processes of textiles, chemical treatments need to be applied for desired effects on fabrics. During these steps, eco-friendly substances and methods should be preferred since the main aim of natural textiles is to ensure the human safety aspects and to save the nature without compromising fashion and function. Textile and apparel brands and retailers give their customers the opportunity of both "feeling organic" and doing something good for the environment and human health.

With the organic fashion concept, the idea is challenging and fashion business should reflect this idea to take care of the environment and human health. Events are organized by different associations, organizations and charity companies with the sponsorships of well-known names to spread the idea. Concerning the environmental issues, organic concept needs to be spread at a high speed. For the apparels produced organically and ecologically, the environmental quality may not be visible to the naked eye. However, people have to see beyond the clothes and look to the air, water, soil where the real differences are made.

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DESIGN AND ECO-DESIGN IN WINE INDUSTRY

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ABSTRACT

Aim of this paper is to analyse the whole wine production process. The production processes and the products are analysed taking into account their Life Cycle from the raw materials and to the final product and the wastes and emissions generated during all these steps. Different types of packaging and their possible re-utilisation are analysed in order to minimise environmental impact too. Through the Life Cycle Analysis, the energy and material requirements and the wastes are identified and described quantitatively for each process. The case study of a company specialised in cultivating vines and producing wine will be discussed as an application example. This company is situated on the hills to the North-East of Campobello di Licata in the province of Agrigento, Sicily, Italy.

Keywords: Eco Design, Life Cycle Assessment, Wine Production, Packaging of Wine.

INTRODUCTION

Today, much discussion about sustainable development is becoming increasingly to need to development with environmental protection. For this now it is very important to develop new types of products and services through more sustainable forms of production and consumption.

The products must be environmentally friendly and must use a minimum of resources. Indeed all companies need to implement strategies to reduce the environmental impact of their products or services. This can be obtained using the Eco design procedure. This procedure minimise environmental impact, but at the same time the products to meet requirements for quality, cost, functionality.

The first stage is to undertake an assessment of environmental impacts, by using environmental management tool as Life Cycle Assessment (LCA).

Life Cycle Assessment takes into consideration all materials and energy involved in the process, the inputs (raw materials, resources and energy) and outputs (air and water emissions and solid waste generation). In this work environmental impact in the wine sector is analysed using some stages of Life Cycle Analysis (LCA). This new approach could give rise to a process which is Eco-efficient, with an optimal use of materials and energy and minimum waste and emissions. Companies that adopt this innovative approach would be more ecological and sustainable, be more competitive in the market place and could reduce all the costs.

Aim of this study is to determine the Eco-efficiency of wine

production.

The study includes the whole process of production of the wine. The main goal is to rationalise the consumption of energy, materials and water throughout the process. The study starts with the identification of the factors that interact with the environment during the production and the packaging of wine. The work is divided into two phases:

- the first phase is a general vision of the production of wine, etc;
- the second phase is the identification of the factors that interact with the environment during the packaging of wine.

ECO-DESIGN

The design of all the products, besides the traditional topics (like properties, etc) should also consider environmental requirements, but now we must also consider environmental requirements, to minimize the use of natural resources, energy consumption, waste generation. Recent researches have been addressed to Eco design, which aim at minimizing environmental impact during whole Life Cycle. Eco design covers a wide range of topics, research and actions that can reduce environmental impacts. These strategies should be selected on the basis of environmental assessment and the analysis of products. Some of these strategies are:

- Materials less harmful for the environment;
- Minimising the impact
- Using renewable resources
- Maximising durability and longevity of the product
- Improving disposal or recycling the final product

Design strategies for minimizing the impact of disposal are: the use degradable materials if appropriate, the use of materials that can degrade rapidly like paper, cardboard and starch based, or can be easily recycled or reused.

Eco-design trends to decrease the amount of materials and resources necessary to produce the items, thus, reducing the costs of waste disposal.

LIFE CYCLE ASSESSMENT IN ECO-DESIGN

The Life Cycle Assessment (LCA) methodology is a tool application in the Eco-design.

LCA can be used in the design of a new product or the evaluation of an exiting product and can also be used for comparing the environmental impact of products and service.

Life Cycle Assessment (LCA) is a method to evaluate the environmental impact associated with a product, process or activity by identifying and quantifying energy and materials used, wastes and emissions released to the environment.

The assessment covers the entire life cycle of the product, process or activity, from extraction of raw materials, manufacturing of the product, transportation and distribution; use, reuse, maintenance, recycling and final disposal (Figure 1)

This is done by compiling an inventory of relevant inputs and outputs of a system (inventory analysis), evaluating the potential

impacts of those inputs and outputs (impact assessment), and interpreting the results (interpretation) in relation to the objectives of the study. The transportation of waste from the point at which waste is generated, through the collection and sorting of waste, to where it is treated, recovered or finally disposed of are included within the lifecycle.

Life Cycle Assessment is conducted in the following steps:

- Goal and Scope definition: description of the goal of the LCA, definition of the product, definition of the functional unit and system boundary
- Inventory analysis: collection of data for each step in the life cycle identification and quantitative evaluation of the materials and emissions to air and water and amounts of waste
- Impact assessment: evaluation of the environmental impacts, selected impact categories and modelling of the inputs and outputs for each category
- Interpretation: review of all of the stages in the LCA and check about the consistency of all the assumptions

Goal definition and scope, involves the purpose of the study, its scope and functional unity. The functional unity is the unity of analysis defined for the study.

Inventory analysis, the environmental burden (according ISO 14040) terminology) associated with the Life Cycle for the functional unit is quantified. These are the material and energy inputs and product, waste and emissions outputs to air, water and land.

Impact assessment, the objective of this phase is to present the environmental impacts of the system under analysis in a form that is useful for the purpose of the study. Types of impact assessment categories considered include global warming, acidification, eutrophication and toxicity.

Interpretation, the results are evaluated and options for reducing the environmental impacts of the functional unit are identified.

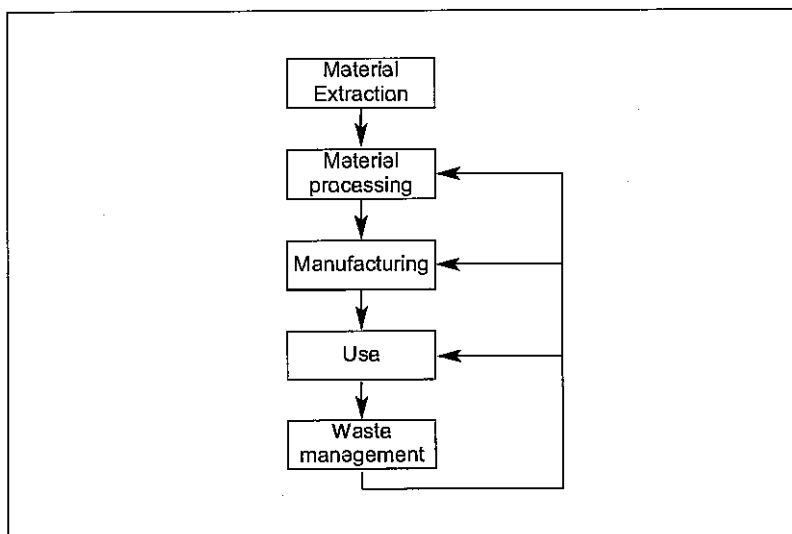


Figure. 1. Scheme of a product life cycle

ECO-DESIGN IN WINE INDUSTRY

The main aim is to achieve an Eco-efficient in wine production.

An Eco-efficient production implies necessary the optimal exploitation of materials and energy resources as well as the minimisation of wastes and emissions.

Through the Life Cycle Analysis, the energy and material requirements and the waste are identified and described quantitatively for each process.

The study included the whole productive process, from the raw materials to the intermediate and final products and residues. The main goal was to rationalise the consumption of energy, materials and water throughout the process. This work explores the extent of the environmental effects in winemaking. Vineyards use land, water, pesticides and fertilisers to produce wine grapes, affecting the environment. This work is completed with a case study of a wine company in Sicily, Italy.

The case study examines which practices are being employed, whether or not they see themselves as successful, how they integrate environmental concerns into all of their operations.

STEPS IN WINE PRODUCTION

Grape needs to be planted in soil that is favourable to root growth including good aeration and good drainage. Soil conditions can affect the quality of wine and is often considered the most important factor in a vineyard. Typical steps for wine production are shown in Figure II.

Wine production requires a variety of additional materials, e.g. Sulphur dioxide is often added to grape to control micro-organism. New vines typically will not produce significant fruit until the 3rd or 4th year and Vines typically have a useful life of about 20 years before they are discarded.

GENERAL WINERY OPERATIONS

Harvest

The vine cycle depends largely upon the regions climate. However the harvest date is largely dependent upon the variety, the location, and the weather.

Additions

Several additions may be made to the must before pressing it. SO₂ is commonly added to inhibit oxidation and kill undesirable micro-organisms.

Pressing

Pressing is done to separate the skins, seeds. There are several different types of presses used in the winery industry.

Fermentation

There are many different kinds of fermenting vessels used in wine industry. The fermentation process is regulated by managing the temperature of the vessel and yeast.

Filtration

Wine is then filtered to further clarify and stabilise the wine.

Bottling

The last step before the wine leaves the winery is bottling. Most wines are aged in the bottles for a few months up to a few years depending on the wine and the winery. Transfer wine to a holding

tank, treat with SO₂ to prevent oxidation, turn bottles upside down and rinse with hot water, fill bottle with wine and insert the cork immediately, apply label and place on racks for bottle fermentation or put them directly into boxes or cases.

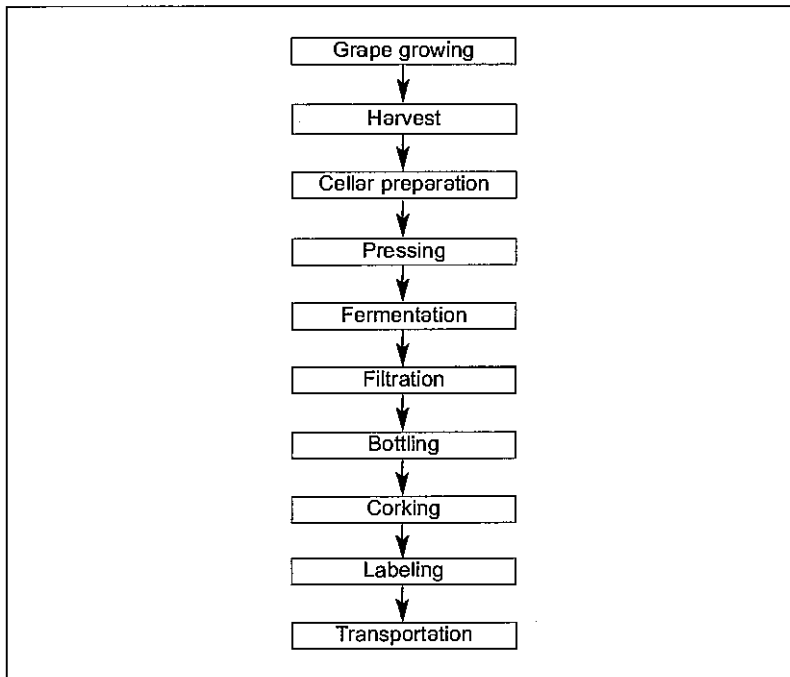


Figure 2. Step for wine production

CASE STUDY

Life Cycle Assessment in wine industry in Sicily

Milazzo's company has a long specialisation in cultivating vines and producing wine. It is situated on the hills to the North East of Campobello di Licata in the province of Agrigento, Sicily, in an area particularly suitable for grape growing.

At each stage of growing the grape and wine making into wine, in everything with the highest consideration for the environment by not using syntethic chemicals, company uses only choice grape grown of the own vineyard.

Methodology

Data used have been subdivided in primary data and secondary data. The primary data collected directly in the company G. Milazzo. The secondary data, from the production of the materials to transports to mix energetic from the data bank of the software Simapro 5.1.

The functional unit selected is a bottle of wine, based on this unit, an inventory is taken of the energy resources and the material required, as well as the main environmental impacts (outputs traced forward to waste material released into the environment). The wastes generated during the processes are not considered the majority part of them is implied as raw materials of other processes.

In the studied system the inventory data used proceeded from the Software "Pré Consultants SimaPro" 5. Different data bases have been used, particularly the BUWAL 250, ETH-ESU 96, IDEMAT 2001, Industry data Methods. The impact assessment method

selected is the Eco-indicator'99 H/E.

The Eco-indicator 99 methodology is a method in which all emissions, extractions and land uses that occur during the life cycle of a product are expressed as three categories of damage (8).

- 1.Human Health expressed as Disability Adjusted Life Years (DALY)
- 2.Ecosystem Quality (expressed as the decrease in species over a certain area during a certain time)
- 3.Mineral Resources and fossil fuels (expressed as "surplus energy" for future extraction)

In sensibility analysis have been evidenced, same processes that produced environmental impact.

Finally, the possible improvements that can bring the process of production of the wine have been illustrated.

Inventory analysis

The wine production has been divided in:

- growing vine
- production in winery
- transportation
- final disposal

In this analysis input (the flows in entrance in a process) and output (the flows in escape from a process) have been considered.

The stage of growing vine includes fuel consumption of the equipment and machines used for the land preparation, plantation, fertilisation, collection and transportation of the grape from the vineyards to the winery. It is also contemplated materials of the tutor-stakes used for the growing of the vine.

The stage of wine production includes the electricity and water requirements for the processes that take place within the winery, as well as glass, cardboard and wood for the packing, and the required sulphur.

The stage of transportation considers the fuel required for transport and commercialisation of the wine. For the transports for the long distances is supposed a truck and a car between the point sale and the place of consumption.

Regarding the outputs, the emissions to the atmosphere associated to the fuel consumption and the electricity generation have been calculated.

Glass bottles have been destined in percentage to disposal and recovery.

From the study of the production process for one wine bottle (growing vine, production in winery, transport) it has been possible to list the elements for the production of the wine, and their weight.

Data used are:

- Diesel oil 7000 Kg. year (transport vineyard-winery)
- Consumption of electricity 340.000 KWh (year)
- Glass bottle 0,750 Kg.

- Cork Stopper 0,005 Kg.
- Cardboard 0,300 Kg. (packing for 6 bottles)
- Truck 40 t. (distribution bottles)

Table 1. Elements for one hectare of vineyard

Elements	Dimensions	Weight	Quantity
Wire			Kg. 110
Concret stakes	9x9,5 cm x 240 H	20 Kg/ml	n. 88
Metal stakes	40 mm x 40 mm x 5 mm x 240 H		n. 616
Sulphur			Kg 400
SO ₂			Kg 10
Water			1000 m ³

The production of grape for one hectare of vineyard is calculated 2800 Kg.; 1 Kg. of grape corresponds to 0,75 litres of wine.

Table 2. Elements employed in the production of one wine bottle from 0,75 l.

	Growing vine Quantity (Kg)	Production winery Quantity (Kg)	Transport tkm
INPUTS			
Water	94	3	
Sulphur	0,038		
Wire	0,018		
Metal stakes	0,924		
Concret stakes	1,32		
Fuel	0,023		
SO ₂		0,001	
Electricity (Kwh)		1	
Glass bottle		0,750	
Cardboard		0,05	
Truck		0,005	
Cork stopper			0,255
OUTPT			
CO ₂		0,097	

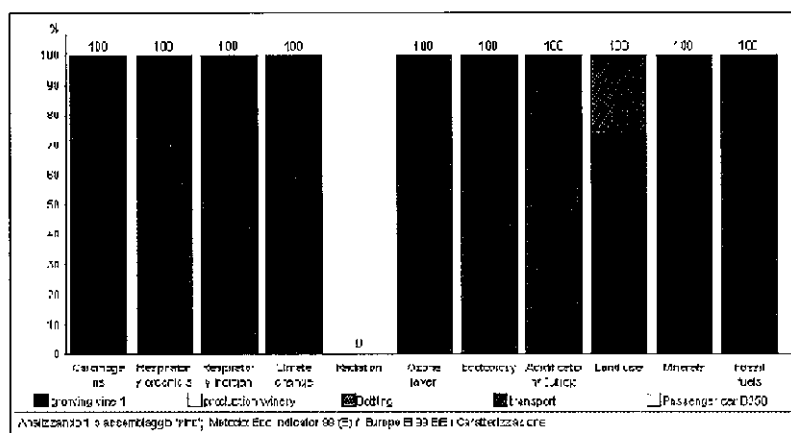


Table 3. Diagram wine production: Characterization

Category of impact	Unity	Total	Growing vine	Production in winery	Bottling	Transport	Passenger car B250
Carcinogens	DALY	9,61E-5	4,35E-8	9,73E-8	2,22E-8	9,58E-5	8,85E-8
Respiratory organics	DALY	3,22E-5	1,96E-9	1,29E-9	1,79E-9	3,22E-5	2,28E-8
Respiratory inorganics	DALY	0,00697	1,2E-5	4,01E-7	3,67E-7	0,00696	1,02E-6
Climate change	DALY	0,00087	1,17E-6	1,3E-7	1,35E-7	0,000868	5,42E-7
Rdiation	DALY	X	X	X	X	X	X
Ozone layer	DALY	3,68E-6	6,85E-12	3,67E-10	4,43E-10	3,67E-6	2,22E-9
Ecotoxicity	PAF*m2yr	220	0,223	0,216	0,277	219	0,257
Acidification/Eutrophication	PDF*m2yr	419	0,249	0,0122	0,0136	419	0,0496
Land Use	PDF*m2yr	0,532	0,391	X	0,141	X	X
Minerals	MJ surplus	3,65	3,65	X	0,000115	X	X
Fossil fuels	MJ surplus	4,53E3	5,28	0,646	0,641	4,52E3	2,79

-The greater contribution to the category of damage Human Health comes from the category of respiratory impact inorganic 0,00697 Daly

-The greater contribution to the category of damage Ecosystem Quality comes from the category of impact Acidification/Eutrophication 419 PDF*m2yr

-The greater contribution to the category of Resources damage comes from the category of impact Pits fuels 4,53E3 MJ

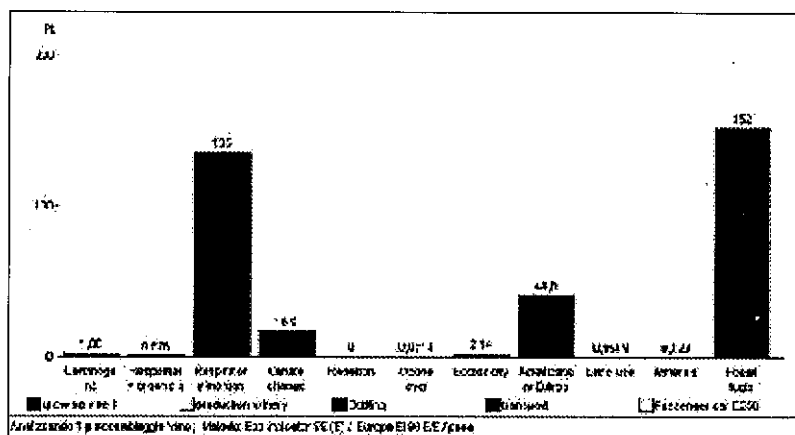


Table 4. Diagram wine production: Assessment

Category of impact	Unity	Total	Growing vine	Production in winery	Bottling	Transport	Passenger car B250
Total	Pt	350	0,621	0,0372	0,0496	349	0,133
Carcinogens	Pt	1,86	0,000845	0,00189	0,000431	1,86	0,00172
Respiratory organics	Pt	0,626	3,8E-5	2,5E-5	3,47E-5	0,625	0,000442
Respiratory inorganics	Pt	135	0,233	0,00778	0,00713	135	0,0197
Climate change	Pt	16,9	0,0228	0,00252	0,00262	16,9	0,0105
Rdiation	Pt	X	X	X	X	X	X
Ozone layer	Pt	0,0714	1,33E-7	7,12E-6	8,59E-6	0,0713	4,31E-5
Ecotoxicity	Pt	2,14	0,00218	0,0021	0,0027	2,13	0,0025
Acidification/Eutrophication	Pt	40,8	0,0243	0,00119	0,00132	40,8	0,00483
Land Use	Pt	0,0519	0,0381	X	0,0138	X	X
Minerals	Pt	0,123	0,123	X	3,86E-6	X	X
Fossil fuels	Pt	152	0,177	0,0217	0,0216	152	0,0936

The greater impacts are in categories:

- Respiratory inorganic 135Pt for the category of damage Human Health
- Acidification/Eutrophication 40,8Pt for the category of damage Ecosystem Quality
- Fossil fuels 152Pt for the Resources category

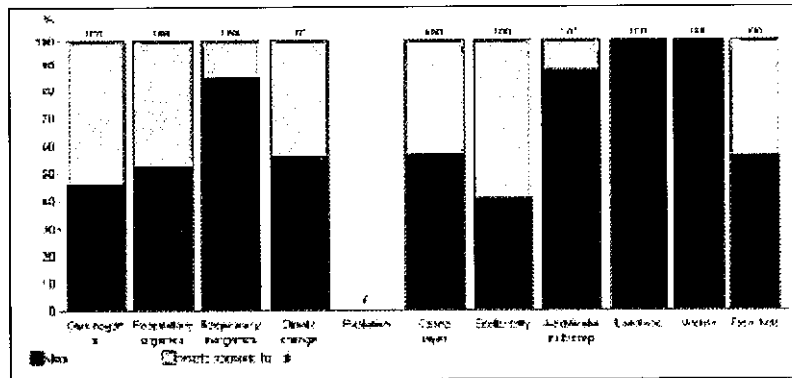


Table 5. Diagram LCA wine: Characterization

Category of impact	Unity	Total	Wine	Water scenario for glass bottle
Carcinogens	DALY	0,000209	9,61E-5	0,000113
Respiratory organics	DALY	6,13E-5	3,22E-5	2,9E-5
Respiratory inorganics	DALY	0,00827	0,00697	0,0013
Climate change	DALY	0,00156	0,00087	0,000691
Rdiation	DALY	X	X	X
Ozone layer	DALY	6,51E-6	3,68E-6	2,83E-6
Ecotoxicity	PAF*m2yr	547	220	327
Acidification/Eutrophication	PDF*m2yr	482	419	63,2
Land Use	PDF*m2yr	0,532	0,532	X
Minerals	MJ surplus	3,65	3,65	X
Fossil fuels	MJ surplus	8,08E3	4,53E3	3,55E3

From the analysis of the characterization the considerations are:

- Category of damage Human Health the category of impact that produces the greater damage is Respiratory inorganics with 0,00827 Daly
- Category of damage Ecosystem Quality the category of impact that produces the greater damage is Ecotoxicity with 547 PDF * m2yr
- Category of Resources damage the category of impact that produces to the damage greater is Fossil fuels with 8,08E3 MJ surplus

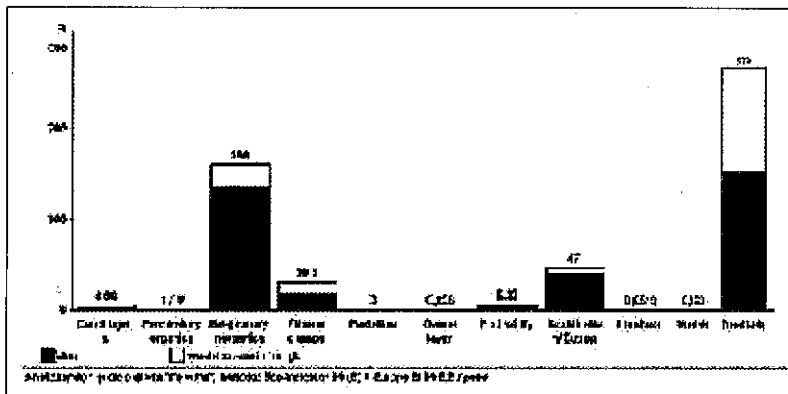


Table 6. Diagram LCA wine: assessment

Category of impact	Unity	Total	Wine	Water scenario for glass bottle
Total	Pt	520	350	170
Carcinogens	Pt	4,06	1,86	2,19
Respiratory organics	Pt	1,19	0,626	0,563
Respiratory inorganics	Pt	160	135	25,2
Climate change	Pt	30,3	16,9	13,4
Rdiation	Pt	X	X	X
Ozone layer	Pt	0,126	0,0714	0,055
Ecotoxicity	Pt	5,33	2,14	3,19
Acidification/ Eutrophication	Pt	47	40,8	6,16
Land Use	Pt	0,0519	0,0519	X
Minerals	Pt	0,123	0,123	X
Fossil fuels	Pt	272	152	119

The greater impacts are in the categories:

- Respiratory inorganics 160Pt for the category of damage Human Health
- Acidification/Eutrophication 47Pt for the category of damage ecosystem Quality
- Fossil Fuels 272 Pt for the category Resources

Sensibility Analysis

In this stage of the LCA, possible improvements in the impact categories are estimated and for this analysis are considered:

- 1.In vineyard, comparison between material used for stakes (metal and concrete) with stakes in recycled plastic
- 2.In production winery, comparison between Sicilian wine (for the absence of synthetic chemical in every phase of cultivation of the grape and transformation in wine) can be defined biological and a conventional Spanish wine present in the literature (10).
- 3.In order to improve the efficiency of the transport, the comparison between packing glass bottles with plastic bottles (PET)
- 4.Finally a last comparison in the phase of disposal the possibility to reused glass packing

For various comparisons input considered are:

-Comparison of traditional stakes (in concrete and metal) with stakes in recycled plastic

Table 7. Elements for one hectare of vineyard

Elements	Dimensions	Weight	Quantity
Concret stakes	9 x 9,5 cm x 240H	20 Kg/ml	N 88
Metal stakes	4 x 4 cm x 240 H	2,32 Kg/ml	N 616
Recycled plastic stakes	6 x 6 cm x 240 H	3,58 Kg/ml	N 88
Recycled plastic takes	9 x 9 cm x 240 H	8,1Kg/ml	N 616

Table 8. Elements for production of one bottle wine

Input	
Elements	Quantity
Concret stakes	1,32 Kg
Metal stakes	0,924 Kg
Recycled plastic stakes	0,016 Kg
Recycled plastic takes	0,0054 Kg

Table 9. Comparison of glass bottle with plastic bottle

Input	
Elements	Quantity
Glass bottle	0,75 Kg
Plastic bottle (PET)	0,035 Kg

Table 10. Elements for comparison between Sicilian wine bottle and Spanish wine

Sicilian wine input		Spanish wine input	
Elements	Quantity	Elements	Quantity
-	-	fertilisations	0,145 Kg
-	-	phitosanitarios	0,01 Kg
-	-	phenol	0,014 Kg
SO ₂	0,001 Kg	SO ₂	0,013 Kg
Water	97 Kg	water	362 Kg
Fuel	0,023 Kg	Fuel	0,086 Kg

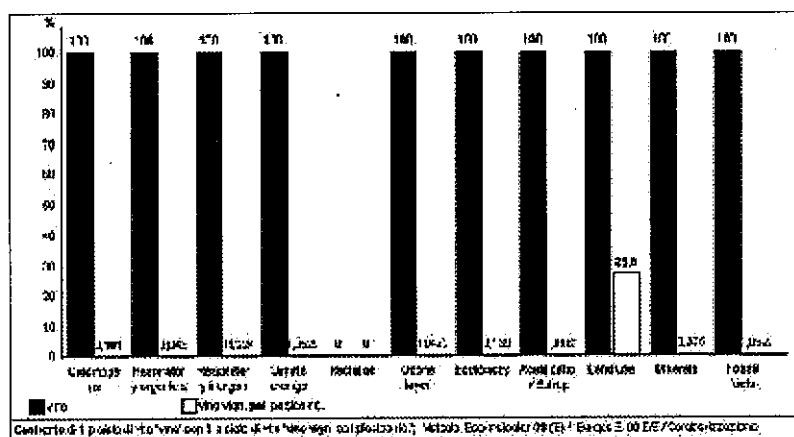


Table 11. Comparison vineyard traditional stakes (stakes in concrete and metal) with stake in recycled plastic: Characterization

Category of impact	Unity	Vineyard with traditional stakes	Vineyard with stakes in recycled plastic
Carcinogens	DALY	9,61E-5	2,1E-7
Respiratory organics	DALY	3,22E-5	2,598E-8
Respiratory inorganics	DALY	0,00697	1,83E-6
Climate change	DALY	0,00087	8,17E-7
Rdiation	DALY	X	X
Ozone layer	DALY	3,68E-6	3,04E-9
Ecotoxicity	PAF*m2yr	220	0,755
Acidification/Eutrophication	PDF*m2yr	419	0,0772
Land Use	PDF*m2yr	0,532	0,143
Minerals	MJ surplus	3,6	0,0137
Fossil fuels	MJ surplus	4,53E3	4,21

- In Human Health the damage is reduced of 99.97% (from 0,00697 to 1,83E-6 Daly)
- In Ecosystem Quality the damage is reduced of 99.98% (from 419 to 0,0772 PDF*m2)
- In Resources the damage is reduced of 99.61% (from 3,6 to 0,0137 MJ surplus)

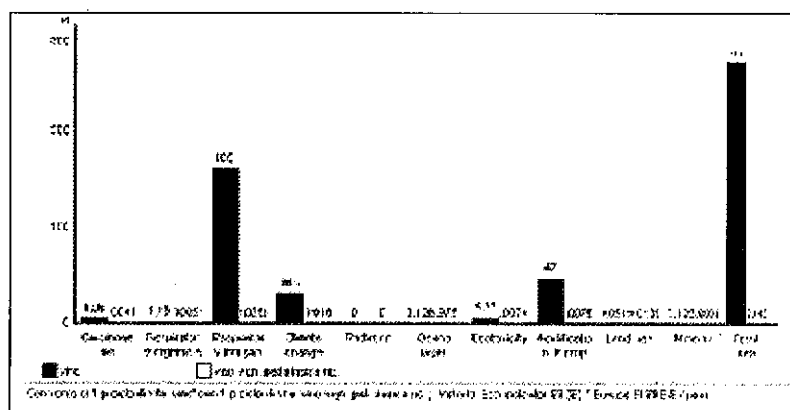


Table 12. Comparison of vineyard traditional stakes (poles in concrete and metal) with stakes in recycled plastic: Assessment

Category of impact	Unity	Vineyard with traditional stakes	Vineyard with stakes in recycled plastic
Total	Pt	350	0,227
Carcinogens	Pt	1,86	0,00408
Respiratory organics	Pt	0,26	0,000503
Respiratory inorganics	Pt	135	0,0355
Climate change	Pt	16,9	0,0159
Rdiation	Pt	X	X
Ozone layer	Pt	0,0714	5,89E-5
Ecotoxicity	Pt	2,14	0,00737
Acidification/ Eutrophication	Pt	40,8	0,00753
Land Use	Pt	0,0519	0,0139
Minerals	Pt	0,123	0,00046
Fossil fuels	Pt	152	0,141

Use of stakes in recycled plastic in the vineyard reduces the impact total of 99,93 % the use of the traditional materials in concrete and metal:

- In Human H. 99,97% of reduction
- In Ecosystem 99,98% of reduction
- In Resources 99,90% of reduction respect vineyard with traditional stakes

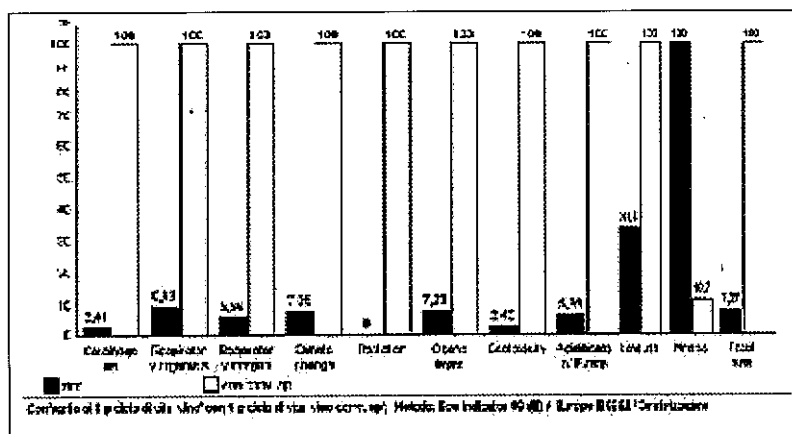


Table 13. Comparison of Sicilian wine with Spanish wine conventional: Characterization

Category of impact	Unity	Sicilian wine	Spanish wine conventional
Carcinogens	DALY	0,000209	0,00866
Respiratory organics	DALY	6,13E-5	0,000667
Respiratory inorganics	DALY	0,00827	0,149
Climate change	DALY	0,00156	1,98E-7
Radiation	DALY	X	X
Ozone layer	DALY	6,51E-6	9E-5
Ecotoxicity	PAF*m2yr	547	2,25E4
Acidification/Eutrophication	PDF*m2yr	482	8,06E3
Land Use	PDF*m2yr	0,532	1,59
Minerals	MJ surplus	3,65	0,389
Fossil fuels	MJ surplus	8,08E3	1,11E5

- In Human Health the damage is reduced of 94%
- In Ecosystem Quality the damage is reduced of 97%
- In Resources the damage is reduced of 92.70%

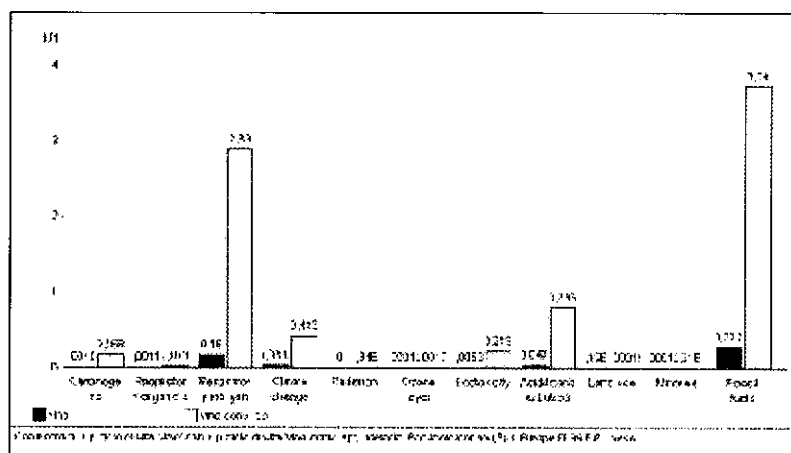


Table 14. Comparison of Sicilian wine with Spanish wine conventional: Assessment

Category of impact	Unity	Sicilian wine	Spanish wine conventional
Total	Pt	520	8,22E3
Carcinogens	Pt	4,06	168
Respiratory organics	Pt	1,19	13
Respiratory inorganics	Pt	160	2,89E3
Climate change	Pt	30,3	413
Rdiation	Pt	X	0,00384
Ozone layer	Pt	0,126	1,75
Ecotoxicity	Pt	5,33	219
Acidification/Eutrophication	Pt	47	786
Land Use	Pt	0,0519	0,155
Minerals	Pt	0,123	0,0131
Fossil fuels	Pt	272	3,74E3

Sicilian wine regarding the Spanish conventional wine reduces the impact of the 93, 67%:

- In Human Health the damage is reduced by 94.46%
- In Ecosystem it is reduced by 94%
- In resources the damage is reduced by 92.72%

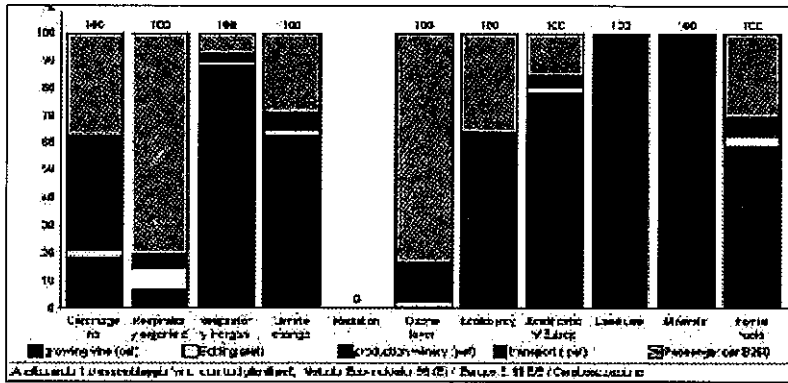


Table 15. Production of wine in bottle of Pet: Characterization

Category of impact	Unity	Total	Growing vine (Pet)	Production in winery (Pet)	Bottling	Transport (Pet)	Passenger car B250
Carcinogens	DALY	2,35E-7	4,35E-8	5,51E-9	9,73E-8	1,83E-10	8,85E-8
Respiratory organics	DALY	2,82E-8	1,96E-9	2,14E-9	1,29E-9	6,16E-11	2,28E-8
Respiratory inorganics	DALY	1,36E-5	1,2E-5	1,55E-7	4,01E-7	1,33E-8	1,02E-6
Climate change	DALY	1,87E-6	1,17E-6	2,59E-8	1,3E-7	1,66E-9	5,42E-7
Rdiation	DALY	X	X	X	X	X	X
Ozone layer	DALY	2,66E-9	6,85E-12	5,36E-11	3,67E-10	7,02E-12	2,22E-9
Ecotoxicity	PAF*m2yr	0,706	0,223	0,00932	0,216	0,000418	0,257
Acidification/Eutrophication	PDF*m2yr	0,318	0,249	0,00616	0,0122	0,0008	0,0496
Land Use	PDF*m2yr	0,391	0,391	X	X	X	X
Minerals	MJ surplus	3,65	3,65	0,000116	X	X	X
Fossil fuels	MJ surplus	8,98	5,28	0,268	0,646	0,00864	2,79

-In characterization the greater contribution to the category of damage Human Health comes from the category of impact Respiratory inorganics 1,36E-5 DALY

-The greater contribution to the category of damage Ecosystem Quality comes from the category of Ecotoxicity impact. 0,706 PAF*m2yr

-The greater contribution to the category of Resources damage comes from the category of impact Fossil Fuels 8,98 MJ

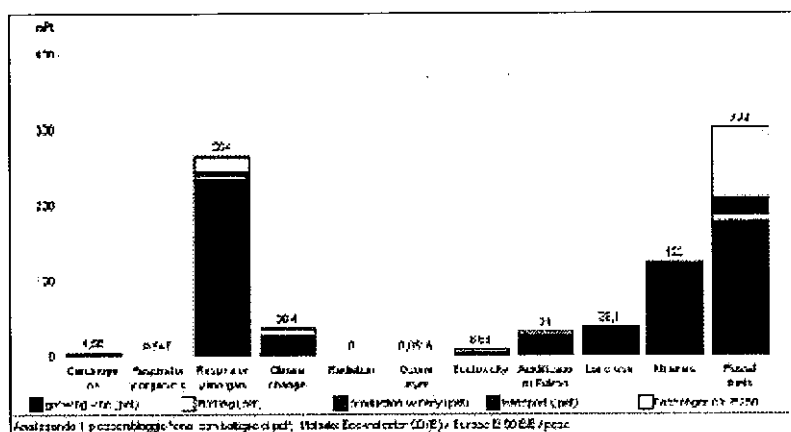


Table 16. Production of wine in bottle of Pet: Assessment

Category of impact	Unity	Total	Growing vine (Pet)	Production in winery (Pet)	Bottling	Transport (Pet)	Passenger car B250
Total	Pt	0,806	0,621	0,0133	0,0372	0,000667	0,133
Carcinogens	Pt	0,00456	0,000845	0,000107	0,00189	3,55E-6	0,00172
Respiratory organics	Pt	0,000547	3,8E-5	4,14E-5	2,5E-5	1,19E-6	0,000442
Respiratory inorganics	Pt	0,264	0,233	0,003	0,00778	0,000258	0,0197
Climate change	Pt	0,0364	0,0228	0,000502	0,00252	3,22E-5	0,0105
Rdiation	Pt	X	X	X	X	X	X
Ozone layer	Pt	5,16E-5	1,33E-7	1,04E-6	7,12E-6	1,36E-7	4,31E-5
Ecotoxicity	Pt	0,00688	0,00218	9,09E-5	0,0021	4,08E-6	0,0025
Acidification/Eutrophication	Pt	0,031	0,0243	0,000601	0,00119	7,8E-5	0,00483
Land Use	Pt	0,0381	0,0381	X	X	X	X
Minerals	Pt	0,123	0,123	3,91E-6	X	X	X
Fossil fuels	Pt	0,302	0,177	0,00899	0,0217	0,00029	0,0936

The greater impacts are in the categories:

- Respiratory inorganics 0,264 Pt for the category of damage Human Health
- Land Use 0,0381Pt for the category of damage Ecosystem quality
- Fossil fuels 0,302 Pt for the category Resources

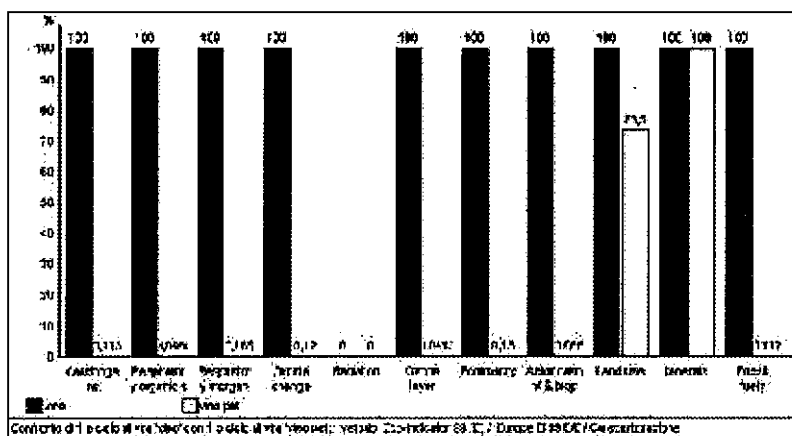


Table 17. Comparison of production of wine in plastic bottle (PET) with glass bottle: Characterization

Category of impact	Unity	Wine in Glass bottle	Wine in Plastic bottle (Pet)
Carcinogens	DALY	0,000209	2,36E-7
Respiratory organics	DALY	6,13E-5	2,85E-8
Respiratory inorganics	DALY	0,00827	1,36E-5
Climate change	DALY	0,00156	1,88E-6
Radiation	DALY	X	X
Ozone layer	DALY	6,51E-6	2,69E-9
Ecotoxicity	PAF*m2yr	547	0,709
Acidification/Eutrophication	PDF*m2yr	482	0,318
Land Use	PDF*m2yr	0,532	0,391
Minerals	MJ surplus	3,65	3,65
Fossil fuels	MJ surplus	8,08E3	9,02

Use of the plastic bottles reduces the damage by 99,83%:

- In Human Health the damage is reduced by 99.87%
- In Ecosystem quality the damage is reduced by 99.88%
- In Resources the damage is reduced by 99%

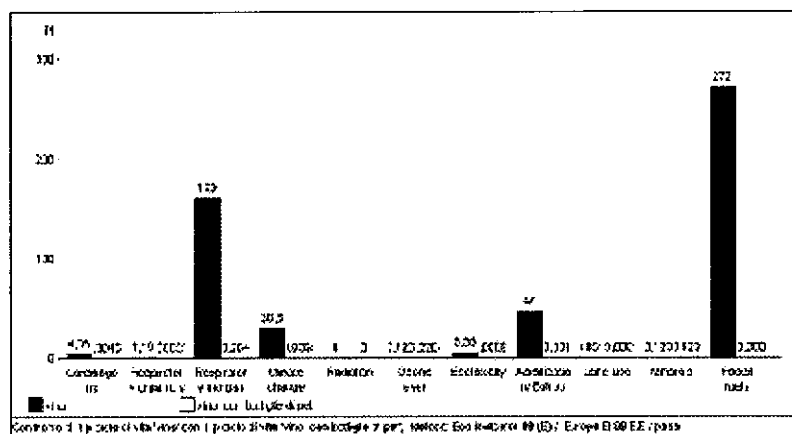


Table 18. Comparison of wine production in plastic bottle (PET) with glass bottle: Assessment

Category of impact	Unity	Wine in Glass bottle	Wine in Plastic bottle (Pet)
Total	Pt	520	0,808
Carcinogens	Pt	4,06	0,00459
Respiratory organics	Pt	1,19	0,000553
Respiratory inorganics	Pt	160	0,264
Climate change	Pt	30,3	0,0365
Rdiation	Pt	X	X
Ozone layer	Pt	0,126	5,22E-5
Ecotoxicity	Pt	5,33	0,000691
Acidification/Eutrophication	Pt	47	0,031
Land Use	Pt	0,0519	0,0381
Minerals	Pt	0,123	0,123
Fossil fuels	Pt	272	0,303

The wine production with the use of plastic bottle has 99.84% of the impact total regarding the wine production in glass bottle:

- In Human Health is reduced by 99.83%
- In Ecosystem is reduced by 99.93%
- In Resources is reduced by 99,88%.

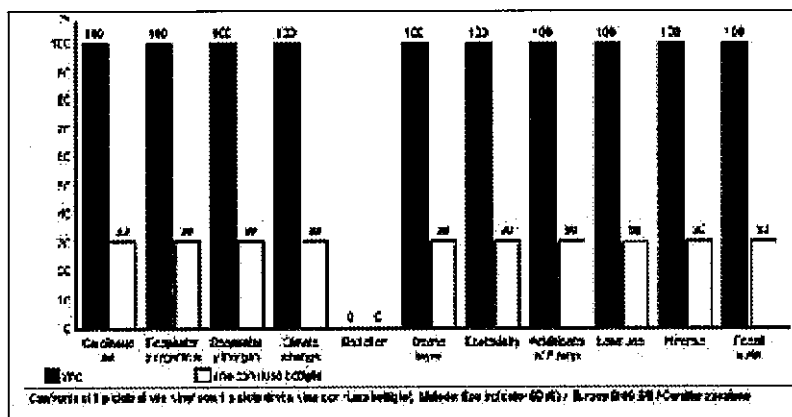


Table 19. Comparison between wine production without reuse of glass bottles and with reuse of glass bottles: Characterization

Category of impact	Unity	Wine without reuse glass bottle	Wine with reuse glass bottle
Carcinogens	DALY	0,000209	6,27E-5
Respiratory organics	DALY	6,13E-5	1,84E-5
Respiratory inorganics	DALY	0,00827	0,00248
Climate change	DALY	0,00156	0,000468
Rdiation	DALY	X	X
Ozone layer	DALY	6,51E-6	1,95E-6
Ecotoxicity	PAF*m2yr	547	164
Acidification/Eutrophication	PDF*m2yr	482	145
Land Use	PDF*m2yr	0,532	0,16
Minerals	MJ surplus	3,65	1,09
Fossil fuels	MJ surplus	8,08E3	2,42E3

There is a reduction of the damage by 70% with reuse of the glass bottles:

- In Human Health the damage is reduced by 70%
- In Ecosystem Quality the damage is reduced by 70%
- In Resources the damage is reduced by 70.13%

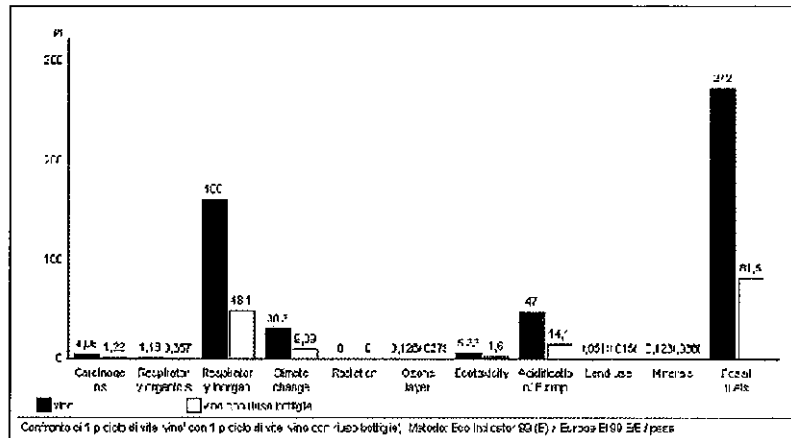


Table 20. Comparison between wine production without reuse of glass bottles and with reuse of glass bottles: Assessment

Category of impact	Unity	Wine in Glass bottle	Wine in Plastic bottle (Pt)
Total	Pt	520	156
Carcinogens	Pt	4,06	1,22
Respiratory organics	Pt	1,19	0,357
Respiratory inorganics	Pt	160	48,1
Climate change	Pt	30,3	9,09
Rdiation	Pt	X	X
Ozone layer	Pt	0,126	0,0379
Ecotoxicity	Pt	5,33	1,6
Acidification/ Eutrophication	Pt	47	14,1
Land Use	Pt	0,0519	0,0156
Minerals	Pt	0,123	0,0368
Fossil fuels	Pt	272	81,5

Wine production with reuse of the glass bottles of 70% of the impact total regarding the wine production without reuse of glass bottles:

- In Human Health the damage is reduced by 70%
- In Ecosystem the damage is reduced by 70%
- In resources the damage is reduced by 70%

Improvements

Possible improvements in the impact categories are estimated.

In this study to result important improve the final efficiency of bottling and transport of the product.

The fuel demanded for transport is influenced by the weight of the glass bottles in addition to the energy to produce the glass.

In order to improve the situation it possible:

- to reduce the weight of the packaging, and to increase the use of plastic bottles
- to reduce the weight of the bottles of glass, redesigning them without increasing fragility
- to reuse glass bottles

The use of returnable glass bottles avoids the consumption of resources and materials associated with the production of new bottles. In addition, returnable glass bottle produces less volume waste and hazardous waste than a system that remelts all bottles.

Comparing wine biological (Sicilian wine) with wine conventional (Spanish wine), Sicilian wine reduces environmental impact during the life cycle. Milazzo's company is one example of vineyard and winery that utilizes organic viticulture and their management is committed to environmental sensitivity. Their success proves that wineries can be profitable while minimizing their impact on the environment and attempting to create a sustainable business.

Conclusions

Ecodesign delineates an innovative approach, for to the reduction of the environmental impacts. In Ecodesign the main guide is: the reduction of the consumption of resources (raw materials, energy); the increase of the employment of material derives from renewable resources from reuse and recycle of the post-consume products. A valid method is the Life Cycle Design, which is in the case of redesign ecological of an object.

Now designers must contribute to render these ideas visible and favour sustainable planning. It is a process that can carry to new competence of the designer, and to new processes of identification and valorisation that can contribute to the development of a territory. In this panorama the role of the design in the territorial valorisation can develop added value to the product and in particular it can have a role in order to favour the new processes of production (for entire chain production, from the vineyard to the packing), coherent with environmental sustainability.

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SUSTAINABILITY AND ECOLOGICAL DESIGN

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ABSTRACT

The concept of sustainability is becoming increasingly important all over the world. Communities and industries are working to prevent pollution and over-consumption from ruining the natural resources. There is a crucial need to make all industrial products and processes 'sustainable'. Traditionally, issues considered in design have related only to function, form and financial concerns; but recently, designers and consumers have started to look beyond the surface.

Environmental regulations and conscious consumers force manufacturers to become more responsible for the safe disposal and recycling used products. However, environmental issues are complex and hard to deal with. In this case, not only designers, but also manufacturers must understand the basic relationship between a product and the environment. To develop products in a sustainable way, designers and manufacturers must be able to assess which design solution is better from the environmental point of view.

Keywords: Sustainability, Ecological Design, Product, Environment.

1. Introduction

Products are the source of all environmental problems. Sustainable design converts global environmental concerns into products at the local level. Product design is an environmental focal point, because design decisions determine levels of resource use and the composition of wastes. Considering environmental issues, designer's responsibilities will become more difficult than before. Designers are in a powerful position; they are able to help create a better world by considering environmental issues and creating environmental processes and products. Thus, designers should aim to create a better design in a better way for the environment.

2. Sustainability and Product Design

Environmental product development requires some fundamental changes in approach by designers. Consciously or not, design of products and processes is the main determinant of environmental impact. Design is the key point for making radical improvements in the environmental performance of products.

2.1. The Concept of Sustainability

'Sustainable Product Design' is intended to develop more environmentally conscious products and processes. The application of sustainable product design involves a particular framework for considering environmental issues and a challenge to traditional procedures for design and manufacturing. Unfortunately, in many past situations, the environmental effects were ignored during the design stage for new products and processes. However, change for any existing products and processes is difficult.

2.1.1. The Features of Ecological Design

Designers have a crucial role to play in creating more ecological products and processes. This concept is vital to designers, who have a critical influence over every aspect of a product's life, from manufacture and use to repair and disposal.

In this case, these are some aspects, which should be included in ecological design;

- manufacture without producing hazardous waste
- use a renewable energy source for its manufacturing process
- use clean technologies
- use non-hazardous recyclable materials
- use recycled material and reused components
- design for ease of disassembly
- encourage the user to minimise environmental damage while using the product
- provide greater utility for the user, such as multifunction products or rented products
- facilitate long life by simplifying repair and upgrading
- make product more efficient in its use of energy, water and materials, both in manufacture and use
- make product more cyclic, safe and renewable [FIK 93; HIL 93].

2.2. The Role and Responsibility of the Designer

In most places, design has not been taught in the context of its social and ecological impact. So, many designers assume that their area of responsibility is limited to function and appearance. Many environmental problems are caused by the pollution, which results from the production and use of products. Most products use natural resources, many of which are irreplaceable. The manufacturing process uses energy and creates waste. Many products have a significant effect on the environment when in use, and finally, the product may be disposed of, causing another set of problems.

Designers must demonstrate an ability to take on the complex issues, which surround designing, for the minimum environmental impact. This will require a willingness to undertake a thorough research before starting the design process, an understanding of environment issues and the ability to know where to look for guidance. In addition to that, some technical understanding of the production process and of the properties of materials will also be essential for the environment-conscious designer. [MAC 91]

Usual definitions of good design already include criteria such as successful performance, ease of use, attractive appearance and a suitable price range. Designing for sustainable markets does not ignore the traditional criteria for good design, but it does demand that new considerations are also taken into account. For example, the designer can no longer develop a product in isolation from the effects that the materials and production processes may have on the environment, or without thinking through the implications of eventual disposal.

Although, all new products need to be designed in a sustainable way, existing designs also need to be revised. In this case, there are a lot of responsibilities that should be considered by designers. For example, all designers should take a look at all their own activities and establish how they can limit environmental damage from day to day.

3. Sustainable Product Design Process

If we want to minimise the environmental problems, design and design process will have to be altered, and also consumers and industries will have to change. Changing consumer priorities and industrial competition will make the pressure for this inevitable. Because of the changes, designer's responsibilities will become more important than before.

3.1. The Changing Design Process

Environmental problems become an increasingly important aspect of the designer's work to minimise the risks coming from the product or process. Because of the rapid technological development, environmental problems increase every day. On the other hand, new technologies often tend to be both less polluting and dangerous than what they replace. Designers have been persuaded to take responsibility for sustainability, because of the crucial role they play in influencing the environmental performance of products. The central position of the designer provides a real opportunity to affect the changes.

3.1.1. Sustainable Design Tools

A designer must understand the basic relation between a product and the environment. To develop products in a sustainable way, designers must be able to evaluate which design solution is better from the environmental point of view. Some rules crucial to create sustainable products and processes are given below;

- Designers should try to design sustainable product life cycle. They should consider all design process, from the concept of design to the manufacturing process, and finally the use and disposal of the product.
- Material selection is another crucial point that environment-conscious designer should take into account. Designers and manufacturers should become more aware of the possibility of using recycled materials. Designers and manufacturers should not ignore the environmental impacts of energy.
- Increasing product lifetime is another way to create sustainable products. In that case, designers can influence the product lifetime in several ways, such as, making it more durable or multifunctional, etc.
- Minimum usage of material is another crucial point and it is more complex than a designer think. Minimising materials requires careful attention to the production processes as well as to the design itself.
- Finally, designers should make all products recyclable.

By considering these basic criteria, we can make huge improvements in the environmental performance of products.

4. Guidelines for the Production, Processing, Packaging and Labelling of Agricultural Products

An agro-industry is an enterprise that processes agricultural raw materials, including ground and tree crops as well as livestock. Agro-industries contribute significantly to a developing country's economic growth, because they are the primary method of transforming raw materials and agricultural products into consumable products. Agro-industries often constitute the base of the manufacturing sector, and their products are frequently the

principal exports of the country.

Ecological production systems are based on specific and precise standards of production, which aim at achieving optimal socially, ecologically and economically sustainable agro-ecosystems. Agriculture is based on minimising the use of external inputs, avoiding the use of synthetic fertilizers and pesticides. Ecological agriculture practices cannot ensure that products are completely free of residues, due to general environmental pollution. However, methods are used to minimise pollution of air, soil and water. The primary goal of ecological agriculture is to optimise the health and productivity of interdependent communities of soil life, plants, animals and people. [GL 32 - 99]

4.1. Principles of Ecological Production

Ecological production systems seek to provide food and herbal products of the highest quality in sufficient quantities. The following principles are the foundation of organic management methods:

- Protect the environment, minimize pollution, promote health and optimise biological productivity.
Maintain diversity within the farming system and its surroundings, and protect and develop plant and wildlife habitat.
- Recycle materials and resources to the greatest extent possible within the farm and its surrounding community as part of a regionally organized agriculture system.
- Maintain the integrity and nutritional value of organic food and processed products through each step of the process from planting to consumption.
- Develop and adopt new technologies with consideration for their long-range social and ecological impact. [GL 32 - 01]

4.2. Processing and Manufacturing

Processing methods should be mechanical, physical or biological and should minimise the use of non-agricultural ingredients and additives. The main objectives of the advanced and optimised technologies and processes are;

- to optimise the existing process technologies leading to safe, high quality foods and beverages;
- to develop advanced food & beverage processing technologies;
- to minimise the damage of food & beverage processes to the environment;
- to develop minimal, functional and safe packaging processes [GL 32 - 01].

4.3. Packaging

Any examination of sustainability needs to begin with the question "Is the product necessary?". The negative impacts of a product on the environment, and the possible solutions, need to be considered within this context. In addition to that, packaging plays a critical role in ecological design process.

The most commonly listed benefits of packaging were:

- 1.Product containment and preservation
- 2.Convenient transport and distribution
- 3.Tamper evidence and food safety

- 4.Product information and identification
- 5.Marketing and product differentiation
- 6.Convenience for consumers; and
- 7.Product life extension.

Increasingly, packaging delivers important information to consumers about issues such as specific content and instruction; however, packaging can contribute to solid waste.

Sustainable packaging,

- meets essential needs, performs a valuable function and is not excessive;
- does not generate any waste, can be managed through strategies of reuse, recycling or composting;
- responds to the expectations of customers and stakeholders; and
- is material and energy-efficient, with minimal impacts over the packaging life cycle [GER 97].

4.3.1. The Packaging of Organic Food Products (Wine & Olive Oil)

Sustainable use addresses the long-term environmental, social and economic aspects of packaging use. Examining the life cycle of packaging materials is an important tool in gaining a more accurate assessment of environmental impact.

Design for resource conservation

- Specify the minimum quantity of material required for the function; specify renewable materials
- Design for cleaner production
- Avoid material wastage; specify low impact technologies and processes

Design for efficient distribution

- Minimise weight of packaging to save energy in transport; specify reusable or recyclable packaging; specify efficient transport systems

Design for minimal consumption and low impact use

- Minimise the use of disposable/consumable components; provide clear instructions for consumers on reuse, recycling or disposal; provide clear instructions for consumers on efficient operation, recycling or disposal

Design for reuse and durability

- Specify durable materials; eliminate potential weak points in the design

Design for disassembly and recycling

- Minimise the number of separate components; locate components with the highest value (or recycling potential) in accessible places; minimise the number of different materials and specify commonly recyclable materials; avoid the use of composites, labels, or coatings that may contaminate recycling.

Design for degradability

- Identify likely disposal routes and use biodegradable materials where appropriate; provide instructions for composting or collection.

Design for safe disposal

- Avoid the use of toxic or hazardous materials; provide disposal instructions on the label; ensure hazardous parts are clearly marked and easily removed. [GER 01; GER 99]

4.4. Labelling

The objective of eco-labelling is to reduce damage to the environment by promoting products with the least environmental impact. Information about the environmental impact of a product, which may have to surround ingredients, manufacturing method, usage and disposal instructions must be included on the packaging. Consumers wish to obtain an immediate impression of the environmental characteristics of their intended purchase; they also require usage instructions and disposal instructions, which make the right behaviour appear simple and desirable.

4.4.1. The Eco-Labelling of Organic Food Products (Wine & Olive Oil)

"Eco-labelling" is a voluntary method of environmental performance certification and labelling that is practised around the world. An "eco-label" is a label which identifies overall environmental preference of a product within a specific product category based on life cycle considerations. Eco-labels on food are becoming increasingly visible all over the world. Eco-labels convey information about the environmental impact of producing, processing, transporting or using a food product such as wine or olive-oil, etc.

Eco-labels serve a number of purposes such as:

- Allowing the rewarding of growers and processors to use environmentally friendly production practices.
- Giving consumers an opportunity to express their environmental and social values in their purchasing decisions.
- Finally, helping to push the food and agricultural industry towards environmental stewardship. [LEF 96]

5. Conclusion

Today, the concept of sustainability has become more important. The challenge of sustainable design is to alter traditional design and manufacturing process to incorporate environmental considerations effectively. So, this requires a change in these existing procedures. Designer is in a powerful position, able to help create a better world by considering environmental issues and creating environmental process and products.

Consciously or not, design of products and processes is the main determinant of environmental impact. Design is the key point for making radical improvements in the environmental performance of products. The relationship between design and ecology is a very close one, and makes for some unexpected complexities such as the acquisition of raw materials through the manufacturing process and assembly, the purchase of the complete product which also includes packaging and advertising, the use, the collection of the

product after use, and finally the re-use or recycling and final disposal. Designers have always tried for a better way of doing things, now that better way includes environmental, ethical and social issues, too.

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A NEW LIFESTYLE OF METROPOLITAN INDIVIDUAL: ORGANIC LIFE

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ABSTRACT

Marshall's "Global Village" concept describes vividly today's life style where the concepts of time and place disappear and distances come closer. The individual who suffers anxiety, doubts about future and risk, while getting further away from traditional life styles finds himself in searches of new waves of living in post-industrial societies. In recent years, behind the demand +for organic nutrient products, natural life, healthy menus, the mysticism and philosophy of the far east, and natural therapeutic methods, rests the response of the uneasy metropolitan individual. In order to suppress this uneasy behavior of the metropolitan individual, lots of new alternative products concerning food and cosmetic sector in the world were produced.

Along with the disadvantageous effects of "Fast Food" upon human health, the demand for natural food has constantly increased and this has necessitated the better understanding and informing of the society about healthy natural nutrition. The sections of supermarkets where organic food and cosmetic products which do not hold chemicals are steadily getting more popular. The metropolitan individual who is encouraged to consume these products, both creates popularity for better body aesthetics and by consuming these products he challenges a novel identity. Hence, is how he paradoxically endeavors to create some sort of idle and vague communication with the nature which he wants destroy.

Keywords: Consumption, Modern Individual, Identity, Organic Life.

I. INTRODUCTION

In this study, the increasing demand for ecological, organic or natural products including food, cosmetics, decorative elements and natural healing methods and that choice of modern individual through to live in more natural life in post-industrial societies will be discussed within a general sociological perspective. Moreover, the problems of modern individual will mostly be analysed giving references to THE post industrialist sociologists like Durkheim, Simmel and Marcuse in relation with the concepts like consumption, modern individual, identity and organic life. After explaining the metropolitan individual, the term organic will be taken under analysis and finally the relation between modern and organic life conditions will be emphasized.

The metropolitan individual who is encouraged to consume organic or ecological products feels himself more comfortable against the negative aspects of city life. Increasing demand for these products was an expected result for consuming individual prevailing after the industrial revolution who was becoming isolated and discontented. The issues like environmental consciousness and ecological balance that have gained publicity in the 20th century have increased anxieties about the future of the world. As a result of these anxieties, a new solution is proposed: Returning back to the nature. Additionally and surprisingly enough, these products had become like popular luxury products, which are sold for double the price and rarely in supermarkets nowadays. These conditions for organic products prevent their prevalence through the all society. This is how human beings paradoxically endeavors to create some

sort of idle and vague communication with the nature, which he wants, destroy before.

II. METROPOLITAN INDIVIDUAL

In today's world which we live in, vagueness, lack of confidence, inequality, risk, anxiety and social disintegration were still using frequently; industrial societies are becoming firmly established in these terms. Also, during the course of liberalization, the individual of modern and industrial world or as Marcuse has mentioned the *One Dimensional Man* had become unhappier. Consequently, effects of globalization had played an important role during that survey (Bozkurt, 2004:355).

The idea of Enlightenment to make a foundation for modern world, ascertains that the human control over the world will increase along with the development of mind, science and technology. From the point of human kind, the control over the world has gone astray. We are not in the position to talk about in organised scope of world, on the contrary the world seems more like an "anomic" phenomenon as Durkheim mentioned before. The uncertainty and instability that covers up much of our lives are not only prevalent in the lower portion income groups but also in the middle class. The society is in more and more pessimistic anticipation about their future (Bozkurt, 2004: 357). This intensive effect of changing world system has been observing either world economies and daily life of human-beings.

After the industrialisation period, all theorists were emphasizing the complicated rapid change of social life and mostly influenced by Marxism. After the industrial revolution, Marx had defined a term named 'alienation' which means being irregularity, becoming isolated, aggression, meaninglessness and escape from reality in general. The individual of the post-industrial society was alienated according to him. Industrialisation saw the transition to a society based upon organic solidarity with the specialisation of roles demanded by industrial production. Identity became a more complex issue as people experienced more dimensions to their lives, they became more confused as to their identities and their roles; and as Durkheim mentioned the modern individual was created by industrialisation. The modern societies would over-emphasise the importance of individuality which erodes social solidarity. According to Durkheim this "anomic" situation was a natural result of industrial revolution and transition period of 19th century. Durkheim had developed alternative approaches for Marxian thoughts (Abbott, 1998: 21).

From the social interactionists side, there was an interaction between individual and society within more flowing structure not in rigid way (Abbott, 1998: 45). According to Simmel, the psychological basis of the metropolitan type of individuality consists in the *intensification of nervous stimulation* which results from the swift and uninterrupted change of outer and inner stimuli. The psychological conditions which the metropolis creates are impressions which differ only slightly from one another. The metropolis exacts from man as a discriminating creature a different amount of consciousness than does rural. The metropolitan type of man -which, of course, exists in a thousand individual variants- develops an organ protecting him against the threatening currents and discrepancies of his external environment which would uproot him. He reacts with his head instead of his heart. In this an increased awareness assumes the psychic prerogative. Metropolitan life, thus, underlies a heightened awareness and a predominance of intelligence in metropolitan man. The reaction to

metropolitan phenomena is shifted to that organ which is least sensitive and quite remote from the depth of the personality.¹

Simmel had more focused on individual compared to Marx and he had emphasized the reason of "alienation" in the metropolitan life. The metropolitan life had separated mind of individual into several parts and it prevents to recognize himself. Much of Simmel's life has passed in Berlin metropolis, the cultural level of his sociology is high and reflecting the sociation forms of urban interactions. He always focuses on certain types of interaction forms in city life and defines *metropolitan man* as analytical minded, nervous and behaviorally disordered. In spite of the criticisms made about Simmel's methodology, his contributions to the science of sociology and metropolitan life have been very tangible in the 19th century. In his approaches to sociology he emphasizes individuality and has influenced Max Weber also (Swingewood, 1998: 171). Simmel's writings ranged from conventional philosopher who mediated on his themes in an insightful and digressive rather than systematic style.² In his writing named "The Metropolis and Mental Life" (1903) he discusses the relation between mind and city life (Swingewood, 1998: 191,192). The deepest problems of modern life derive from the claim of the individual to preserve the autonomy and individuality of his existence in the face of overwhelming social forces, of historical heritage, of external culture, and of the technique of life. The fight with nature which primitive man has to wage for his bodily existence attains in this modern form its latest transformation. The eighteenth century called upon man to free himself of all the historical bonds in the state and in religion, in morals and in economics. Man's nature, originally good and common to all, should develop unhampered. In addition to more liberty, the nineteenth century demanded the functional specialization of man and his work; this specialization makes one individual incomparable to another, and each of them indispensable to the highest possible extent. However, this specialization makes each man the more directly dependent upon the supplementary activities of all others.³ In *The Philosophy of Money* (1900) Simmel has deduced negative results on industrial society. Consequently, Simmel talks about a dialectical and societal evolution. Modern culture is intrigued, modern mind calculates and he stabilizes the world with mathematical formulas. In *The Philosophy of Money* he talks on that "disintegration" and "alienation". Creative subject is transformed to an object. Economy of money objectifies the social relations in modern city life. This condition displays itself his view of the tragedy of culture (Swingewood, 1998: 194,195) For Simmel, the sociation consists of both harmony and conflict but this conflict is independent and it is social form of life and this has positive and tiring effect on society.

Along with Simmel, Marcuse's ideas were so popular in 1960s, his criticisms of advanced industrial society and defence of radical politics achieved world-wide impact. He had attempted to re-examine and develop Marxian project in order to make it more relevant to the problems of present age (Kellner, 1984: 1-5). Marcuse attempts the ambivalence between capitalist production and nature, with the destruction of capitalism to the nature and

¹ http://condor.depaul.edu/~dweinste/intro/simmel_M&ML.htm#TOP adapted by D. Weinstein from Kurt Wolff (Trans.) *The Sociology of Georg Simmel*. New York: Free Press, 1950, pp. 409-424.

² Robert Audi (General Editor), *The Cambridge Dictionary of Philosophy*, 2nd Edition, Cambridge University Press, 1999, s. 844.

³ http://condor.depaul.edu/~dweinste/intro/simmel_M&ML.htm *The Metropolis and Mental Life*.

increase sovereignty of capitalism to the nature. He argues that this is a destructive evolution of industrial society and this effect creates a society which sovereign on nature and human beings.⁴

Marxism suggests that capitalist societies tend to produce certain type of identity, modern capitalism is producing human beings who are stunted and deformed or to use the phrase of Herbert Marcuse, "one dimensional man". Capitalism produces a culture which promotes the development of identities which are distortions of our nature. It turns people into alienated workers (Abbott, 1998: 35,36). It should be noted that, reasons stand behind in that increasing desire to live in more natural life and to be familiar with ecological treatment methods, aroma-therapeutic healing methods, organic products are related with the social transformation period after the industrial revolution.

III. MEANING OF ORGANIC AND ORGANIC LIFE

"Organic product" word identifies environmentally friendly and nutritionally pure product. Ecological or natural terms can be used instead of organic products. Moreover, "organic" term is defined in lots of meanings such as; being or coming from living plants and animals, producing a physical change in the structure of an organ or part of the body; not using artificial chemicals in the growing of plants and animals for food.⁵ Other meanings are having parts that are organized and interrelated in a way that is the same as, or analogous to, the way in which the parts of a living animal or other biological organism are organized and interrelated. Thus, an organic unity or organic whole is a whole that is organic in the above sense. It has applications of the concept of an organic unity which are to works of art, to the state, to the universe.⁶ As general, "organic" means forming a whole composed of organs; pertaining to a system of organs; inherent in, or resulting from, a certain organization like organic government; produced by the organs; pertaining to an organ or its functions, or to objects composed of organs; consisting of organs, or containing them; the organic structure of animals and plants; exhibiting characters peculiar to living organisms; as, organic bodies, organic life, organic remains; instrumental; acting as instruments of nature or of art to a certain destined function or end.⁷

Organic is a universal word that has become a sort of bolt-on term to describe an array of products, practices and procedures perceived as healthy for man, animal and the environment. Virtually all definitions of the word tend to share common meanings, yet each definition has its own unique features. It is important to gather some understanding of how various sectors of the food marketplace tend to interpret their understanding of what *organic* means.⁸

Organic life also has several meanings like an essential constituent of life, esp. the blood; the potential or animating principle, also, the period of duration, of anything that is conceived of as resembling a natural organism in structure or functions; the living or actual form,

⁴ ŞENER E. Hasan, Marcuse: İleri Sanayi Toplumunun Bir Eleştirisi, *Demokrasi Kuşağında Girişim Dergisi*, 2000.

<http://www.metu.edu.tr/~sener/articles/marcuse.htm>

⁵ Cambridge Advanced Learner's Dictionary, Cambridge University Press, 2003, p. 875.

⁶ Robert Audi (General Editor), *The Cambridge Dictionary of Philosophy*, 2nd Edition, Cambridge University Press, 1999, s. 635.

⁷ <http://en.thinkexist.com/dictionary/meaning/Organic/>

⁸ <http://cooperativegrocer.coop/articles/index.php?id=532>

Reclaiming the True Meaning of Organic From Mark Kastel, July - August 2004.

person, thing, or state; as, a picture or a description from the life; a certain way or manner of living with respect to conditions, circumstances, character, conduct, occupation, etc.; the vital force, whether regarded as physical or spiritual; animation; spirit; vivacity; vigor; energy, the state of being which begins with generation, birth, or germination, and ends with death.⁹

A central focus of this study on "organic" term will be about environmentally friendly and nutritionally pure product. As we mentioned before modern societies had created popular products. Of course consumerism becomes an important source of identity differing among different classes (Abbot, 1998:118). Nowadays one of the most popular issues is to control body in order to create their own sense of identity. It is observed that eating or buying "organic" or "ecological" foods from shopping centers was like being a differing significance upon classes. Since the price of the organic foods are higher, the middle classes and lower classes were not attempting to buy it. These products were serving as luxury and healthy objects. Naturally, to consume organic products does not mean being sensible to environment but today to consume such products is so fashionable. Consuming people are more environmentally sensitive while consuming.

The ecological farming is growing rapidly today and is about consumers finding more meaning in their food. Consumers who have felt good about their spending on organic products because they feel they're helping the environment, fostering human treatment of animals, and supporting family farmers could become seriously disillusioned.¹⁰

IV. ORGANIC AND MODERN IDENTITIES: INDEPENDENT BUT ANXIOUS INDIVIDUAL

The spirit of 19th century is problematic, it applies several phenomena, this age is more individualistic which is composed of individuals who settle their own interest and fundamentally technological and rational. In postmodernist era, consumer culture which is created after First World War had globalised all over the world. At the same time this era was a era of unidentification. Postmodernism was a rejection of the sovereign autonomous individual with an emphasis upon anarchic collective, anonymous experience. Not only is knowledge in postmodern societies characterized by its utility, but knowledge is also distributed, stored, and arranged differently in postmodern societies than in modern ones.¹¹

According to Marxian Theory, in the capitalist system, there has been standing economic structures and in industrial societies part of the accepted social definition of success and the enjoyment of good life is having their own consumer durables. The more stuff we have, the better off we are in every respect (Knutilla, 274).

In Table 1 adopted from Abbot there is a comparison between modern and postmodern society.

⁹ <http://en.thinkexist.com/dictionary/meaning/life/>

¹⁰ <http://cooperativegrocer.coop/articles/index.php?id=5320>

Reclaiming the True Meaning of Organic From Mark Kastel, July - August 2004.

¹¹ <http://www.colorado.edu/English/ENGL2012Klages/pomo.html>, Postmodernism.

Table 1. Comparison between modern and postmodern society.
 Table is adopted from David Abbot, *Culture and Identity*, Hodder and Stoughton, UK, 1998: p. 119.

Modern Society	Postmodern society
Concerned with mass production of standardised goods	Concerned with continually changing styles, colors, etc.
Class societies	Societies are no longer around the issue of production. Consuming societies
Economic and social arrangements were both developed and defended by nation-states competing in a largely free market	The nation state is being eclipsed by the rise of global culture; there are frequent assertions of local identity
Clear distinctions between high culture and mass culture	Blurred differences between high and popular culture

Basically, Western Europe was being transformed from a feudal to a capital society which is a radical revolution. The emergence of capitalist society involved radical and dramatic changes to the political, economical, family, religious, military and educational orders. In addition, an intellectual revolution had changed ideas about how we come to understand the world we live in (Knutilla, 1996: 132).

Particularly, feelings such as frequently repeated anxieties, fears like earthquake or war, unconfidence to some circumstances leads the people being more "alienated" to the world which they live in and to themselves. That's why Simmel describes that individual as to present his or her own personality, differentiated, behaving like mentally disorder or complicated, feeling self-confidence such behaviors.

In Marcuse's view, the powers of reason and freedom are declining in late industrial society with the increasing concentration and effectiveness of economic, political and cultural controls, the opposition in all fields has been pacified, co-ordinated or liquidated (Kellner, 1984: 434). He also proposes that contemporary society has produced a technological world in his writing "De L'ontologie a la Technologie". According to him, technological world is self-contained and self-perpetuating world and it allows change only within its own institutions and parameters (Kellner, 1984: 234). In the "One Dimensional Society", the subject is assimilated into the object and follows the dictates of external, objective structures, thus losing its abilities to discern more liberating possibilities and to engage in transformative practice to realize them. In his analysis, the "One Dimensional Man" has lost or has been losing individuality, freedom and the ability to dissent and to control one's own destiny. "One Dimensional Man" does not know its true needs because these needs are not his own they are superimposed and heteronomous (Kellner, 1984: 235-237).

In today's individual, "consumerism" plays an important role, the people recognize themselves in their commodities, they may find their soul in their goods. From Marcuse's side, this society made possible by new forms of social control which create needs and consciousness that conforms the system. New forms of social control such as mass culture and advertising, produce needs that integrate individuals into the consumer society (Kellner, 1984:243). Increased number of population is not being able to support the needs, distorted urbanization reinforcing this aggressive mood. As a result of this, one reason, which alerted ecological disorganization, is migration from rural to urban areas (Ertuğ, 2001: 248). Most of that migrated people are mentally and spiritually aggressive as Simmel mentioned before.

Around 1970s the Green Revolution movement had started as a

messenger of destroyed nature, this movement had started as a message of emancipation from superimposed needs, it was a solution to reach more presence world. Since people can no longer gain a sense of security from the old sources, they may have to create new ways of gaining a sense of identity like the Green movement, New Age travelers. At the same time another movements have been raising like the Cyberculture, which refers to the culture growing up around the technology. Beyond the critics of postmodernism and globalization era, Giddens argues that -he defines that era as late modernism- the society can be thought of as a post-traditional society, since tradition of all types is increasingly challenged. An individual identity is constructed in different ways to traditional society. Individuals can assess how successful they are in creating their desired identity, they may adopt several strategies if they fall short of it like dieting, buying new clothes, etc (Abbott, 1998: 125-131). The increasing demand through to organic life is a way of creating an identity for individual. After the globalization inconfidence, inequality, the distance between classes have been growing fast. According to some sociologists, these negative conditions in the society tends people to return their fundamentals (Bozkurt, 2004: 361).

Before 1970s, destroying natural sources was not a popular subject in developed countries, because these countries were more focusing on development. According to future-oriented projections of ecologists; in the future, spiritual norms, sociation forms, new technologies which are more sensitive to the nature and items like recycling will be getting importance (Kışlaoğlu, Berkes: 1989: 274, 275). Besides, in the future what is greater importance in contemporary society is the increasing degree of risk which is brought in our life by technology, or problems like pollution, diseases like AIDS, world climate.

We are faced with global climate change, mostly caused by industrialized world. In Koyoto Agreement, organized in Exeter city, by a conference of climate scientists world have been alerted on *ocean temperatures and by the publicity surrounding the introduction of the Kyoto Protocols on reducing greenhouse gas emissions. The world's oceans have become warmer and more acidic due to capitalism spewing out increasing quantities of greenhouse gases, particularly CO₂. There is an urgent need to limit these emissions and keep the rise in global temperatures below 2°C. Failure to do so threatens not just wildlife, but increasing disasters, droughts, floods and loss of human life on a massive scale. The future should want to work towards saving the environment.*¹²

Today the food production is an important subject and in the future it will be more important. Many people are suffering from disease; because of the food scarcity many people are hungry. Although the food sources are available, these people could not afford to buy it since the prices were high (Ford, 2000: 83). According to Ford, the artificiality of civilization has made us into refined people and after the industrial revolution, there was an increasing demand for refined food but now to hold a brown bread or brown sugar is getting more important than refined food. Today the cross-cultural fusion food is set to expand. According to Ford, if human beings are to survive in a crowded world, then the future of food must be very different from its recent past (Ford, 2000: 19-22). In the future, small farmers will re-emerge to provide the luxury items like special foods, self-

¹² Radikal, 4 Şubat 2005.

sufficient farming will increase with direct sale through the Internet; subsidies that were envisaged as a way of protecting farmers in poor areas are being commercially exploited by wealthy landowners. Since farming damages the soil, we will need to return much more organic waste (Ford, 2000: 79).

In the future climatic changes in the atmosphere will pose problems in the world. There is still an increasing danger for all organisms. Industry is forcing the global climate changes. Because of that, to choose living in organic or natural conditions seems like an emancipation way for metropolis people. According to this tendency, organic farming is becoming more and more popular among the wealthier nations. Moreover, some organic producers argues that ecological producers and consumers cannot be able to come together depending on their high prices since they have costly production methods. They also emphasize on these products since they are not just a kind of food but also a kind of lifestyle, especially in Europe and United States.¹³

V. CONCLUSION

As noted, organic life style means not just a kind of a nourishing way but also an alternative lifestyle aiming to create happier nations, to achieve social interactions, to be in respectful for human beings and nature, to support sustainable evolution philosophy. The changed conditions in advanced industrial society were greatly enhanced by the development of technology and industry. Technology can be seen as a form of capitalism to prevent all further human progress. Changing conditions and transformations in the status is an increasingly mechanized and automated process in every day life and leisure time in industrial societies (Kellner, 1984: 370, 452); these conditions had created a more anxious individual. Modern individual had achieved his independence, but he was dissatisfied. As Marcuse argued, freedom of nature will be achieved by using technology in convenient conditions. Marcuse claims that "new technology" will aim at creating an environment and a way of life expressive of needs for joy, happiness and beauty. The new culture and sensibility will create a technology of liberation and a social environment which in turn will continue to gratify and enhance human needs and personalities (Kellner, 1984: 330). So, turning to organic life is a way of movement for being happy for modern individual or a organic products have been used as an instrument to create a more liberated mood of life. The problem with organic life is that despite the popularity of organic life style products, that does not mean a transformation through to environmental sensibility. It has to be a social, political, intellectual and cultural majority consensus for change.

As a result, improvements achieved during post-industrialization period has provided human kind a multitude of positive outcomes as well as a more anxious human model pursuing primarily his own ego. Mankind has far too surpassed his limits uncompensating for what they have lost with his brutality over his once to benevolent nature. Now we have only got an opportunity to save what is left behind in meager amounts. We are apt to do this very soon for we are very short of time. That is why organic products must either be sold with cheaper prices or made possible to be supplied to wider parts of the society with reasonable precautions taken. So the "Modern individual" will be more present as an "organic individual" in the future.

¹³ Organik Ürün Tüketici ile Buluşamıyor
<http://www.cine-tarim.com.tr/dergi/arsiv52/sektorel02.htm>

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DESIGN REQUIREMENTS TO PREVENT POLLUTION: USING AGRO INDUSTRIAL RESIDUES IN NEW PRODUCTS

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ABSTRACT

This article is a result of a master's degree research and it discusses the design contribution to the prevention of pollution and to the environmental protection. The growing need of environmental preservation makes us consider the project of ecologically correct products as a possible solution to the exaggerated consuming of raw material, as well as to the industrial residues.

In order to avoid those problems, we propose the minimum usage of natural resources and it is also important to avoid the residues generation. In other words, we should decrease the interference of productive processes and the use of products in the environment as well.

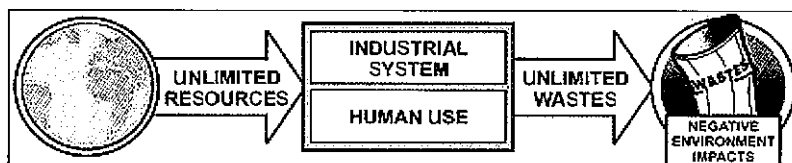
One of the ways to reach these aims is to have a maximum increase of time to use the material resources and this resource will be possible if the concept of residue circulation is applied to it; this is known in the industrial ecology context, as a kind of industry that uses residues of other productive process as raw material to manufacture products. This is an example of how design can really contribute to the preservation of the environment.

This article proposes a list of project requirements, based on concepts of the industrial Ecology that aim to increase the importance of the usage of ecologically correct materials such as: recycled agro industrial residues. This article has, as an example, the usage of wood sawing as a base of a promising eco-composite.

Keywords: Industrial Ecology, Eco-Design, Agro Industrial Residue, Recycling.

1- INTRODUCTION

The necessity for environmental preservation has been growing as the human activities of production and consuming have been endangering important natural resources. These activities are based on the idea that the environment is a plentiful or even an unlimited supplier of power and raw materials, as well as it is also seen as an unlimited receptacle of residues (MANAHAN, 1999). This system, which is known as linear or open, understands that residue generation is inevitable and inherent to the productive process and to consuming, and it is not concerned with the efficiency in production or the origin of the raw materials, nor with the existence of toxic substances or the disposal of residues or even with the outcome of these actions. This system can be seen in PICTURE 01.

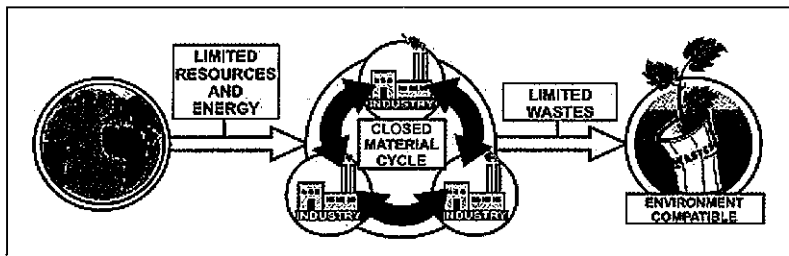


PICTURE 01 - The linear system of production and consuming
(TEIXEIRA & CÉSAR, 2004)

In this context, we have example of how the wood industry has been using the natural resources inappropriately both in the stage of extracting virgin material as in the production of consumer goods as well as in the disposal of solid residues. According to FREITAS (2000), in Brazil, from 1/3 to 2/3 of the virgin wood volume is turned into residues like sawing. This residue has had a low value destination or it has simply been burned outdoors or in landfills, worsening environmental problems. As a means of reducing these risks, technologies that make use of wood natural resources in a more economic and in a less polluting way have been used. This research aims to check the possibility of using recycled wood sawing that is generated from the solid wood processing as material for the industry of reinforced plastic.

2- INDUSTRIAL ECOLOGY AND ECO-DESIGN

The industrial ecology aims to prevent negative environmental impacts, optimizing the usage of raw materials by cycling materials between productive processes. It is based on the natural model of ecology, where there is interaction between living beings without the destructive exploiting of natural resources or residue generation. The preservation of the environment takes place by decreasing the demand for virgin resources and reducing residue. Thus, industrial ecology states that something that is considered a residue of a certain productive process is then used as a raw material in another process, creating a closed cycle of raw material usage as PICTURE 02 shows, making the amount of transiting material constant within the biosphere (KIPERSTOK & MARINHO, 2001).



PICTURE 02 - Closed cycle of material resources between productive processes (TEIXEIRA & CÉSAR, 2004)

The industrial ecology uses the Eco-Design or the DfE, the Design for Environment, as its tool, and it aims to use means of environmental protection as its basic project requirements all along the material life cycle and for all consumer goods. This way, these products should pollute less, use less natural resources, less energy and they should also be easy to buy and respectful to local cultures.

Thus, it becomes a matter of great relevance to select raw materials that comply with these goals. The list below shows the environmental requirements that are suggested by the Eco-design in determining the ecologically efficient materials (RAMOS E SELL, 2002; MANZINI, 2002; KIPERSTOK, 2003; FUAD-LUKE, 2002).

- Use abundant materials that have no usage restrictions.
- Reduce the energy spent in manufacturing.
- Use recycled and recyclable materials.
- Use abundant materials that have mutual compatibility.
- Use materials that come from residues of other processes.
- Avoid materials that can produce emissions, residues or toxic derivatives.
- Use low-impact and eco-efficient productive processes and

technologies.

-Give aesthetic value to recycled materials.

-Possibility of a certain material to be used as raw material in other productive processes.

A certain material will cease to be a residue if it can be a potential raw material in making other products. In this case, the residue is now considered a sub-product in the productive process (VALLE, 1995 apud SAVASTRANO Jr, 2000). From the producer's point of view, this could become an excellent business opportunity, as he will be manufacturing a product at a much lower cost, using as raw material something that was considered as waste, besides being able to use the available wood almost completely, wood being considered a noble raw material.

An alternative usage for agro-industrial residues is taking them as reinforcement for composites - a raw material in manufacturing products that combine two or more different materials, basically a main material and a reinforcement one, combining their properties. In the case of substituting the native wood, this material comes as a great attraction that would help preserve the forest reserves (CARVALHO, 2003; BISWAS et al, 2004; BAKSI et al, 2004), changing the consuming to products that have been made of composites as well as having an opportunity to create new jobs and resources in poor areas or communities. Table 01 shows some vegetal fibers, virgin or residual, that have a great potential to be used in composites.

TABLE 01 - Vegetal fibers used in composites (TEIXEIRA, 2005)

ORIGIN	FIBER
VIRGIN AND RENEWABLE RAW MATERIAL	<ul style="list-style-type: none"> -Sisal -Banana -Cotton -Jute -Vegetal sponge -Dwarf mallow -Wood -Linen -Piçavea -Hemp -Bromeliad -Bamboo
RECYCLED RESIDUES	<ul style="list-style-type: none"> -Sugar cane husks and other vegetables -Coconut bark -Pineapple crown -Paper and cellulose -Cereal peel and straw: rice, wheat, peanut, etc. -Wood sawing

The advantages of using vegetal fibers to reinforce composites are (CARVALHO 2003):

- Low cost if compared to artificial fibers.
- Full usage of the Phytomass.
- Environmentally friendly and renewable.
- Non-abrasiva to the processing equipment.
- High resistance, low elongation.
- Low energy consuming and non-toxic.
- Providing us with recyclable and/or biodegrading products.
- They contribute to the creation of jobs in countryside areas.

The disadvantages are:

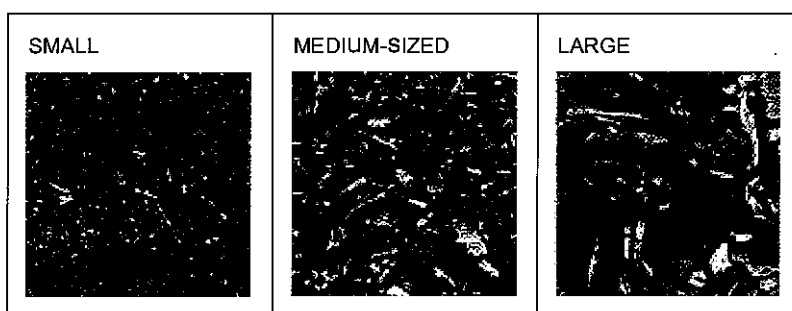
- The weather-dependant production.
- The seasonal production.

3- MATERIALS AND METHODOLOGY

The research involved two industrial companies located in the metropolitan area of Salvador (the capital of the state of Bahia, in Brazil). The first company, which will be called **Process 1** from now on, is a factory that produces goods made of sawed solid wood, eucalyptus and pinewood, being the producer of the sawing used in this research. The second company, which will be called **Process 2** from now on, is a factory that produces fiberglass-reinforced plastic products.

3.1- The recycling of the wood residue

The wood residue is basically constituted of cellulose and lignin. It has a low density, it is biodegradable and also atoxic if there are no contaminating materials in its volume such as paint, varnish, insecticide or preservatives. The sawing is generated during the mechanic processing of the solid parts, and there is a specific residue from each kind of processing machine, that is different from the others. The recycling process took place in two stages: the drying and the sifting, so three kinds of particles could be classified: small, medium-sized and large particles, as PICTURE 03 shows.



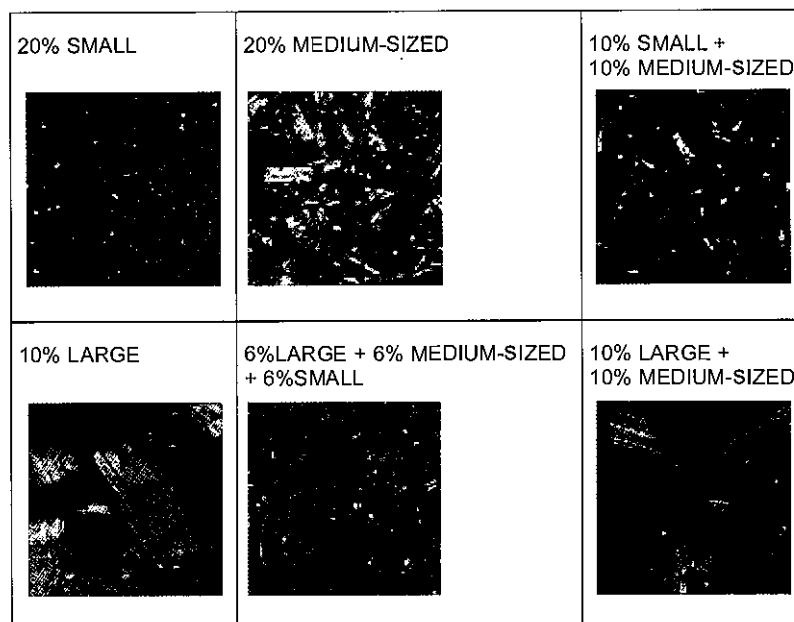
PICTURE 03 - Residues of recycled wood (TEIXEIRA, 2005)

3.2- Development, shaping and testing the composite

The recycled wood residue was mixed to a polyester ortoftalic-type resin (Cray Valley 5061) in 15 kinds of mixtures, according to the size of the particles that were obtained after sifting, and it was shaped by the process of cold-pressing. The cold-pressing process was chosen because of its:

- Easy handling
- Low acquisition and operating cost
- Low vapor emission
- Low consumption of water and power.

Six of these mixtures can be seen in Picture 04. The testing samples were shaped according to the Brazilian Technical Rules, the NBR 5014 for determining water absorption, the NBR 7456 for determining hardness SHORE D, and NBR 7447 for bending resistance in 3 areas.



PICTURE 04 - Residues of recycled wood (TEIXEIRA, 2005)

4- RESULTS

1st Water Absorption: The studied composite remained underwater for 15 days, and it presented an absorption rate varying from 1,19% to 5,08%, compared to the dry composite.

2nd Hardness Study: There was a variation from 67 to 78 in the SHORE D scale, that goes as far as 100. The pure composite, without the sawing, showed a value of 80, considering the same scale.

3rd 3-Area Bending Study: It showed Young Module values from 1701,56 to 2799,33 N/mm².

The variation of the values that were obtained from the 15 mixtures considers the amount and the size of the sawing particles used in each mixture. The mixtures that contained a greater amount of small and medium-sized particles showed a greater general performance.

5- CONCLUSION

According to the studies, the developed composite was considered eco-efficient for having been made of wood sawing which was recycled and valued as a sub-product of a productive system. Besides this, it presented a low level of water absorption, a good performance in bending and good resistance to penetrating objects according to the SHORE D scale. This all makes it a potential raw material for the manufacture of several products. These products can be of many kinds, such as pieces with plain surfaces, like tables, other kinds of furniture and utensils, as well as other products of complex shapes.

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CONCEPTS THAT SHAPE TRADITIONAL OLIVE OIL MILLS AND SOME ASPECTS FOR THEIR SUSTAINABILITY

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ABSTRACT

Previously, the main values associated with the cultural heritage were cultural and scientific. With the new trends of globalization, these were confronted with the social and economic realities, and the policy of environmentally sustainable development. The shift to safe-guarding traditional know-how and living cultures instead of the re-establishment of status-quo requires the acceptance of change as an essential parameter in the process. The aim of this paper is to define the essence of what is maintained and the criteria for managing change, while dealing with traditional production buildings in rural settlements. Olive oil production has been a part of traditional life in the Mediterranean region throughout ages. The traditional olive oil mills have been subject to both seasonal and historical change. Determination of conservation guidelines for such buildings necessitates the clarification of some design concepts such as authenticity, traditional continuity and sustainable planning. The conservation design, proposed for these olive oil mills, should provide a way of distinguishing between the concept of authenticity related to historicity, and the meaning of revived traditions. Within this frame, historical olive oil mills documented in Karaburun peninsula are introduced and evaluated. Via these olive oil mills, ways of undertaking sustainable human development within the potential of existing cultural, physical and environmental resources are explored. In fact, this is what modern conservation demands.

Keywords: Olive Oil Mills, Change, Traditional Continuity, Sustainability, Conservation Design.

There is limited research on the traditional production buildings of Turkey. The present ones are being lost because of changes in the production techniques. This paper focuses on a series of olive oil mills documented in Karaburun, İzmir. It is claimed that the question of sustainable architecture in Turkey in fact includes the question of the definition of a conservation design problem. The study addresses the problem of producing sterile conservation projects in Turkey, where the design is isolated from the existing economic and social conditions. It stresses the need for developing an approach to conservation design, which would define architectural conservation as a sustainability problem dealing with the social, spiritual, aesthetic and economic problems of the related society. The study seeks to recognize ways of conserving sustainable olive oil production structures in the architectural scale, by taking the conditions and characteristics of Karaburun, a province of İzmir, as a case in point.

The crucial point here is first to *define sustainability* for the traditional olive oil mills in Karaburun, and then to *identify the design approach* that will affect the development of Karaburun into a sustainable rural settlement. Such a rural settlement will have an agriculturally based livelihood.

The Characteristics of Karaburun Peninsula

Karaburun peninsula is at the north-west of İzmir and controls the entrance of the gulf together with Foça (Focae). The governmental center of the peninsula is Karaburun district, which is nearly 100 km

to İzmir by highway. Mordoğan county and thirteen villages are the sub-settlements. The traces of different civilizations starting with the Calcaolitic can be observed here. The landscape and traditional settlements conserved as a fortunate result of the poor quality of the present transportation system present a *potential* for the development of the peninsula. Betterment of this transportation system, especially by the vitalization of sea transportation, will provide an opportunity for marine commerce and tourism. Nevertheless, natural values such as the sea gulfs, which are being rapidly lost; continuous wind with high velocity, which may be used as an alternative energy source; and qualified agricultural products such as olive, grape and narcissus together with cultural values including traditional ways of life and their related built heritage should all be enhanced. In fact, agriculture together with natural and cultural tourism are the two important economic potentials¹. In the economic life of the peninsula, table olive and olive oil production have played an important role throughout the history. 'Hurma zaytin' is the special name given to the olives of this region.

Ancient Background of Olive Oil Production in the Region

In the archaeological excavations carried out in the antique Clazomenai, ruins of an olive oil mill dating the first half of the 6th century B.C. have been documented. Clazomenai is one of the twelve Ionian cities and it is within the borders of Urla, a district of İzmir neighboring Karaburun. The mill exhibits two phases: the first includes production for the inhabitants of the city only and the second includes overseas trade. Possibly, the number of mills discovered in the region may increase in the following years because olive oil production was one of the major activities in the city. The Clazomenian amphorae found at far colonies in the Mediterranean and Black Sea prove the important position of Clazomenai in oil production and trade in the second half of the sixth century B.C.

The technical components of this antique mill may be defined as follows: first of all, there is the *polima*. This is a three-compartment separation system that decomposes olive pieces - olive oil - water combination by the help of the unity of cups principle. It enables continuous production. Secondly, there is the *rollermill* carved out of hard rock with cylinders turning around the mill. Thirdly, a press and capstan are used for squeezing the cracked olives. This technical system expands the capacity. All of these technical aspects, which seem to have been applied first in the Clazomenian mill in Aegean, are still being used in the traditional mills in the region².

Traditional Olive Oil Mills in Karaburun

The mills were documented in field trips carried in the winters of 2003 and 2004. There are nine traditional mills and three relatively modern mills in different parts of the peninsula. The traditional ones are in Kösadera, Ambarseki, Saip, Tapeboz, Haseki and Sarpıncık. Besides photographic survey, scaled plan sketches of these mills were prepared³. The mills in Saip were documented in 1 / 50 scale with conventional drawings. Depending on these documents, it is quite possible to arrive at an *analysis of the traditional olive oil mills* in Karaburun in terms of site characteristics, storey systems, spatial characteristics, technical components, enclosure systems, structural characteristics and sustainable peculiarities point of views.

It has been observed that all of these mills present similarities in the way their sites are organized. First of all, the mills are preferred to

be located at the border of the villages, but not within them (Ambarseki, Saip). Presence of a natural water source is important in the choice of the site. Therefore, a fountain and a plane tree are indispensable elements of the site. These are observed in all excluding the ones in Kösedere and Haseki. Sometimes, a few mills are preferred to be organized around this water source (Ambarseki, Saip, Kösedere). Since the organization of a special entrance for the olives at half storey level is a prerequisite for the process; situating the building masses on slope of a hill, has been a common choice in all of the examples. The rise in slope is around 15% in Saip. The inclined surface is terraced so that a series of open spaces and building masses can be organized. The open spaces are composed of a series of courtyards and vegetation terraces. The courtyards are connected to the main road via individual paths wide enough for the access of a horse cart. The primary courtyard is a datum element around which the whole mill area is organized. Provision of water, storing of oil amphorae and olive cake, resting of the workers and animals under the shadow of the plane tree all take place here. The mill buildings border the sides of this main courtyard. On the other hand, the secondary courtyards are only for the olive storage and washing activities. Here, the pools within which the olives are washed before they enter the mills can be seen close by the buildings as in the cases of Tepeboz, Sarpıncık and Kösedere. Consequently, the terraces for vegetation circumscribe the mill area. Here, olive trees, grape yards, narcissuses gardens and almond trees are present.

The *storey systems* of the mills are originally composed of a ground storey and a half storey. The half storey covers up only a small volume at one of the building corners. It is 4.6 by 3.6 meters in mill 1 of Saip, where as the ground measures 14 by 7.3 meters⁴. The ground floor-first floor combinations in Sarpıncık and Haseki, and single ground floor in Kösedere are thought to be altered cases. The half and first stories are for the gradual pouring down of the olives through openings on the floors to the roller mills on the ground level. On the other hand, the ground floors are completely for the production of olive oil in a series of subspaces. The total interior heights are around four and a half meters to provide enough air for the production process.

The *spatial layout* of the historical olive oil mills in Karaburun peninsula is based on the utilitarian necessities. Although the process whole takes place in a single volume, subspaces were defined for different phases of the production process. The level differences and vertical partitioning elements are the border elements of these subspaces. Each of these subspaces refers to one of the stages in the processing of the olives. In the first phase, the olives are washed in the courtyard and carried into the half storey of the mill. These are the washing and pouring spaces, respectively. Then, the olives are crushed in the roller mill and stuffed into sacks. This is the crushing space. The crushing space is separated from the pressing space with a low stonewall around 1.70 meters in height as in Mill 1 in Saip. The press functions originally with manpower. The rope in connection with the press is turned around the timber capstan close to one of the sides of the press. In turn, the press moves up and down. For the extraction of oil from the cracked olives, hot water is necessary. Water carried from the fountain at the courtyard is heated in the fireplace close to the press. Then, it is poured onto the sacks during the pressing phase. There is a parted separation system at the front of the press. The olive oil - olive water combination is directed into this system. Then, the combination is moved into an amphora in the neighboring storage zone. The amphora has a tap at its bottom to control the

purification. When only olive water comes out of the tap, the water is poured out and the oil collected above the amphora is taken into a smaller amphora within which it is transported.

In the determination of this spatial organization; the *paths* the workmen follow, the animal follows, the olives follow, the water used in the decomposition process follow and olive water follows are important inputs. The *technical components* involved in the process are placed along these paths. They have been altered in accordance with the developments in the production technologies. These components in the order of their usage are timber funnel, rollermill, press, fireplace and amphora with a tap. The timber *funnel* is for directing the olives down to the rollermills. So, it is positioned just above the opening on the floor of the half storey. The rollermill is composed of four separate cylinders rotating around an axis, and a stone cylindric basin circular in plan, around 1.30 meters in diameter (Mill 1, Saip). The original rollermills making use of animal power can still be observed in Tepeboz and Sarpıncık. In the ones in Saip and Kösedere, power of electricity has taken the place of animals. In turn, motors were added to the cracking system. The presses and capstans are used in the squeezing process. Chios type of presses work on the basis of the Archimedes screw principle. Only in the mill in Saip, hydrolic press has been used. The fireplace and a chimney in connection with it is a must for heating the water to help the decomposition process. Finally, the *amphora with the tap* is used in the purification process.

In the formation of the *enclosure systems*, necessity of controlling sunlight, which has negative impacts on olive oil, has been an important criterion. In addition to this, the mills are only used during the winter and they are kept locked with all their technical components inside throughout the year. Therefore, security is a second criterion in the determination of elevation morphology. So, minimum number of openings giving way to low intensity of daylight at the interior has been preferred. The elevations whose design is guided by functional and structural concepts rather than symbolic ones provide plain faces to these rural buildings standing on their own in the scrubs and olive groves of Karaburun geography.

The *structural systems* of all of the mills are stone masonry for the walls, and timber skeleton for the half or first stories and roofs. The walls are out of rubble stone and some tile pieces put together with lime mortar. Series of timber beams support the even distribution of loads in the walls. They are also used to span the openings. The surroundings of the openings are further reinforced with brick. The surfaces are originally exposed without any plastering or white wash. The joints are recessed back. The ground floors are covered with earth. The timber beams and posts are originally covered with timber, while concrete repairs are observed in some parts today. Timber is also preferred in the wings of the doors. Fireplace are out of brick and mortar, and they are not plastered. Marseilles type of tiles are preferred in the roof covering. On the other hand, the courtyards and the paths connecting them to the roads by are originally covered with stone.

The discussed building type can be analyzed from its *sustainable peculiarities* point of view. Such an analysis brings forward a set of climate based design principles. In the search for cool spaces in the summertime as well as warm ones in the wintertime; the heavy solutions, the massive forms with dense walls are preferable because of their capacity to insulate heat. Similarly, the minimum number of openings on the building surfaces is a sustainable choice in order to avoid the destruction of sunlight on the olive oil.

Sustainability for Traditional Olive Oil Mills in Karaburun

Sustainability is related to the systems approach of the biological sciences. It is the capacity of a system to maintain continuous flow of whatever each part of that system needs for a healthy existence. *The sustainable place making activity* represents modest-scale, practical, realistic, autochthonous and context-specific solutions, requiring living with the possibilities and constraints imposed by a combination of the ecological, social, cultural, spiritual, aesthetic and economic context of a place⁵. Therefore, the *building type* and the geography as the case in point should be discussed within a broad-based *comparative study*, undertaken just to address the unique problems of this particular place.

The European Union is the leading world producer in the olive sector. Turkey, Syria, Tunisia and Morocco are the other main olive oil producers⁶. Olive oil processing structures in the EU reflect the mix of traditional olive mills and more intensively managed modern plants⁷. Similarly, the olive oil processing structures in Karaburun reflect the mix of traditional olive oil mills and some relatively modern mills as observed in Mordoğan, Eğlenhoca, Kösedere and Ambarseki. They are either transformed traditional or new constructions, whose physical characteristics resemble the traditional ones.

The olive sector is a key element of the EU model of agriculture. It is an important source of employment and economic activity in the main producer areas such as Spain, Italy, Greece, Portugal and France⁸. On the other hand, there has been an extensive migration to the metropolitan city of İzmir from Karaburun since 1950s. Unfortunately, only 25% of the population is continuously employed at present. The reorganization of the olive sector is certainly necessary.

It is known that the traditional olive oil mills are valued for their role in promoting biodiversity⁹. Unfortunately, the majority of the traditional mills in Karaburun peninsula are under the risk of demolition because of production disruption and abandonment. Therefore, it is necessary to improve the competitiveness of these olive oil processing structures so that the rural economy of Karaburun is supported.

In the zones of traditional production, where a sustainable development is desired, economical, environmental, social and cultural concerns should all be considered¹⁰. Consequently, funds for the maintenance of the traditional mills in Karaburun lands should be provided. Measures for the improvement and conservation of the natural environment should be developed. The advantage of providing seasonal employment in winters, complementary with other agricultural and also touristic activities should be made use of.

The opportunity of marketing the traditional production structures via natural and cultural tourism should be considered. It is known that tourism makes a significant positive contribution to widen public access to the cultural heritage, and the revenue derived from tourism can provide substantial resources for the upkeep and preservation of the cultural heritage¹¹. The tourism development should be to a level compatible with the ecological and social, carrying capacity of the site¹². The visiting of mill sites should not exceed sustainable levels, which are set by the vulnerability.

Design Approach for the Sustainability of the Mills

The basic question in the determination of a design approach for these mills is how to establish 'traditional continuity' as a contemporary trend in conservation practice. The concept of 'traditional continuity'¹³ can be explained as follows: Previously, the main issues associated with the built heritage were cultural and scientific. With the new trends of globalization, these were confronted with social and economic realities, and a policy of environmentally sustainable development. While the classical care for historic resources was generally aimed at the re-establishment of a status quo, the shift to safeguarding traditional know-how and living cultures requires the acceptance of change as an essential parameter in the process. The purpose is to define the essence of what is maintained, and the criteria for managing change whether dealing with historic gardens, cities, rural villages or cultural landscapes. All of these are subject to continuous change even if gradual or seasonal.

In the case of this study, the mill had undergone physical alterations as a result of the changes in the production technologies. In addition to this, lack of maintenance has played a role in the change of their physical characteristics. The set of 'what is maintained' has elements varying between almost total preservation of the architectural characteristics of a mill and its surroundings, and total loss of spatial quality.

The criteria for managing change in these mills may be defined as follows:

- The mills should be *rehabilitated* and maintained to be used for the processing of olive oil. The production process itself is a value to be conserved for the economic sustainability of the inhabitants. The process is also valuable from the viewpoint of biodiversity. A standardized production process and technical equipment should be preferred in all mills that will continue to be used as olive oil processing structures.
- Decent *production conditions* should be established in line with the contemporary processing necessities.
- Refunctioning as a museum* can be accepted only for the limited cases, documenting the historical production technology making use of animal power, with the majority of their authentic elements. For example, the authentic mill in Saip may be converted into a museum of traditional olive oil production. The tactile values of the highly authentic mills in terms of low intensity of light, aroma of olives, kina-aesthetics of the production process and echoing resonance of the footfall of both workers and animals should be considered.
- Alternative *seasonal usages* may be suggested for the mills to be rehabilitated. During the summers, mills together with their open spaces may serve as teahouses and olive product shops for the tourists. This requires the design of modest-scale, removable, standardized, but context-specific architectural elements such as sheds, tables, benches, exhibition stands, cabins for storage and wet services. Similarly, car parks should be provided.
- However, traditional olive oil mills are located in agricultural land. Thus, the proposed new additions should use as little land as possible. Some of the open areas may be sacrificed for agricultural purposes. Cultivation of plants indigenous to Karaburun such as olive, grape and narcissus may be supported.
- Local material usage and construction techniques with which

the villagers are familiar with should be preferred in the interventions so that cultural consciousness that has been gradually refined through time can be attained. The tectonics of the new materials should be understood and respected as well, when making use of them in the interventions.

-In the *management* of the mills, the water flowing continuously from the fountains in the mill sites should be accumulated and harnessed. The black water problem should be coped up with. Passive heating, cooling, lighting and ventilation systems should be installed.

Conclusion

This paper has discussed the traditional character of the olive oil mills in a selected geography, Karaburun. It has been documented that these buildings are in poor structural conditions at present as a result of lack of maintenance. Their abandonment can be avoided only if their functions are sustained. This includes the betterment of working conditions in the mills, preservation of natural environment by controlling waste disposal, modernization of production techniques without losing the biodiversity value of every mill and provision of access for cultural tourists. This will bring economic, social and cultural sustainability. Traditional continuity is the suitable conservation approach for these mills whose traditionality instead of historicity is intended to be emphasized. Authentic historicity as a design approach can only be accepted for limited cases, which document the historical production technology in animal power period with the majority of their authentic characteristics.

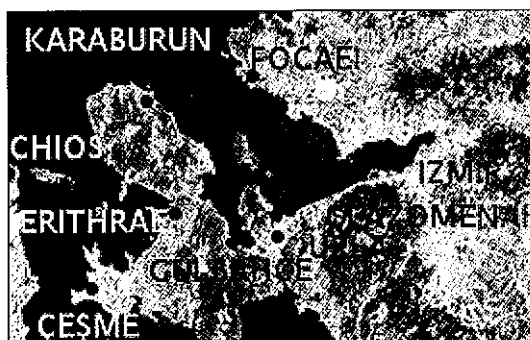


Figure 1. Karaburun peninsula and its neighbors



Figure 2. Plane tree and fountain - two indispensable elements of the site organization



Figure 3. The two mills, the primary courtyard and the terraced organization of the site, Saip

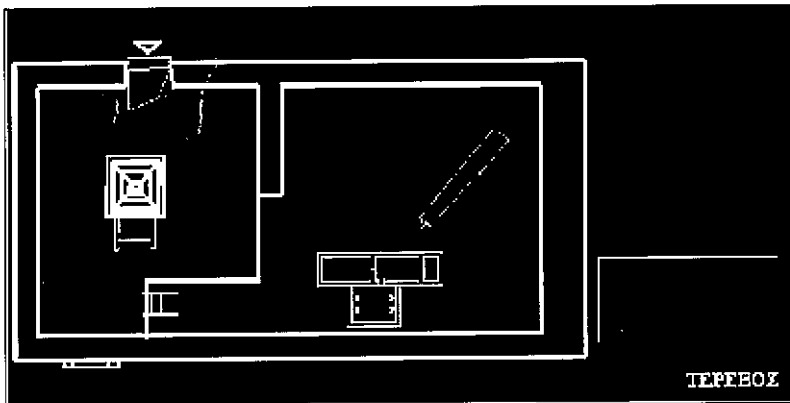


Figure 4. Half storey on the left and ground storey on the right, Tepeboz example, present situation

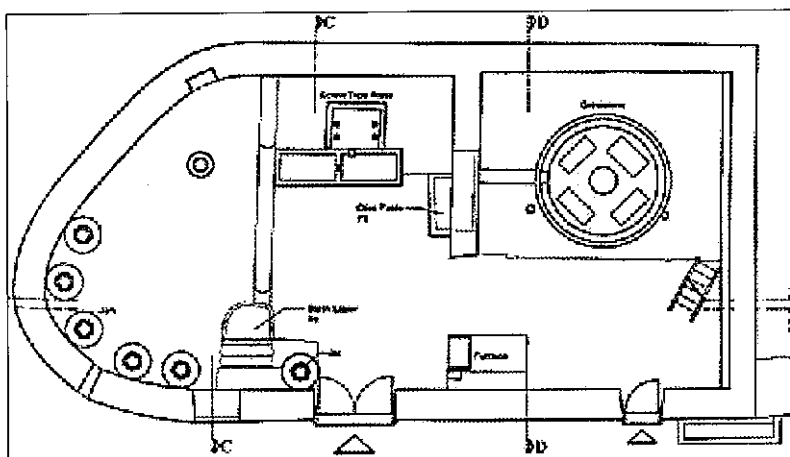


Figure 5. Spatial organization of the ground storey, Mill 1, Saip, restitution



Figure 6. The funnel in Mill 1, Saippresent situation



Figure 7. The press, Tepeboz



Figure 8. The capstan, Tepeboz



Figure 9. The fireplace, Mill 1, Seip



Figure 10. Metal and plastic bins used instead of ceramic amphorae, Kösedere example

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² www.klazomenai.com

³ This documentation work has been carried out in the design studio RES 502 Architectural Restoration Design II in the graduate program of Architectural Restoration, İzmir Institute of Technology, and supervised by Assist.Prof.Dr.Mine Hamamcioğlu-Turan. See also Uğurlu, E., Şerifaki, K. and Hamamcioğlu-Turan, M. (2004). *Arradamento Mimarlık*, 'Karaburun, Seip'te Tarihsel Zeytinyağı Değirtmenleri', No:2004/12, 102-107. I am am thankful to Assist.Prof.Dr.Sedat Emir, Dr.Zeynep Arsan, Res.Assist.Nilgün Kiper and Hakan Arsan for informing me about the presence of the mills, and sharing their views on the subject.

⁴ Mill 1 is one of the two mills in Saip which has reached today with the majority of its authentic characteristics.

⁵ Durmuş-Arsan, Z. (2003). 'A Critical Overview of Sustainable Architecture in Turkey: A Proposal for the Municipality of Seyrek', *Unpublished Ph D Thesis*, İzmir Institute of Technology, Department of Architecture, İzmir.

⁶ <http://europa.eu.int/comm/agriculture/markets/olive/index;en.htm>, www.internationaloliveoil.org

⁷ 'Accomplishing a Sustainable Agricultural Model for Europe through the Reformed CAP - the tobacco, olive oil, cotton and sugar sectors', *Report of the Commission of European Communities*, No:COM(2003)554 final, Brussels, 23.09.2003.

⁸ *ibid.*

⁹ *ibid.*

¹⁰ *ibid.*

¹¹ Madran, E. And Özgönül, N. (ed.) (1999). *International Documents regarding the Preservation of Cultural and Natural Heritage*, 'Helsinki Declaration on the Political Dimension of Cultural Heritage Conservation in Europe, Resolution No:2, The Cultural Heritage as a factor of Sustainable Development, 1997', METU, Ankara, 544-545.

¹² Madran, E. And Özgönül, N. (ed.) (1999). *International Documents regarding the Preservation of Cultural and Natural Heritage*, 'A Policy for the Development of Sustainable Environment-Friendly Tourism in Coastal Areas, 1997', METU, Ankara, 546.

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**PART IV
EXPORTING STRATEGIES,
RETAIL SALE AND E-BUSINESS IN TERMS OF
CONTEMPORARY MARKETING METHODS, AND
THEIR RELATIONSHIPS WITH DESIGN**

Burcu Pınar, Frank Bates

A Study of a Plan to Develop, Produce and Market the Agricultural Crop of Dried Tomatoes in an Effort to Gain Competitive Advantage in the Global Marketplace

Gül Özkan, Frank Bates

Trends Affecting the Logistics Companies of Turkey in Servicing the Agricultural-Based Production Materials (Textiles and Garment Apparel) Sector - Assessing the Impact of Services, Products and Capabilities Being Offered to Create Value within the Supply Chain

István Kerepeszki, Frank Bates, Tolga Uysal

Measuring the Effectiveness of Changes to the Logistics Operation in Support of the Agricultural Firm's Products and Services - Using the Lean Process of "Mapping" to Measure Performance and Create Value within the Supply Chain

Melek Akın, Frank Bates, Gökhan Efecan

Organic Farming in Turkey - Developing the Basis for Benchmarking Turkey's Activities as a Strategy within TQM to Gain Competitive Advantage in the Global Marketplace

Melek Akın, Nissim Levy, Frank Bates, Kamil D. Atıcı, Altan Candır

Using the Lean Process of Mapping to Demonstrate the Advantages of Cultivating a Newly Designed Hybrid Corn Fodder by the Agricultural Farm Crop Producer to Gain Competitive Advantage in the Global Marketplace

Tolga Uysal, Frank Bates

Consideration for the Application of a Logistics Services Network-Based System for Use by the Agricultural Firm in Support of Advanced Planning Efforts for Optimizing the Operation

Tunçdan Baltacıoğlu, István Kerepeszki, Öznur Yurt

Logistics in Agriculture

Recommendations to the Aegean Agricultural Sector



A STUDY OF A PLAN TO DEVELOP, PRODUCE AND MARKET THE AGRICULTURAL CROP OF DRIED TOMATOES IN AN EFFORT TO GAIN COMPETITIVE ADVANTAGE IN THE GLOBAL MARKETPLACE

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ABSTRACT

The challenge for the agricultural firm is to successfully grow and harvest its crops and to get the 'fruits of their labor' to market - all at a profit to sustain themselves. With this major accomplishment comes the assumption that such efforts in agricultural production will be widely accepted in the marketplace. However, with the various cultural and marketing pressures acting upon the farm producer, there is the reality and recognition of certain purchasing characteristics and behaviors and traits held by today's buyers, which have an impact upon certain value creating processes brought about by many food handlers and processors before the food gets to the market, namely fast food and convenience. How to anticipate the worthwhile nature and the likelihood for success of efforts to create value-added products and services associated with a basic farm crop, in this case, the demand and acceptability of 'dried' tomatoes by the consumer - the subject of this research work - is not widely appreciated nor understood by many.

To meet customer market potentials for the dried tomato, one firm in Turkey has examined the nature of the pressures and demands for quick and ready use of 'fast food' with the attendant efforts to successfully enter the international marketplace, at a time when demand levels may seem to exist. In addition to having studied the international marketplace, to assist themselves in analysing the motivation and behavior of the consumer, they also have deployed the use of a consumer decision model, "The Consumer Decision Process", with the intention of it being an important element within the new business plan for the project.

A review of both the academic and business-oriented literature reveals that there is a growing recognition, acceptance and use of certain decision support systems in the firm's new business development processes; these activities include designing into the product and into the marketing efforts relevant customer attitudes and preferences. Given the pressures to find new markets, contain marketing costs and increase efficiencies, the business manager wants to be creative and find new ways to achieve their goals. The researchers conducted both a primary research survey through personal interviews with agricultural crop growers and processors, as well as an analysis of related empirical data collected from a multinational agricultural processing firm engaged in tomato crop development and processing programs for both domestic production and export activities. With the deployment of these special R&D, design and program management processes within a dried tomato production and marketing program, it is suggested that agricultural crop planners can utilize certain analytical modelling processes to demonstrate the advantages of increasing efficiencies, containing costs and simultaneously adding value to their product or service offerings within their international farm products and commodities that are the very products of their country's natural resources base. The firm's use of a consumer decision process model is described in this work.

As there are virtually no articles or books specifically addressing the Turkish agricultural firm's product design and development attempts to develop these processes for enhancing the marketability, acceptance and effectiveness of such new business development and promotional programs, a basic purpose of this research work is to explore the firm's attempts to gain competitive advantage in the global marketplaces.

Keywords: Agricultural Program, Competitive Advantage, Product Design, Supply Chain, Consumer Behavior, Consumer Decision Model.

1. INTRODUCTION

Agricultural processing activities play a strategic role in a region's or an individual country's economic growth and social development. The development history of a country's agricultural base is derived from the underlying goal for the improvement of customer service.

With the challenge to be successful in cultivating crops for successful entry into the marketplace, multinational agricultural firms, in general, are called upon to play an increasing role in designing such products to meet consumer tastes and desires. Agricultural firms, in consideration of the perishable nature of the processes within crop production, have included themselves within this analytical process for studying just what the customer demands might be. In such a dynamic marketplace these firms have to adjust to new challenges in dealing with product freshness, perishable nature, consumer demand and marketability concerns.

For this reason coordinated strategies are required where the international marketplace issues may leverage involvement into the product design and development processes. The way that an agricultural processing firm has consulted and used the consumer decision-making model as a reference in determining the viability for design and development of a dried tomato product for the marketplace is the subject of this research work. The paper is structured into 5 sections. Following the Introduction, in Section 2, an overview of the current situation is given highlighting the need for coordinated product design and development strategies. In Section 3 a focus is placed on the strategic activities by the firm as it seeks to improve its business development processes and to influence its successful achievement and optimal performance in determining consumer demand within the international marketplace. Within Section 4 is presented the structure of a consumer behavior model-based approach along with a descriptive discourse on its adaptation for use by the firm. Finally Section 5 discusses the rationale and activities in implementing decisions made within the firm's product design and development efforts as a result of its modeling of consumer decision making process.

2. CURRENT ENVIRONMENT OF THE AGRICULTURAL FIRM

Agricultural processing operations are functioning in a business climate that is highly competitive with all companies increasingly depending upon efficient and cost effective processes, from the design and development of processes attendant to business development and marketing through production and transportation to the consumer. Certain trends in global customer and market development will inevitably further influence the most basic decisions of producers on what to grow and how to package for the international marketplace (Evans, Moutinho, Van Raaij, 1996).

With the order cycle for products shrinking significantly and more deliveries of cargo being "critical" in terms of perishable nature, these factors point to one thing: the critical role of the agricultural products processor to arrive at sound and timely decisions for a food processes system that will create value-added products and services.

The agricultural industry is of great commercial significance to Turkey and is a major contributor to the regional and national economy (<http://www.die.gov.tr>, <http://www.dpt.gov.tr>, <http://www.foreigntrade.gov.tr>, <http://ito.org.tr>, <http://igama.gov.tr>). Expansion of this industry is driven by trends and demands

governed by market forces.

3. EMERGING PRODUCT DESIGN AND DEVELOPMENT ACTIVITIES OF THE AGRICULTURAL FIRM

Global commerce has expanded at a double-digit pace in the last decade with new trends in product design and development strategies and intense pressure of globalisation - all having attracted the attention of the agricultural firm operating in the international marketplace.

At the agricultural firm in Turkey, the objectives in product design and development include:

- Delivery performance in terms of freshness and perishability factors
- Forecast accuracy and internal analytical capabilities within the firm
- Production planners with adequate visibility on consumer needs and desires
- Accuracy of available date being caused by lack of a process for contributing to effective planning
- Improvements needed in product design and development processes to support increased brand types and levels and to meet customer order fulfilment time for both domestic and international deliveries
- Goals for the reduction in business development and marketing costs
- Improvements in forecasting deemed desirable by management
- Simplification and the integration of effective product design and development processes

Plans were arrived at for the implementation of a new product process derived from the result of using a consumer decision-making model study; as a result of the above-mentioned objectives, specific improvement proposals were developed to meet the goals:

- To optimise the product design and development process
- To optimise the acceptability by the consumer of the new product and process
- To optimise finished goods in terms of freshness and non-perishability standards
- To improve the bases for developing the new processes
- To optimise the firm's coverage in support of all marketing initiatives
- To optimise coverage in support of all processes materials
- To exercise control (configuration control) over changes to differing products and sizes in order to minimize spoilage and outdated, obsolescent materials
- To shorten response time of planning, product design overview and budget reporting sessions
- To collaborate inventory stocking information with vendors
- To synchronize market entry timing and advertising initiatives in coordination with area distributors
- To explore alternative and additional processes for optimization of product deliveries and to minimize response lead times
- To investigate options planning processes

Results of the different initiatives included a greater degree of responsiveness to be offered to customers - with the realization of some understanding of what motivates their behaviors in product

selection.

Future initiatives will include greater collaboration with distributors on forecast stock levels - resulting from customer acceptance levels as sales volumes increase. In addition, planning is underway to expand into additional areas with full consideration for domestic demand and an anticipation of growth in food processing services that can create added value.

4. UTILIZATION OF MODEL FOR CONSUMER BEHAVIOR DECISION MAKING - AN ADAPTIVE STUDY IN MARKET DEVELOPMENT

Globalization has become an imperative in the management of a true global supply chain, requiring the management of business processes across trading partners concentrating on the objective of meeting consumer demands. The current market environment can be characterized by the growing emphasis on determining and understanding the consumer decision making process, given rapid technological changes and research and product development goals that affect production, sourcing, marketing and distribution activities (Kedzior, Karcz, 1999).

Consumer pressure for lower prices, convenience foods, fast food and a more responsive and higher quality service are forcing retailers, manufacturers and distributors, to achieve higher efficiencies and improve lead times, making product design and development effectiveness a critical factor in gaining competitive advantage (Mowen, 1987). Radical changes are being forced on manufacturers and distributors by this consumer led demand, which in turn is generating a need for more dynamic products and services.

However, as a result of rapid technology development the trend of determining consumer behavior patterns seems to be replaced by new applications for studying the forces behind this decision-making process. We are witnessing the emergence of more interest in this research paradigm model in which product design and development planners work together with production operation planners towards a common goal and share their responsibilities with an understanding of the consumer (Engel, Blackwell, Miniard, 2000).

Management's vision for adapting an analytical decision making process is supported by various deployment strategies, not the least of which is the use of 'instinct and market savvy.' More analytically based and perhaps better realism anchored processes may come from the use of a model. The dimensions and approaches to these challenges will determine success (Engel, ET AL). There are many market forces that are changing the way companies are anticipating consumer needs and desires. Increased global complexity with the consolidation of customer demands all create pressures on the firm and represent the challenges for product design and development managers who are charged with adding new processes to the operation. As a result, the business planner seeks a concept of effectively producing goods and services in concert with meeting market demands.

The concept of consumer behavior services requires an advanced planning that puts into place a common goal to coordinate processes across different lines of business, with local execution and local decision-making within the attendant empowerment execution (Klappich 2004). The concept of a decision-making

system model for determining consumer behavior has emerged as a means of dealing with new types of products with an application of the latest management strategies and technologies to provide an environment for further rapid development and application of this tool for correctly gauging the consumer's needs and desires (Engel, ET AL).

The Turkish company decided to try out the application of such a consumer decision-making model in hopes of arriving at another tool or opinion for the likelihood of success in this new business development initiative. The firm deployed the consumer motivation and behavior decision-making model for its advanced product design (dried tomatoes) and afterwards, the development oriented section of a new business development initiative driven by the conclusions were arrived at by working with the model. The objective for the use of the model is that it is based upon the measure of the consumer's acceptance of new products related to innovations, like transition/conversion into functional food, with consideration for the evolving nature of consumer habits (Engel, Blackwell, and Miniard, 2000). Areas and processes studied are illustrated in the following graphic Figure 1 of the Consumer Decision Making Process. Results are noted from the adaptation and implementation of this modelling system for the dried tomato agricultural processes firm. Areas identified for special study involve motivation and the intended uses for the dried tomato product by the consumer.

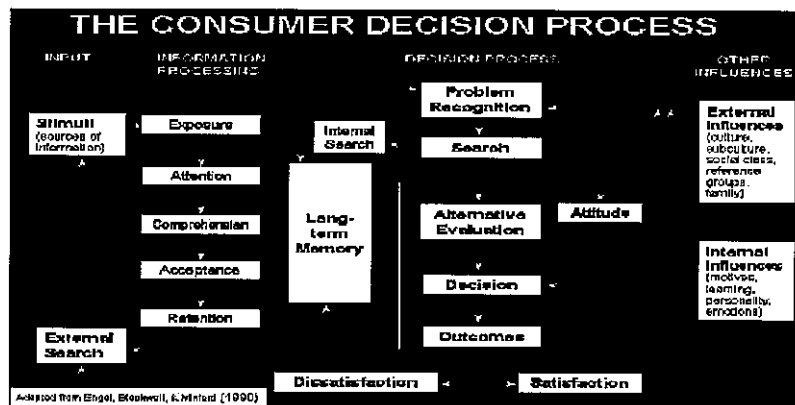


Fig. 1. The Consumer Decision Making Process

Source: (Engel, James F. & Blackwell, Roger D. & Miniard, Paul W. 2000)

The input factors within the model are the results of research on:

- Production site requirements and qualifications
- Product design, variations and consideration of development processes
- Labor and material costs
- Dried packaging processes
- Production and preservation processes
- Crop growing conditions
- Competition analyses
- World producing and consumption areas
- Changing trends of production and consumption rates
- Annual consumer consumption rates
- Climate control considerations for product storage and transport
- Cost and pricing strategies
- Marketing and business development strategies
- Market demand projections

(Engel, ET AL)

The firm is located in Manisa, Turkey (refer Figure 2) being geographically located in a desirable region favoring tomato crop development, cultivation and processing activities for the export and domestic markets.



Fig. 2. Map of Manisa Turkey

Source: http://www.geocities.com/nar_sos/anasayfa.html#

The information processing factors within the model are taken from analyses dealing with:

- Market surveys
- Trade shows
- Advertising media
- Customer interviews
- Memory retention studies

(Berkman, Lindquist, Sirgy, 1996; Engel, ET AL)

The decision processing factors include inputs about:

- Buyer psychology
- Behaviorial studies
- Clinical trails
- Conflict resolution scenarios
- Comparison, preferences and selection analyses
- Memory recall characteristics and stimuli

(Bazerman, 2001; Engel, ET AL)

Other processes with the model include:

- Internal
 - Learning
 - Personality
 - Motives
 - Emotions
- External
 - Culture
 - Subcultural
 - Social class
 - Reference groups
 - Family

(Cialdini, 2000; Engel, ET AL)

5. IMPLEMENTATION PLAN FOR THE DESIGN OF NEW PRODUCT DEVELOPMENT

At the firm in Turkey, existing processes were examined to determine where to place the emphasis on consumer wants and desires. Alternative plans were developed for various consumer groups and differing cultural markets. Performance measurement processes are applied on all decisions taken with the objective to either positively reinforce decisions taken or remedial action to

dynamic consumer demands and the identification of alternatives in response to changes of other market conditions. A documentation trail of performance criteria for measurement was set up to identify areas in need of corrections/modifications of processes and implementation of changes.

The consumer decision-making model displays a pathway for consideration of the factors that influence decisions for acceptance or non-acceptance of products based on collaboration with market suppliers and customers for coordination and benchmarking methodology using industry news and intelligence, attendance at seminars and trade fair observations.

These analytical tools are deployed to critically examine specific dried tomato product requirements in support of the production plan, manufacturing processes, feasibility plans for all changes, facility layout optimization, work simplification, standardization, material flow, movement and handling, and traffic patterns production flow processes. With planning participants, an integrated product design and development plan through the production phases is prepared for all processes, allowing the worker to do the job.

The adapted model system being studied here provides reliable, effective, efficient, and fully integrated product design and development that will best meet the needs of customers at continuously improving levels of service and at a cost which supports the goals of the agricultural firm.

The purpose of this methodology is to illustrate how planning managers and consultants may apply the use of a model like that used herein, that of the Consumer Decision Process. The model may assist during the product design and development stages with insights about the psychology underlying customer decision-making and insight and may permit such insight to be incorporated within their business and marketing strategies (Engel, ET AL).

Such use of the model may allow the agricultural business development manager to acquire knowledge of the many factors that influence - often without their awareness - how customers and consumers make decisions. Often this involves such factors as the effects of memory on decision-making, principles of influence, effects on choice, influence of emotion and affect, customer self-control, investment psychology and such. Results of the consumer decision-making process and the model itself have been made a part of the firm's new business plan.

6. SUMMARY AND CONCLUSIONS

A firm's plans for determining the most effective processes in product design and development cannot be considered in isolation, but should be integrated into an accepted model for determining customer decision making leading to new business development initiatives (Lasher, 1994). There should be synergy between new business planner and production operations personnel. Long-term planning for meeting customer demands and market development should run parallel to the plans of the firm (Russo and Schoemaker, 2001).

Competitiveness is a key aspect that influences any country's place in global markets. To compete successfully for business in domestic and international markets, product design and development teams must have the ability to react swiftly to changing consumer and market conditions (Bernstein, 1998). Examples drawn from the

empirical data of an agricultural processing firm in Turkey have been studied. The results of the model serve another tool in the business plan to support the firm's decisions and subsequent new business strategies and tactics. It is suggested that agricultural industry strategic planning professionals can utilize the essence of a consumer behavior decision-making model, like the one utilized here to study consumer behaviors and motivations within the organization as part of their new business development initiatives and simultaneously add value to their firm product or service design and development offerings.

The modelling system for the agricultural firm offers a number of advantages. Primary among them is the potential to reduce an organization's overall business development and new marketing costs by obtaining an improved return on development activities. With continued pressure to reduce costs, the strategically-oriented business development manager must seek out and embrace new ways that will help in reaching new markets. Carefully conceived and studiously applied analyses using consumer behavior decision-making processes can help maintain efficiencies and competitive advantages and ensure that the organization's activities are future-directed. The modelling system approach to the new business development challenges of agricultural firms may hold significant potential for creative new market development efforts in many situations; as a direct result, planning managers may someday have the abilities to add significant improvement to the agricultural firm's competitive advantage within the global marketplace.

It is well established that successful marketing and business strategies depend on a thorough understanding of how customers make decisions. However, traditional models of customer decision-making, especially so-called normative or rational models have serious limitations. Rather than making decisions in the manner postulated by these models, customers often use a variety of rules and processes that lead to (sometimes counterintuitive) decision behavior. For instance, customers have an exaggerated tendency to select compromise or middle options when making choices. Customers are also easily seduced by features of a product that seem to differentiate it from other products, even when these features in fact add no value. Seemingly "irrational" customer decision phenomena such as these abound.

Similar findings from research in customer decision-making have powerful business implications. Marketing and business development planners interested in developing marketing and business strategies based on cutting-edge research in the behavioral science may want to apply such a model. The researchers conclude that investigating how the use of such a model may be leveraged within the product design and development phases may contribute to more successful product with the attendant marketing and business strategies; the agricultural firm may benefit from using this model and it can be a significant source of competitive advantage.

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TRENDS AFFECTING THE LOGISTICS COMPANIES OF TURKEY IN SERVICING THE AGRICULTURAL-BASED PRODUCTION MATERIALS (TEXTILES & GARMENT APPAREL) SECTOR - ASSESSING THE IMPACT OF SERVICES, PRODUCTS AND CAPABILITIES BEING OFFERED TO CREATE VALUE WITHIN THE SUPPLY CHAIN

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ABSTRACT

Because of globalization effects on the textile sector, logistics support services has become an important factor as retailers attempt to take on the competition via the supply chain. A review of both the academic and business-oriented literature reveals that there is a growing awareness of logistics services contributions within the textile firm's operations. These firms are meeting the competition head-on and want to make use of the technologies and methodologies of logistics services that are available. Given increasing pressures from their customers, both the textile and garment apparel supplier firms and logistics planners are striving to be creative and find new ways to achieve their goals.

In addition to using examples drawn from the trade press, the researchers conducted two primary research surveys of representatives, one survey - at recent textile business symposium sessions in Cesme, Turkey, and the other survey - at recent logistics trade sessions at the Aegean Free Zone, in Gaziemir, Turkey.

A study of the textile firms' needs and demands for services as compared to those services now being performed by logistics companies suggest strategic planners can utilize certain strategies and tactics to contain costs and simultaneously add value to their customers and to their companies offerings. As there are virtually no articles nor books specifically addressing the textile and garment apparel firms' attempts to use strategic alliances and agreements in contracting for services provided by the logistics company, this research work explores the firm's attempts to gain competitive advantage in global business.

Keywords: Fashion Logistics, Retail Services, Supply Chain, Competitive Advantage, Garment Apparel, Textile Logistics.

1. INTRODUCTION

Within the textile and garment apparel sectors, supermarkets, fashion outlets and vertically integrated retailers are achieving growth and market share objectives. Supply chain capabilities and shorter lead times are the reason for this success; logistics services have become the discriminator for fashion retailers that set the pace of the competition. Retailers will search for those logistics services providers capable of achieving improvements to their supply chains; there are opportunities for logistics service providers to significantly contribute to the quality and performance of their own supply chains. Logistics providers are beginning to target this business.

For upscale and specialist fashion retailers, extremely short lead times have become critical. As emphasis is placed on these new lead times and pre-emption of ones' competitors to be first to introduce and exhibit "the latest," wholesalers and retailers seek partners that will help them. As a result, these business entities have stepped up their outsourced spend on logistics services at a pace not seen in this industry sector.

The researchers seek to explore the growing recognition, acceptance, adaptation and deployment in an organization's

operations those logistics services and processes that can be the focus for achieving improvement. Thus, a basic purpose of this analysis is to explore the use of logistics services - specifically those being provided today in the agricultural-based materials within the textiles and fashion apparel industries - as a tool for measurement and as a strategy to the traditional methods of improving operational efficiencies, eliminating wastes and cutting costs within the firm's processes. With this knowledge of the 'right thing' to do, planners will need to take an aggressive and proactive posture in rooting out wastes and inefficiencies by using the creative methodologies of contemporary logistics services and techniques to find the firm's areas for improvement. Supply chains, in principle, exist everywhere as corporations provide services, products, equipment and information flows [Stevens, 1989].

2. PROVIDING LOGISTICS SERVICES TO FIRMS IN THE TEXTILE AND GARMENT APPAREL INDUSTRY - NEW TRENDS AND SERVICES

The researchers examined empirical trade industry data. Analysis of the data illustrates how logistics service providers can meet the demand by customers and how they can be used as a means to improve competitive advantage. This work examines the use of such services by the agricultural product based firm's attempts to improve its textile production operation.

Certain trends are noteworthy; they include:

- desire for quicker response times and strategies
- an internationalization of logistics practices
- contract logistics
- careful attention being paid to the lead-time gap
- importance of agility
- temperature-controlled supply chains
- impact of lead time reductions on manufactured inventory stocking levels
- greater collaboration between members in the supply chain
- use of radio frequency identification (RFID) cards for tagging of garments
- emergence of the role of "mass customization", i.e., the production of custom-made, high-quality, clothing competitively priced with rapid delivery
- increasing use of air freight for the garment industry, though not necessarily only for the textiles industry
- bypassing of distribution centers in the garment industry
- more shipping to the ultimate customer's door
- certain specifically created logistics services being designed for the special group of clients

Some of these logistics services that have been especially developed for the client include such value-added services as:

- garment-on-hanger/move on hanger, special containers - at origin, door-to-door service for shipping samples
- follow-up orders
- exhibition items and small quantity fashion shipments boxed
- air cargo priority to high fashion
- special containers to move garments on hangers
- Pick & Pack warehousing services
- intermediate storage
- versatile re-conditioning services in order to appear attractive and saleable to the retailer, hand pressing, repair by sewing, stain removal, packaging, hanging of garments, labeling, sorting, etc.; specially equipped modern transport vehicles to

- carry special products
- offsite store management services
- pre-retailing services (such as price-tagging for certain selected currencies, like Euros, etc.)
- All Risk insurance coverage
- monitoring of shipments through multifaceted information systems
- forwarding and EDP services including customs clearance; customs warehousing; surface consolidation services
- expedited airfreight transits
- multiple vendor pick-ups
- several trailer releases weekly
- team service
- sort & segregation
- airfreight departures nightly
- purchase order (PO) verification at point of dispatch
- route planning and operation
- parts sequencing
- dedicated deliver
- inbound and outbound shipment
- information management for reverse logistics
- data retrieval on past and current shipments
- quick response service to include store floor replenishment and timely transit of goods to each retailer

2.1. Methodologies of the Primary Surveys

2.1.1. Pre-testing of the surveys

The survey instruments were pre-tested to determine clarity, meaning accuracy, and appropriateness using vocabulary within the trade industry. Several versions were created and then tested again to eliminate any ambiguities and confusion.

2.1.2. SPSS 10.0

SPSS 10.0 is used as a tool for the analysis and statistics tool for the methodology of the survey. Other programs such as COPSS and ANOVA can also be used for these methods and analysis.

3. PRIMARY RESEARCH SURVEYS

To support this work, the researchers conducted two primary research surveys of representatives, one survey - at the recent textile and garment apparel business symposium sessions in Cesme attended by trade industry representatives, and the other survey - at recent Logistics Business Days trade sessions at the Aegean Free Zone, Gaziemir - Izmir attended by logistics services providers, as well as, an analysis from a study of empirical data collected from trade journals and media. A study of the textile and apparel firms' needs and demands for services as well as those services now being performed by logistics companies in Turkey suggests strategic planning professionals can utilize certain strategies and tactics to contain costs and simultaneously add value to their customers and their companies offerings. The surveys were made to determine the level of awareness, needs and demands, past experience and attitudes of textile and garment apparel firms in regards to logistics services providers and services being offered to their customers.

Results from the primary research surveys are examined to search the supply chains for discrepancies and to make comparisons between logistics services being offered and those demanded by the textile sector.

3.1. Survey of Textile and Garment Apparel Firms at Business Symposium Held in Cesme - Izmir To Determine Needs, Awareness, Experience and Attitudes about Logistics Services

Business representatives attending the Cesme business symposium were from companies using the various agricultural-based fabrics and materials as: cotton, silk, wool, knitted fabric, denim, leather and synthetic; the composition is reflected in Table 1.

Table 1. Firms at Symposium Using Various Agricultural-based Materials

Type of Material	# of Companies	Percent	Valid Percent	Cumulative Percent
Cotton	9	17,3	17,3	17,3
Silk	7	13,5	13,5	30,8
Wool	13	25,0	25,0	55,8
Knitting	4	7,7	7,7	63,5
Leather	7	13,5	13,5	76,9
Synthetic	6	11,5	11,5	88,5
Denim	6	11,5	11,5	100,0
Total	52	100,0	100,0	

Respondents to the survey of textile business representatives attending trade sessions were asked to rank the services in importance:

- International & domestic cargo handling & distribution services
- International & domestic shipping services
- Air, land & sea transport services
- Reverse logistics
- Customs clearance
- Packaging
- Order processing & administrative management
- Bar-code and labeling
- Warehouse computer system
- Bonded warehousing

The respondents also cited services listed in the survey that are offered by logistics service providers but are not needed in their operations:

- Warehouse & inventory/stock management services
- Bonded Warehousing
- Procurement of materials and components
- Returns management
- Vendor managed inventories (VMI)
- Cross-docking stations/depots
- ERP (enterprise resources planning) system
- Free zone services
- Product re-configuration services (ironing, hangars, repairs, cleaning, tagging)
- Security scanning

These responses may change as the full impact of wanting to interface with the new EU guidelines and addition to European market supply chains develop further.

3.1.1. The Cesme Survey

The attendees responding to the written survey indicated a relative consistency of opinions of services desired and being fulfilled. Responses are illustrated by percentages through the use of bar charts in Figure 1; actual responses in quantities are illustrated in Table 2.

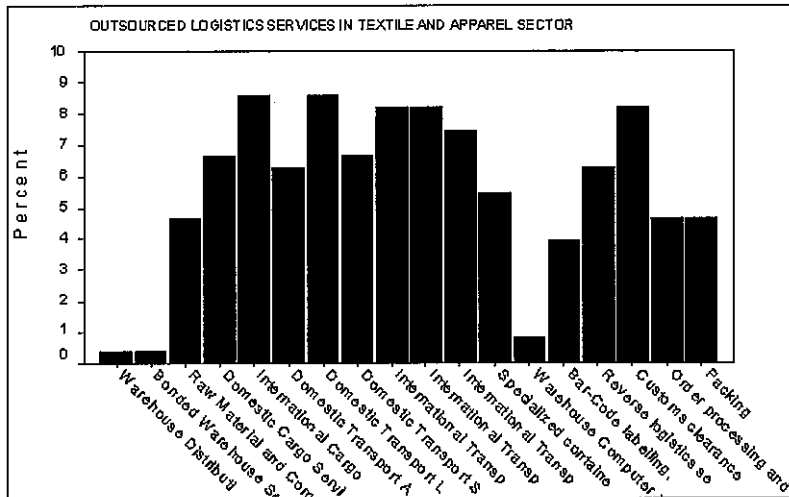


Figure 1. Outsourced Logistics Services in the Textile and Apparel Sector - Responses in Percentages (%)

Table 2. Logistics Service Types - Responses (frequencies) are illustrated in actual quantiles

	Frequency	Percent	Valid Percent	Cumulative Percent
Warehouse Distribution Systems	1	,4	,4	,4
Bonded Warehouse Services	1	,4	,4	,8
Raw Material and Component Procuring	12	4,7	4,7	5,5
Domestic Cargo Services	17	6,6	6,6	12,1
International Cargo Services	22	8,6	8,6	20,7
Domestic Transport Air	16	6,3	6,3	27,0
Domestic Transport Land	22	8,6	8,6	35,5
Domestic Transport Sea	17	6,6	6,6	42,2
International Transport Air	21	8,2	8,2	50,4
International Transport Land	21	8,2	8,2	58,6
International Transport Sea	19	7,4	7,4	66,0
Specialized containers	14	5,5	5,5	71,5
Warehouse Computer System	2	,8	,8	72,3
Bar-Code labeling, labeling, dispatch to store, returns co	10	3,9	3,9	76,2
Reverse logistics services	16	6,3	6,3	82,4
Customs clearance	21	8,2	8,2	90,6
Order processing and management	12	4,7	4,7	95,3
Packing	12	4,7	4,7	100,0
Total	256	100,0	100,0	100,0

Other services were not mentioned as being needed or desirable, such as Vendor managed inventory, Inventory management system, Depots used as "cross-docking stations", ERP (enterprise resource planning) system, SAP control systems, Import clearance, Security scanners, Trade in Free Trade Zone and Product reconfiguration services by the textile and apparel firms. One may conclude that these activities may be not applicable or are being done by the companies themselves.

3.1.2. Findings

The highly used services of the textile and garment apparel industry as logistics service providers are: International cargo services, Domestic cargo services, Domestic air transportation, Domestic land transportation, Domestic sea transportation, International air transportation, International land transportation, International sea transportation, Reverse Logistics services and Customs clearance. The logistics service providers should pay attention on this side and try to improve service focusing on these topics. To provide other topics to become high appreciated logistics service providers should improve their:

- Customer response on time
- Flexibility
- Agility
- Quality
- Information Systems
- Service concept and scope

3.2. Survey of Logistics Firms at Sessions Held at the Aegean Free Zone in Gaziemir, Izmir, to Determine the Nature of Textile and Garment Apparel Logistics Services in Turkey

In addition to commenting on past experiences and on familiarity with the logistics services concepts and on the awareness of such quality improvement processes in Turkey, the logistics firms attending the Free Zone sessions were asked to designate, from a listing of services, a ranking of the ten (10) most important services that their logistics company/organization offers. They were invited to identify any additional services not listed in the survey.

3.2.1. The Esbaş Survey

In the evaluation part the first question of the ranking of the important service that the logistics providers give to their customers are examined as from 1, highest priority to the 5, lowest priority.

The answered services from the logistics providers are:

- Textiles and garment apparel shipments
- Domestic distribution
- Air freight
- Import clearance
- Bonded warehouse & Re-Export Zone services

Firstly, as the analysis of the frequency table shows:

Table 3. Statistics

	Number of attendee	Garment ship.	Domestic dist.	Air freight	Import clearance	Bonded warehouse ser.
Answered attendee	29	14	16	13	12	14
Not answered	0	15	13	16	17	15
Mean	15,00	2,00	1,00	5,00	4,00	3,00
Std. Error of Mean	1,58	,00	,00	,00	,00	,00
Median	15,00	2,00	1,00	5,00	4,00	3,00
Mode	1	2	1	5	4	3
Std. Deviation	8,51	,00	,00	,00	,00	,00
Variance	72,50	,00	,00	,00	,00	,00
Range	28	0	0	0	0	0
Minimum	1	2	1	5	4	3
Maximum	29	2	1	5	4	3
Sum	435	28	16	65	48	42

An observation from the data in this table is that domestic distribution is the most preferred service offered by the logistics service providers; the value is 16 as an answered attendee number out of 29.

The numbers in bold represent the answered and not answered by the attendee, as well as the mean and median. Median and mean numbers indicate the priority numbers (1 to 5). The services highlighted below in Table 4 are: garment shipment, domestic distribution, air freight, import clearance and bonded warehouse service and are prioritized according to the responses.

Table 4. Frequency tables

Garment ship.				Domestic dist.			
		Frequency	Percent			Frequency	Percent
Answered	Near highest priority	14	48,3	Answered	Highest priority	16	55,2
Not answered	System	15	51,7	Not answered	System	13	44,8
Total		29	100,0	Total		29	100,0
Air freight				Bonded warehouse ser.			
		Frequency	Percent			Frequency	Percent
Answered	Lowest priority	13	44,8	Answered	Normal priority	14	48,3
Not answered	System	16	55,2	Not answered	System	15	51,7
Total		29	100,0	Total		29	100,0
Import clearance							
		Frequency	Percent				
Answered	Near lowest priority	12	41,4				
Not answered	System	17	58,6				
Total		29	100,0				

As it is seen from the frequency tables, the most preferred service offered from the logistics service providers is domestic distribution with 55.2%; this service is followed by garment shipments and bonded warehouse & free trade zone services with 48.3% (both two are the same), air freight with 44.8% and the least percentage owned by the service of import clearance with 41.4%.

4. DISCUSSION OF THE RESPONSES AND FINDINGS FROM THE PRIMARY SURVEYS

4.1. Survey of Textile and Garment Apparel Firms (at Cesme)

With 29 out of 52 (a 56 % return) responding to this survey, all indicated that they had knowledge of or otherwise were involved in forms of logistics services and most of these were or had been engaged in these services activities within the recent past. Notably several respondents made reference to on-going and beneficial arrangements with other cost cutting activities.

As a result, a conclusion may be drawn which suggests the logistics services being offered may have applications in these two areas: (a.) with that already established business in need of gaining a more competitive advantage for its operations, and (b.) with the smaller and newer company charged with new operational challenges seeking information about which logistics services may be needed to determine advantages to its business operations.

The services demanded by textile and garment/apparel customers at the Cesma sessions include:

- international warehouse distribution services
- specialized container usage
- packaging
- bar-code labeling - control of the apparel error
- order processing and management, cargo services
- domestic cargo services, domestic air transportation
- domestic land transportation
- domestic sea transportation
- international air transportation
- international land transportation
- international sea transportation
- reverse logistics services
- customs clearance are mostly demanded from the textile
- apparel industry companies

4.2. Survey of Logistics Firms Offering Fashion Logistics Services to Textile and Garment Apparel Industry (at the ESBAS sessions)

With 29 out of 50 (a 58 % return) responding to this survey, all indicated that they had knowledge of or otherwise were involved in forms of logistics services and most of these were or had been engaged in these services activities within the recent past. Specifically, when asked to rank the importance of various logistics services to their customers, the first and highest priority was for "faster delivery and shorter transit times". The second highest ranked service drew more varied responses, with 30% citing "inventory management services", 30% citing "availability of air freight/air cargo shipping", and 30% responding "other" - the latter priority factors were generally indicated to be "price and cargo freight charges" and "shipping status information".

When asked to rank their customer business types by importance, 40% of the respondents cited the first most important customers were the multinational textile manufacturers; second were the garment/clothes manufacturers, selected by 50% of the respondents; a distant third ranking held by a small number of respondents (10%) included an array of customers within various sectors, as those in retail food/beverage, textiles and garment/clothes manufacturers, and electrical appliances producers.

These companies also ranked in order the fashion logistics services that are most important, i.e.,

- International distribution
- Shipment of garments
- Store delivery services
- Warehousing
- Domestic distribution
- Warehouse management technical systems
- Vendor management inventories
- Bar-code labeling
- Reverse logistics services
- Returns logistics
- Custom clearance and security scanning
- Multi-temperature storage
- Order processing assistance

Interestingly for the time being, there were no indications of any importance being placed on such services as:

- Warehouse management systems
- Computer systems/enterprise resources program (ERP)
- Vendor-managed inventories
- Computer on-line receiving
- Value-added services, like price tagging - clean / repair / press / iron garments, etc.
- Refrigerated warehouse section
- Re-labeling
- Primary collection of goods from the factory and later, secondary deliveries to retail outlets/direct customers

The services offered by logistics companies are

- domestic distribution,
- garment shipments,
- bonded warehouse & free trade zone service,
- air freight
- the import clearance.

In comparison of these supply & demand values, of significant note is that the services of

- import clearance,
- air freight
- domestic distribution are both demanded and supplied.

As a result, one may conclude that the supply chain and economies of scale are efficiently operating in these three areas.

However, the other services demanded are not being recognized by the logistics service providers and are not being provided / supplied efficiently nor effectively.

This span of services arranged by outsourcing may change at some point depending upon pressures brought by growing involvement within European Union supply chains. Those responding to the survey did reveal a great importance being placed on logistics services being offered to the textile and fashion apparel industry reflecting some of the trends and some indications of the new developing services noted earlier in this report.

Those logistics services being offered will benefit (a.) those already established logistics businesses in need of gaining a more

competitive advantage for their operations, and (b.) with the smaller and newer logistics companies charged with new operational challenges by seeking information about which fashion logistics services may be needed to determine advantages to their operations.

5. SUMMARY AND CONCLUSIONS

Examples drawn from the trade and industry press involving the study of empirical data from the textile and garment apparel industry and from the primary research surveys of both the leading textile and garment apparel firms in this industry as well as from the logistics services providers involved in meeting their customers' demands, suggests there is a growing awareness and appreciation of what the global markets will demand of these players in Turkey. Adaptations to this awareness are growing in the international global arena, yet many firms have not attempted to utilize this innovative approach to logistics activities in support of their customers' production, manufacturing and business support services (like warehousing, etc), while at the same time seriously giving thought to outsourcing alternatives.

Outsourcing offers a number of advantages. Primary among them is the potential to reduce a firm's overall costs by obtaining an improved return on operations. With continued pressure to reduce costs, strategically oriented planning managers must seek out and embrace new strategies and tactics that will help in achieving needed reductions. In addition, the impact of these strategies can significantly impact activities of other functional areas of the firm. A carefully conceived and cross-functionally integrated logistics services plan can help maintain efficiencies and competitive advantages and ensure that the firm's activities are future-directed.

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MEASURING THE EFFECTIVENESS OF CHANGES TO THE LOGISTICS OPERATION IN SUPPORT OF THE AGRICULTURAL FIRM'S PRODUCTS AND SERVICES - USING THE LEAN PROCESS OF "MAPPING" TO MEASURE PERFORMANCE AND CREATE VALUE WITHIN THE SUPPLY CHAIN

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ABSTRACT

An emerging trend to create value in the transaction of global business has brought claims of significant costs savings and increased logistics operational efficiencies gained through the use of lean processes - the cornerstone of total quality management (TQM). The study examines a primary research survey and empirical data from a multinational agricultural processing firm's use of the lean process tool of 'mapping' to demonstrate awareness and applications. Logistics warehousing planners tasked to take an aggressive and proactive posture in rooting out wastes and inefficiencies may want to consider lean process techniques by which to increase competitive advantage of the firm within the supply chain.

Keywords: TQM, Lean Processes, Agriculture, WMS, Material Handling, Warehousing.

1. INTRODUCTION

In periods of great economic stress, lean processes make advances, as witnessed by the activities from Toyota Motor Company in the 1950s, when they were forced to reduce their work force by 25% permanently and adopt their Toyota Production System throughout the company. Later as a result of the 1973 oil crises, the Japanese were forced to incorporate lean principles countrywide. With the recession of 1981-1982 when Toyota had its first entry into the U.S., American car companies began to look seriously at this new emphasis on lean processes [Jones, 1990]. The greatest advance for adaptation of lean came in the recession of 1991-1992 when there was wide acceptance by the aerospace industry, European motor industry and general manufacturing in many places [San Filippo, 2002].

With the global development of the supply chain has come the well-known phenomenon of lean processes when used in defining effectiveness and in achieving competitive advantage in the supply chain development process [Kemp, 2001]. An emerging trend in supplier-customer relations is the attempt to add value within the supply chain as a means to transact business on a global basis. Lean processes industry and educational groups have written of estimates of significant costs savings and increased operational efficiencies gained through the use of lean processes. International forums, workshops and seminars are conducted at growing frequencies to spread the word. While much has been written about global business attempts at improving supply chain networks in both business magazines and academic journals, articles and books specifically addressing the issues involved in the logistics warehouse planners attempt to enhance the agricultural processing

firm's competitive advantage within supply chains are virtually nonexistent in Turkey.

As a result, the researchers seek to explore the growing recognition, acceptance, adaptation and deployment in an organization's operations of lean processes - the cornerstone of total quality management (TQM). Thus, a basic purpose of this analysis is to explore the use of lean processes -specifically mapping- as a tool for measurement and as a strategy to the traditional methods of improving operational efficiencies, eliminating wastes and cutting costs within the firm's agricultural processes.

For this to occur, planners need to take an aggressive and proactive posture in rooting out wastes and inefficiencies by using the creative lean methodology of mapping techniques to find the firm's areas for improvement. Once the organizational processes are defined and mapped, management of the function over a period of time will result in savings and greater efficiencies. Supply chains, in principle, exist everywhere as corporations provide services, products, equipment and information flows [Stevens, 1989].

A mapping of the processes within the supply chain is used to search for inefficiencies, to assist in decision-making support systems, to identify areas negatively impacting costs and schedules and to illustrate relationships between the chain's members and the effects of logistics warehouse and distribution decisions on the agricultural processes.

The final step of mapping is to create and implement a plan for achieving the future state. Value stream mapping helps create a vision of a leaner future state by which all of the lean activities are deployed. Various improvements can be identified which involve moving operations closer together to facilitate the efficiency of communications. Once the wastes in the steps are eliminated, barriers are eliminated, thereby allowing a product -or service-oriented organization that will reduce lead times; this is improving the Material Flow process [Womack, 2004].

The resulting culture change benefits plant operations by increasing efficiencies, creating more useful space, improving the flow of work and material, optimizing the frequency of cargo pickup, storage and dispensing. Achieving the future state -also known as 'perfection'- is the process for TQM, made possible by adaptation to lean processes [Marchwinski, 2003].

2. PRIMARY RESEARCH SURVEYS TO DETERMINE LEAN AWARENESS, EXPERIENCE, ATTITUDES

To support this work, the researchers conducted a primary research (non-scientific) survey of business representatives that attended recent business sessions held at the Aegean Free Zone in Gaziemir - Izmir, Turkey. The survey was conducted among the attendees at the "Yalın Üretim Zirvesi 2004, Lean Processes and Continuous Improvement in Manufacturing Operations," in February, 2004. The survey was made to determine the level of awareness, past experience and attitudes of lean processes within business operations.

From the small number of firms responding to the survey, the respondents (professionals and managers of Turkish companies attending the lean processes sessions including interested local business representatives from such sectors as: medical, manufacturing, cosmetics, automotive, banking, construction,

government municipality departmental officials and staff) do deploy lean processes in Turkey. Although the lean processes approach is widely popular, with firms in attendance indicating some awareness of the processes, none reported on the results of their efforts.

In addition to commenting on past lean processes experiences and on familiarity with the lean manufacturing concepts and on awareness of such quality improvement processes in Turkey, the participants of the sessions were asked if their company/organization used lean or continuous improvement processes in the following functions:

- Transportation / Shipping
- Customer / Warranty Services
- Hazardous / Toxic Materials Handling / Disposal
- Logistics Communications & Information Technology
- Warehousing / Storage
- Procurement / Purchasing
- Customer Services
- Material Handling / Packaging
- Handling / Re-cycling of Returned or Out-Dated Goods
- Security
- Environmental Controls
- Manufacturing / Production
- Inspection / Quality Assurance / Quality Control
- Equipment Calibration
- Marketing/Business Development
- Water services

3. RESPONSES AND FINDINGS

With 12 out of 60 (a 20% return) responding to this non-scientific survey, all indicated that they had knowledge of or otherwise were involved in forms of lean processes and most of these were or had been engaged in lean processes activities within the recent past. Most significantly, all either agreed or are unsure or are neutral about the lean processes having a positive or favorable role in their business activity (this high volume of non-negative responses may reflect the perception of the need to improve efficiencies and solve waste problems and of the need for greater efficiencies in their operations). None of the attendees cited any disagreement for the inclusion of the lean processes in their business activities; they explained the rationale of already having cost cutting familiarity and some lean processes experience for some of the listed services. Not any of the meeting attendees had moderate or strong disagreement on the place for lean processes in the business operation (this volume of responses reflecting relative agreement for a role of lean processes in the business operations may be explained by the nature of the economic times wherein there is rising pressure to attain levels of conformance standards within the European Union entrance criteria in relation to Turkey's candidacy for membership).

Those reporting existing and past involvement with such lean processes report worthwhile business experiences and satisfaction in their dealings - however not necessarily for those services suggested in the survey. Notably several respondents made reference to on-going and beneficial arrangements with other cost cutting activities.

Most interestingly is the relatively low response rate of 20% (12 out of 60 firms attending sessions) - this was not considered a scientific survey. In keeping with a natural tendency not to reveal corporate

performance data or criteria to outsiders, the data received from the survey is considered statistically invalid; as a result detailed analyses and illustrations are not included in the report. Never the less, the attendance does reveal a great importance being placed on lean processes for the primary processes of production, manufacturing, inspection and warehouse functions.

As a result, a conclusion may be drawn which suggests lean processes may have applications in the two areas: (a) with those already established businesses in need of gaining a more competitive advantage for its manufacturing and logistics operations, and (b) with the smaller and newer companies charged with new operational challenges by which more knowledge about lean processes may be needed to determine advantages to their total business (both primary and support processes) operations.

4. ILLUSTRATION OF AN AGRICULTURAL PROCESSING FIRM'S UNDERTAKING OF THE LEAN PROCESS OF "MAPPING" BY THE LOGISTICS WAREHOUSE ORGANIZATION

The researchers engaged in the collection of empirical data from that of a global multinational entity's agricultural processing business unit in Turkey - dealing in local and imported agricultural based products, later undergoing local manufacturing processes; the firm, known here as Company X, will remain anonymous for purposes of this study. Examination and analysis of the data illustrates how lean processes can be incorporated into the logistics warehouse operational activities of firms and how they can be used as a means to improve competitive advantage. This work examines the use of lean processes by a firm's own attempts to improve its operation.

The experience of Company X provides a useful illustration of how lean processes applications within the organization can be used / deployed. Specifically, the following example focuses on the firm's use of mapping current and future states. While the agricultural processes of cargo handling, storage racks and dispensing are examined, the readily available "lean" application of the mapping methodology will also work for analyzing most agricultural production areas - such as bulk pressing for oils and juices, cleaning, spraying, drying, fertilizing and other such process activities.

A typical problem faced by many large firms is that of declining efficiencies, increasing costs and waste levels, schedule slippages and such problems. One alternative to remedy the situation is to cut right away headcount levels, marketing and promotional expenditures, freeze hiring plans and eliminate supervisory levels. Sometimes this can work only on a short-term basis, with the underlying inefficiencies remaining within the firm, unresolved. Another way is to deploy studies to adapt lean processes to the operation. This is how Company X of Turkey has set about their tasks at improving their operation.

5. THE ROLE OF THE LEAN VALUE SYSTEM

What should be the role and expectations of the lean processes manager with respect to the firm's efforts to improve its logistics warehouse operation? Getting started and making the most of lean process opportunities requires a learning process that suggests starting the learning process prior to the need by getting acquainted with the lean principals in several lean organizations (benchmarking) and study studies. There is a need to work closely

with the major contributors, i.e., the workers, on the adaptations to lean processes in the firm's environment.

The new initiative at Company X began with a re-organization and management changes, with special emphasis on leadership within a new Strategic Planning Operations Department. The previous organization had the functions of Engineering, Manufacturing Services, Production, Industrial Engineering, Operations Planning & Analysis and Continuous Improvement reporting to a vice president level. The new Strategic Planning Operations section now has the functions of Operations Planning & Analysis, Industrial Engineering and Continuous Improvement. The change reflects management emphasis on prioritizing the planning and analytical processes into all operations for maximum effect and for performance measurement and appraisal.

The methodology deployed by the firm involved the theme of "Strategic Positioning," by which to preserve what is distinctive about the company's operations - its core of excellence. The self-analysis was to identify the firm's unique capabilities and all associated activities in support of the operation, thereby creating "fit" for synergy of all operations; trade-offs and alternatives were identified for management consideration.

The self-analysis led to defining those activities being performed that were different from the competition. Customers' needs and accessibility were matched to the firm's activities. The resulting creation of fit set the goals for achieving competitive advantage in the global marketplace. Organizational goals have long-term horizons, and continuous improvement processes provided opportunities for growth and performance measurement. A roadmap has been designed in concert with the Mission Statement in acknowledgement of changing trends and modifications of strategies. Current individual group objectives were reviewed, validated, integrated amongst all other groups and prioritized in concert with the firm's mission statement. An action plan was laid out with performance time frame schedules and designated assignments.

6. CURRENT STATE MAPPING

The current state mapping (refer to Figure 1 - Current State of the Agricultural Warehouse Utilization Improvement Study) shows how production volume requirements drive logistics warehouse actions. In this specific case, the current state shows how material is stored with attendant flows located in the production area; the stock is uniquely stored as buffer stock within the conditioning process. Headcounts in the varying operations are based on and driven by production volume levels. Bottlenecks exist in machines directly supporting production processes and material flow and handling functions. Decisions for new machine acquisitions, identification and utilization of work sites, machine layout planning, material flow routings are mandated downward from the home corporate office to the firm's operations involving processes and workers.

The extent of such logistics warehousing activities, such as material flows and handling, production area cleaning and maintenance, storage, warehouse material handling, mechanized material issuance and distribution are determined and illustrated in the mapping graphic. In-house salaried headcount perform periodic maintenance upkeep, emergency repairs and production equipment operating rates and machine setups. The improvement study also facilitates planning for the outsourcing of certain segments of the

operation, i.e., material handling, equipment maintenance and calibration; it also assists in the decision-making processes for equipment make or buy decisions.

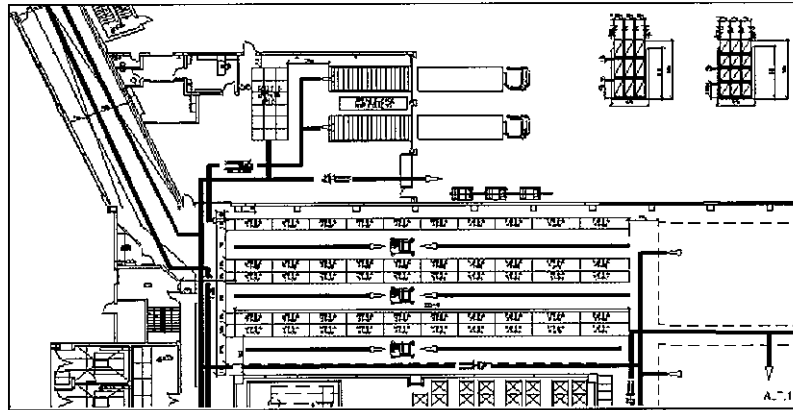


Figure 1. Current State of the Agricultural Warehouse Utilization Improvement Study (Single Deep Back to Back Racking for Buffer Stock)

Decisions for outsourcing are evaluated by supervisory level of the related operation and process. Production levels and activities, for example, processes dealing directly with plant facility services, workshops, water and waste water handling, are driven by marketing forecasts by the firm's technical staff. The production plan is prepared in accordance from forecasts of sales, stock and shipment requirements in consideration of in-house resources and change requests. Changes in production levels of certain product brands affect other product brand production levels. Production planning is prepared at intervals of weekly, monthly and annually. Bottleneck analyses are performed on an "as required" basis. Material/inventory stock spoilage affects return on equity performance. Production machine maintenance schedules are fixed.

The work improvement suggestion system collects inputs into manual database for supervisory evaluations, testing and implementation activities. The warehousing function is covered in this feedback system of performance measurement and appraisal. Rewards and recognition ceremonies are conducted. Other systems are set up to collect inputs, based on continuous improvement teams, ISO 9000 Corrective Action Requests, analytical trouble shooting teams and by departmental improvement activities on the shop floor.

Support of marketing and sales promotional initiatives is provided without due regard to work simplification, effective and optimal usage of inventory stock, machine production and attendant material flow and handling processes - all place undue burden on the existing production plan which drives logistics warehousing activities in support of production levels.

Supply chain management directives related to source selection and purchase commitments come from corporate office downward to each strategic business-operating unit. For instance, the routing of agriculture-based local and imported materials, for production requirements, travel from Brazil to Antwerp to Turkey - resulting in inefficient transport, material flow and handling processes.

The palletization system (involving full pallets) creates confusion and additional handling processes, resulting in wasted materials, added handling costs, flow inefficiencies, schedule delays and extra

work time within processes for access to distributors. Existing warehouse capability in Turkey is inadequate and inefficient to meet requirement of new integrated production plan. The Current State graphic in Figure 1 illustrates what is to be modified as a result of the Implementation Plan detailed below.

7. IMPLEMENTATION PLAN TO ACHIEVE FUTURE STATE

Existing processes are examined to determine where wastes can be eliminated and efficiencies can be created. Alternative plans are developed for acquisition, set up and integration into new processes. Performance measurement processes are applied on all equipment with headcount correlations with each process and activity. Analysis and identification of alternatives takes place for changes to equipments, headcount levels, and suppliers to achieve the Future State. A documentation trail of performance criteria for measurement is set up to identify areas in need of corrections/modifications of processes and implementation of changes.

Decision support systems are comprised of mathematical modeling and simulation, cataloguing, internet based collaboration with materials suppliers and with customers using intranet utilities for coordination and benchmarking methodology using industry news and intelligence, attendance at seminars and trade fair observations.

These analytical tools are deployed to critically examine specific material requirements in support of the production plan, manufacturing processes, feasibility plans for all changes, facility layout optimization, work simplification, standardization, material flow, movement and handling, traffic patterns production flow processes. With planning participants, an integrated production plan is prepared for all production processes, allowing the worker to input the processes, the time spans for uptime and downtimes and material handling and movement and storage. Headcount/manpower planning is coordinated to optimize uptime and production machine capabilities, limitations and to maintain optimal levels of warehouse inventory stock. The collective impact and effects of projected production level changes to all product brands are to be analyzed during the planning of production. All suggested changes for the redesign of processes would take into consideration the minimization of brand change. Processes in support of marketing and sales promotional activities will be coordinated within the integrated production plan.

A new suggestion system is prepared involving a pre-evaluation by direct supervisor of employee submitting the idea, then evaluation by specific work shop floor teams, which assign an alphabetic grade award, thereby simplifying the process and shortening the review and recognition cycle.

Production machine maintenance schedules will be developed to minimize down times, using in-house system methodology that provides for the Maintenance and Calibration Work Program that prioritizes checks in accordance with latest equipment and production standards and needed manpower levels for specifically designated work maintenance teams. All work will be in accordance with machine operation compliance standards and current and future production targets.

The strategic business-operating unit - based on results and experiences, drives supply chain management activities (this

represents a significant change to more involve the local business unit, in place of these levels of decisions being mandated from the head office in another country). Performance measurement and appraisals will be conducted using an Integrated Business Modeling & Design system. Studies are initiated to expand existing warehouse capability in Turkey in order to meet requirements of the new integrated production plan by initiating a warehouse utilization and material flow improvement study.

8. FUTURE STATE MAPPING

Areas and processes to be modified are illustrated in a future state graphic, Figure 2 - Future State of the Agricultural Warehouse Utilization Improvement Study, denoting results from the changes made to the material storage section within the production area - specifically for material being used as buffer stock within the conditioning process. Areas identified for changes involve specialization, work simplification, standardization, work layout improvements, and the transfer of work, workforce to suppliers, to competitors and to customers, as applicable.

Purchasing supports the outsourcing decisions by engaging in source qualification, contracting activities, transportation, warehousing and other logistics processes and activities. This mapping graphic demonstrates 'the future state' to be attained in support of the Implementation Plan cited above.

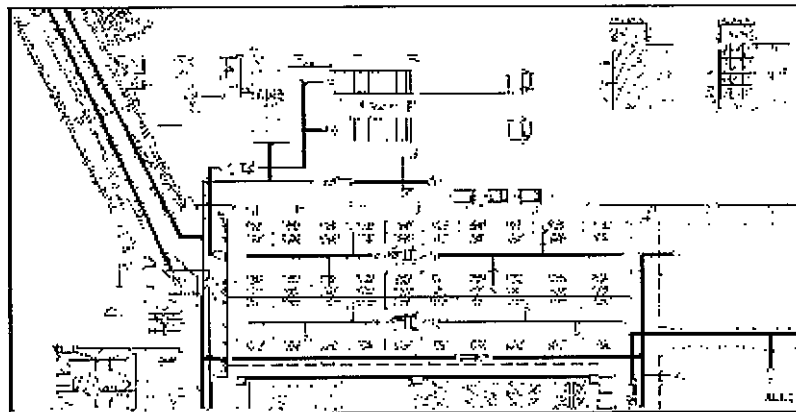


Figure 2. Future State of the Agricultural Warehouse Utilization Improvement Study (Double Deep Back Racking for Buffer Stock)

The routing of materials storage and flow is simplified for production travel direct from Brazil to Turkey - to improve and simplify transport and warehouse handling processes. This involves consideration for and examination of different routing possibilities, a new warehouse design and more effective usage of existing storage facilities and material handling equipment. The palletization system has been revised to incorporate mixed pallets for access to distributors, which will minimize confusion, handling processes, wasted materials, handling costs, inefficiencies in purchasing and supply management, schedule delays and work times. The strategic management function, at the local strategic business-operating unit, will incorporate decision support systems that will be locally available for applications in real time analyses, updates, revisions, database maintenance and upkeep.

9. SUMMARY AND CONCLUSIONS

Examples drawn from the trade and industry press and from the primary research survey, the study of empirical data from the multi-

national agricultural processing firm in Turkey and from the lean processes involved in developing the improvement actions for the logistics warehouse organization have been studied. It is suggested that industry strategic planning professionals can utilize lean processes within the organization, as part of their cost containment initiatives and simultaneously add value to their companies' product or service offerings - and ultimately to the firm's competitive advantage.

It should be emphasized that lean processes - particularly the mapping of processes of the current state and that of the desired future state, can be an extremely beneficial alternative methods of operational planning for the logistics warehouse organization. Adaptations to lean processes in the organization are growing in the international global arena, yet many agricultural firms have not attempted to utilize this innovative approach to the operational activities of production, manufacturing and business support services (like warehousing), while at the same time seriously giving thought to outsourcing alternatives.

Lean processes offer a number of advantages. Primary among them is the potential to reduce a firm's overall costs by obtaining an improved return on operations. With continued pressure to reduce costs, the strategically oriented planning managers must seek out and embrace new lean tools and processes that will help in achieving the needed reductions. In addition, the impact of lean processes, such as mapping of agricultural processes can significantly impact the activities of other functional areas of the firm. For example, multi-national sites for material sources and for production processing often creates problems when cost cutting goals become the major program emphasized. A carefully conceived and cross-functionally integrated lean process plan can help maintain efficiencies and competitive advantages and ensure that the agricultural firm's activities are future-directed.

While the various approaches to lean processes activities do not represent a panacea for the problems of material and logistics managers, they do hold significant potential for creative corporate problem solving in many situations. Planning managers who have not examined these approaches may be overlooking opportunities to add significant improvement to their agricultural firm's level of competitive advantage.

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ORGANIC FARMING IN TURKEY- DEVELOPING THE BASIS FOR BENCHMARKING TURKEY'S ACTIVITIES AS A STRATEGY WITHIN TQM TO GAIN COMPETITIVE ADVANTAGE IN THE GLOBAL MARKETPLACE

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ABSTRACT

With tremendous cultural and marketing pressures acting upon the farm producer, there is the need to develop the rationale for investing in the cultivation of crops and the need to minimize the risk of loss of opportunity that may arrive at harvest time when there may not exist a market for readily perishable fruits and vegetables. The unknown factor of uncertain markets and trendy consumer habits - some trading health for the convenience of fast foods traits - held by many of today's consumers can negatively impact some of the various other value improvement processes brought about by many handlers and distributors along the way to the fast food, convenience and health conscious food buyer markets. How to anticipate the worthwhile nature and the likelihood for success of Turkey's efforts to create value-added processes and services associated with organically-farmed (OF) crops - the subject of this research work - is not widely appreciated nor understood by many.

To meet customer market potentials for the organic crop, the researchers have examined the critical factors / problems to be solved in achieving competitive advantage in the global marketplace for organically grown food crops. Given the pressures to be creative and find new ways to achieve the nation's export goals, the researchers conducted both a primary research survey through personal interviews with a multinational organic agricultural farm crop association representing crop growers and processors, with an expert possessing 'corporate memory' on the introduction of OF and its subsequent stage of development we see today, as well as, an analysis of related empirical data collected from trade media about organic farm crop development and processing programs for both domestic production and export activities.

A review of both the academic and business-oriented literature reveals that there is a growing recognition, acceptance and deployment of certain processes in organic agricultural operations; these activities include designing changes into the processes and into the marketing efforts that deal with customer attitudes and preferences - such as health, ecological and environmental concerns. It is suggested that agricultural crop planners dealing in organic farming in Turkey can utilize certain analytical processes, such as "benchmarking" - a component closely aligned with Total Quality Management (TQM), to demonstrate the advantages of organic agricultural farming to contain new product and processes development costs and simultaneously add value to their product or service offerings - in essence those products that are part of their country's natural resources base.

Keywords: Agricultural Crops, Benchmarking, Soil Conservation, Ecological Problems, Organic Farming, Environmental Measures.

1. INTRODUCTION

Organic farm agriculture is a crop production system that promotes environmentally, ecologically, socially and economically sound cultivation of food and fibers, and excludes the use of synthetically compounded fertilizers, pesticides, growth regulators, livestock feed and additives and genetically modified organisms. Utilizing both traditional and scientific knowledge, organic agricultural systems rely on practices that promote and enhance biodiversity, biological cycles and soil biological activity. It is based on minimal involvement

of off-farm inputs and on management practices that restore, maintain or enhance ecological harmony. The purpose of organic farm agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people. Organic farm agriculture is based on generally accepted principles which are the bases for social, economic, geo-climatic and cultural contexts (www.ifoam.org).

Organic farming is a production system which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators and livestock feed additives. To the maximum extent feasible, organic farming systems rely on crop rotations, crop residues, animal manures, legumes, green manures, off-farm organic wastes, and aspects of biological pest control to maintain soil productivity and tilth (tillable cropland), to supply plant nutrients and to control insects, weeds and other pests. It should be emphasized that the organic label certifies that a product has been produced in a particular way; it is not a guarantee that it has certain desirable qualities. In other words, organic standards are based on the method of production, not on the characteristics of the finished product. Yields from organic farms are generally lower than from conventional farms. The question of yields is explored more fully in paragraph 57, but as a rough guide, which takes no account of differences between sectors, organic yields are on average around 60-70% of conventional yields (Organic Farming and the European Union, 1999).

Organic agriculture in Turkey began in 1984-1985 to meet the demand of a few European countries. During this period traditional exported products were primarily dried figs and raisins. Beginning in the 90s, exports were few in number with exporters working with agencies representing foreign firms.

Izmir and the Aegean region have an important place in OF agriculture in Turkey. The first organic farming activities began in Izmir -Aegean Area, started by the Rapunzel Company of Germany. As a result, most organic / ecological processing institutions in Izmir have responsibilities for issues dealing with controls and certifications; most of the products are exported from the Port of Izmir. Figure 1 offers a portrayal of the significance of the Aegean area on organic farming.

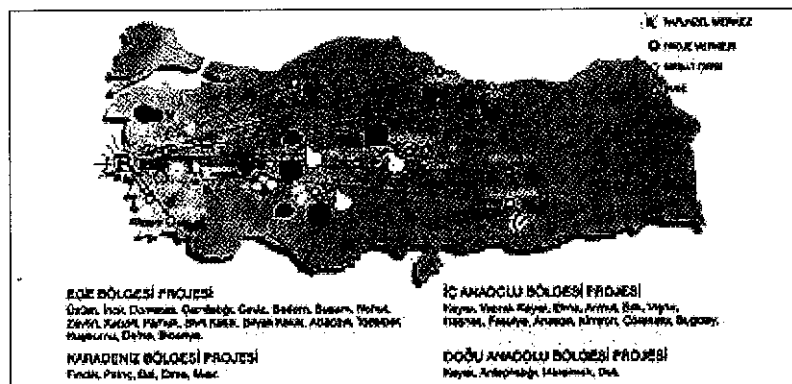


Figure 1. Portrayal of Organic Farm Activity in Turkey
(Source: Website: <http://www.rapunzel.com.tr/iletisimng.htm>)

Advantages to the OF sector of Turkey include:

-Chemical and synthetic chemicals are only rarely used in Turkey, so the shift from traditional to organic agriculture has gone without major adjustments

- Organic agriculture provides savings from non-use of chemical fertilizers, pesticides, and energy inputs
- Exported organic products, on average, cost 10-20% more than traditional food products resulting in a higher added value in the crops for export

The production of dried produce in Turkey includes figs, raisins, hazelnuts and apricots. The volume of processed organic products in Turkey has increased in recent years. Worldwide, the volume in dollars and tonnage is approaching that of other export categories, such as furniture, cosmetics, shampoo, fishery and wool materials. According to data from the Ministry of Agriculture, there are 7,364 producers, performing processing activities on areas totaling 22,771 hectares by 829 enterprises. 98% of organic products produced in Turkey are being exported. Germany receives 60% of the Turkish organic products exported; the balance is exported to the U.S. and other European countries. Annual export revenue is approximately USD\$ 100 million.

It is estimated that the world market for organic farm products is about US\$16 billion; annually the average market increase is 25%; some countries are experiencing a growth rate of 40%. In 120 countries (Australia, Argentina and Italy are the top 3), organic farming occupies a total composite area of 17 million hectares. Organically grown food products account for just 3% of the world agriculture. The number is expected reach 20% in 2010 by some accounts. For the time being, only 1.8% of food businesses sell organic products.

Trade magazines and industry news accounts indicate that European agricultural groups are increasing their efforts to make agricultural investments in Turkey, while taking steps to switch their investments from Spain and Africa - perhaps in response to the long term prospects for entry into the EU. Trade news media report that these foreign investors are planning to cultivate organic fruits and vegetables in the Aegean Region, organically dried beans in the Middle Anatolia regions and fodder silage in the East Anatolia region. Some interests are being shown in support of organic fish production projects sponsored by the Ministry of Agriculture. With the advent of such efforts in the agricultural sector, the agricultural and marine farm producers are engaged in fitting into the supply chain to service the growing mass market demand for organically grown and processed food products (www.turkishdailynews.com; www.ifoam.org).

With the likelihood of progress being made by Turkey to enter the European Union (EU) in the coming period, there is increasing speculation about what the agricultural contribution will be from this addition to the European membership (<http://www.turkishdailynews.com/FrTDN/latest/dom.htm#d3>). For this speculation of the increasing importance of Turkey's contribution to materialize, planners need to take an aggressive and proactive posture in rooting out problems using creative analytical methodologies and techniques to find the areas for improvement. Once the processes are defined and understood, management and oversight of this activity, over a period of time, will result in savings and greater efficiencies. Supply chains, in principle, exist everywhere as corporations provide services, products, equipment and information flows (Stevens, 1989).

With the today's global challenges influencing all aspects of the supply chain network, business planners have been working to understand the tie-in between their own organization's goals and

objectives with that of Total Quality Management (TQM) and its concepts. This interest has not escaped the attention of the agricultural sector. The process of 'benchmarking' has received some degree of recognition in these efforts due to the rational process inherent in the use of this TQM tool.

A benchmarking of the processes within the organic agricultural farm sector permits a search for inefficiencies and problem solving, while contributing to decision-making support systems; the results can assist in identifying areas negatively impacting quality, costs and schedules objectives and in illustrating relationships between the supply chain's members for improvements. Ultimately, the objective of benchmarking is to prove that improvements in current processes and activities have been achieved.

The resulting changes can benefit agricultural operations by increasing efficiencies, improving the quality and creating added value while increasing the flow of materials. Achieving these improvements in organic agricultural farming is the process for TQM, made possible by adaptation to such evaluation and improvement processes [Marchwinski, 2003].

As a result, the researchers seek to explore and evaluate the applicability of a 'fit' of generally accepted criteria dealing with problem solving and resolution into this analysis of the 'benchmarking' of Turkey's standing and activities within organic farming, in consideration of its growing recognition, acceptance, adaptation and deployment of OF activities for the global marketplace.

2. PRIMARY RESEARCH SURVEY - THROUGH PERSONAL INTERVIEWS - TO DETERMINE AWARENESS, EXPERIENCE, ATTITUDES TOWARD EVALUATION OF BENCHMARKING CRITERIA

To support this work, the researchers conducted personal interviews with organic agricultural farm representatives working in Izmir, Turkey. The non-scientific survey was conducted among those directly involved in programs to improve quality and crop yields in various areas, in accordance with international standards of organically grown produce. The survey was made to determine the level of awareness, past experience and attitudes of the TQM's benchmarking processes within business operations.

From those responding to the oral survey through personal interviews, the respondents do not deploy benchmarking processes in Turkey. Although the benchmarking processes approach is widely popular, none of those being interviewed reported any significant experience or efforts made within this area of TQM.

In addition to commenting on the awareness of certain quality improvement processes in Turkey, the participants at the interview sessions were asked if their organization/association used any benchmarking evaluation or continuous improvement processes in the following functions:

- New organic crop sowing and harvesting processes
- Chemical fertilizers and insecticide spraying alternatives
- Productivity yields and production levels related to organic processes
- Access to new markets
- Environmental controls
- Soil treatment and preservations measures

- Irrigation techniques and water resources
- Crop management and rotation
- Government subsidies and incentives
- Supply chain awareness
- Market forces
- Strategic alliances and partnerships
- Technology transfers
- Inspection / quality assurance / quality control
- Land and conservation practices
- Impact of long term climate changes

While there appeared to be some general awareness of developments in these areas during the interviews, no connection with TQM or benchmarking was formed at the time of the discussions.

3. INTERVIEW RESPONSES AND FINDINGS

With two agricultural representatives responding during the interviews, none indicated that they knew of or were involved in any forms of benchmarking processes; none had been engaged in benchmarking processes activities within the recent past.

Most significantly, all either agreed or are unsure or are neutral about the benchmarking processes having a positive or favorable role in their business activity. (This high volume of non-negative responses may reflect the perception of the need to improve efficiencies and solve waste problems and of the need for greater efficiencies in their operations.) None of the industry representatives cited any disagreement for the inclusion of the benchmarking processes in their agricultural business activities; they explained the rationale of already having technical evaluations and improvement in processes but not necessarily with any of the listed functions. Not any of the meeting attendees had moderate or strong disagreement on the place for benchmarking processes within the organic farming business operation. (This volume of responses reflecting relative agreement for a role of benchmarking processes in their organic farming operations may be explained by the nature of the increasing pressures to attain levels of conformance standards within the European Union entrance criteria in relation to Turkey's candidacy for membership.)

As a result, a non-scientific conclusion may be drawn which suggests benchmarking processes may have applications in those already engaged in organic farming processes, and who are in need of evaluating improvements in their OF operation to prove that these improvements actually have been achieved.

4. USING THE TQM PROCESS OF "BENCHMARKING" FOR ORGANIC FARMING

In addition to the interviews, the researchers engaged in the collection of empirical data pertaining to that of a company engaged in organic agricultural processes in Turkey, Germany's Rapunzel Company in Izmir. The company deals in local and imported organic based products. Examination and analysis of the data illustrates how benchmarking processes can be incorporated into problem solving activities and how they can be used as a means to apply toward the evaluation of Turkey's fit and activities in this sector.

A typical problem faced by many companies is that of being able to document that control measures and processes implemented to improve the quality of their operation and to solve problems have

been successful. One alternative to achieve some visibility is by adapting benchmarking processes to the operation. This is how those organic farming representatives in the Aegean area may set about their tasks at improving their operation. This analysis provides a useful illustration of how benchmarking processes applications may be used / deployed. Specifically, the following example focuses on the sector's use of benchmarking for evaluating and documenting the status of problems and barriers to Turkey's organic farming activities.

5. THE ROLE OF THE BENCHMARKING EVALUATION PROCESS

What should be the role and expectations of the organic farm planner with respect to their efforts to evaluate and prove that achievements for improvement did occur? Getting started and making the most of benchmarking process opportunities requires a learning process that suggests starting the learning process prior to the need by getting acquainted with the principals in the organic farm organization (benchmarking) and with existing research studies. There is a need to work closely with the planners and the workers, on the adaptations to benchmarking processes in the organic farm's environment.

This new initiative may begin with an examination of the current processes which, in and of itself, may lead to improvements. Soon it may be realized that this process can lead to acceleration for change; it may be a way to further develop an organic farming program within a dynamic and constantly changing environment. During this process, the planners may introduce themselves to ways to improve their program, by looking outside, to other such programs. As a result, they may feel they are able to avoid the uncertainty of new experimentations in areas, as yet untested by them; why make expenditures and invest time and money on problems to be solved when someone else may have achieved success in that area already and oftentimes better, faster and cheaper? Ultimately, the objective of benchmarking is to portray that improvements in current processes and activities have been achieved (Waterfield, 2003).

6. BENCHMARKING - A KEY ELEMENT WITHIN TQM

Benchmarking refers to a process wherein an entity (organization, company or country) seeks to compare its own processes and products to those of the best in the world; afterwards it must then try to achieve the same level or consider not continuing. With these changes, the entity must seek to engage its workforce to continuously improve to maintain a leadership position (Waterfield). With this understanding of the nature of benchmarking, the methodology deployed by the researchers involves the analyses of data (criteria and factors) taken from the website: www.ifoam.org, (Information Federation of Organic Agriculture Movements - IFOAM), wherein some 24 factors and criteria - each with various sub-groupings - are listed each bringing with it definition of problems, solutions, and a grade evaluation as to the relevance to an EU database. The researchers assigned values to these same classifications in terms of the degree of relevance, i.e., "3" for 'high relevance, "2" for certain / moderate relevance, and "1" for conditional relevance depending on circumstances. In an effort to manage the analytical comparisons, the 24 factors / criteria were consolidated down to four (4) major groupings / rows being impacted by the organic farm agricultural sector as follows:

- Cultural / Social Health Well-being
- Environment
- Farm Producers' Operational Efficiencies
- Market Demands and Economic Forces

Each of these major groupings were then assigned a weighted composite value by which to compare similarly grouped and consolidated benchmarking criteria for analyzing Turkey's unique problem areas with attendant solutions within the organic farming sector. The researchers determined weighted composite values in each grouping - the values coming from an assignment of the values of 1, 2, or 3 to coincide with the X?, (X), AND X relevancy designations, respectively, in the IFOAM website provided table.

In this analysis, specific areas are codified as problems to be solved. This is followed by the solutions and remedial / positive measures to be taken. Factors denoting relevance to the norm (as presented in the IFOAM guidelines) are compared to factor relevancy arrived at by the researchers through interviews with the German Rapunzel Company in Izmir, with interviews with other industry trade experts and analyses of industry sector data and the trade media. The benchmarking study (shown in Table 1) posits those factors that form the benchmarking process of TQM in this report.

For example, to avoid having to deal with the IFOAM grouping of 24 factors, further broken down in another 75 sub-groupings within the IFOAM guidelines, the factors considered within the benchmarking process of TQM are consolidated into four major categories to assist in clarity and brevity, each with sub-groupings totaling 34:

- "Cultural/Social Health Well-Being" (pesticides-3, antibiotics-3, pollution-3, genetically modified organisms (GMO)-3, degree of awareness of bio-diversity-3, urban migration-2, revitalization values-1, food supply and social health-3)
- "Environment and Ecology" (pesticides-3, agrochemicals-3, pollution-3, degree of bio-diversity-3, deforestation-1, forestry replenishment-3, soil degradation-3 and erosion-3)
- "Farm Producers' Operational Efficiencies" (soil condition-3, biological controls-3, green revolution-3, low profits-1, value added activities-3, market-oriented production-3, low cost production labor and resources-3, use of natural resources-3, recycling-3, crop nutrients and production cycles-3, small farmer survivors-1)
- "Market Demands and Economic Forces" (foreign exchange-1, currency markets-1, import / export valuations-1, environmental certifications-3, market information-3, creation of value for achieving competitive advantage-3)

Table 1. Factors Considered Within the Benchmarking Process of TQM
(Source data taken from Gunnar Tundgren, IFOAM President/Sweden, www.ifoam.org)

Problems to be solved - Metric	Solutions / Positive measures	Relevance of organic agriculture	
		3= high relevance 2= certain relevance 1= relevance depending on conditions	
		EU	Turkey
Cultural / Social Health Well-Being	No use of chemical pesticides	3	2.1
	No use of antibiotics	3	2
	No pollution	3	2.2
	No Genetically modified organisms (GMO)	3	1.5
	Degree of awareness of bio-diversity	3	1.5
	Urban migration	2	2.5
	Re-vitalization values	1	2
	Food supply concerns	3	1.5
	Social health concerns	3	2
	Average weighted values	2.63	1.92
Environment and Ecology	No use of pesticides	3	2
	No use of agrochemicals	3	2
	Pollution	3	2.5
	Degree of biodiversity	3	1.5
	Deforestation	1	1.5
	Support for forestry replenishment	3	1.8
	Soil degradation awareness	3	3
	Erosion of soils	3	2.6
	Average weighted values	2.75	2.6
Farm Producers' Operational Efficiencies	Soil condition	3	3
	Biological controls	3	2.5
	Green revolution	3	2
	Low profits	1	2.5
	Value added activities	3	2
	Market-oriented production	3	2.2
	Low cost production labor and resources	3	3
	Use of natural resources	3	2.5
	Recycling	3	1.5
	Crop nutrients and production cycles	3	3
	Small farmer survivors	1	3
	Average weighted values	2.64	2.47

Market Demands and Economic Forces	Foreign exchange	1	3
	Currency markets	1	3
	Import / export valuations	1	3
	Environment certifications	3	3
	Market information	3	2.4
	Creation of value for achieving competitive advantage	3	1.5
	Average weighted values	2.00	2.65

7. EVALUATION OF BENCHMARKS ESTABLISHED AND FINDINGS REACHED

In looking at the comparative values in an effort to address and explain deviations and differences to the 'norm' of the EU relevancy factors/criteria, we can arrive at certain observations:

Within the first segment of "Cultural/Social Health Well-Being," it is reasonable to expect differences of the relevancy of the factor criterion between the EU and that of Turkey. One explanation is the perceptions and the levels of consciousness between the population entities. Comparing the first grouping, i.e., that of 'cultural health and well-being,' the differences are clearly indicated and point to the greater awareness and appreciation for the non-use of chemicals by the EU versus that by Turkey, the latter assigning only 'average importance'. With the lower scoring by Turkey in concern for a better environment and healthful well-being - as compared to the EU at large - there may be an indication that there is not yet a grand appreciation by its citizenry in this area. This may give an indication that the current level of interest in the development, growth and general acceptability of OF in Turkey may hinder greater achievements in the reversal of urban migration, given that one third of the population work in the agricultural sector. However there is evidence that there may be a growing appreciation for healthier food and environment, as reflected in the comparative values.

Within the second segment of "Environment and Ecology," the focus is on the well-being of the general public (municipalities, organizations for the public good and such) rather only that of individual (family unit and such) as indicated within the first segment. Once again the average weighted value falls below that of the EU with similar observations and findings.

Within the third segment of "Farm Producers' Operational Efficiencies," the observations may appear to be more promising. In consideration of healthy profit growth and low cost of factors of production, Turkey seems to be on a course to achieve world class status as indicated by the comparison between the EU and Turkey. Further substantiating the findings in the above illustrated benchmarking table are the interviews with industry and academic experts in the field. In this segment, Turkey seems closely in synchronization with that of the EU. The data suggests that the Turkey's small farmer (SME's) may gain more than that of the European Union.

Finally within the fourth segment, "Market Demands and Economic Forces," not surprisingly, there is the anticipated evidence of the anomaly of different economic fortunes that have developed over the years for the two entities. This shows the clear differences in attention being played on the relevancy of the attendant factors - the

EU with a readily exchangeable and internationally traded foreign currency, infrastructures already in place for certifications of marketable goods and services, and the intense attention being placed upon the creation of value between and amongst the elements of supply chains.

8. SUMMARY AND CONCLUSIONS

As the result of the benchmarking analysis of the previous section, it appears that there is an overall favorable rating for Turkey; the ratings pertaining to their awareness gives indication of the favorable pre-disposition by Turkey toward a 'bias for action' to identify problems, seek positive solutions and to prioritize their activities in concert with that of the IFOAM guidelines.

Examples drawn from the trade and industry press and from the interviews conducted as the primary research survey and from the study of empirical data from the multi-national corporation in Turkey have been studied. It is suggested that OF industry strategic planning professionals can utilize benchmarking processes within the organization, as part of their evaluation and attempts for changes made to prove that improvements have been achieved, so as to illustrate that efforts to improve their farm's product or service offerings have added to the firm's competitive advantage.

It should be emphasized that TQM processes - particularly that of the benchmarking of processes - can be an extremely beneficial alternative methodology for planning within the OF operation. Opportunities and adaptations for benchmarking processes in the agricultural sectors are growing in the international global arena, yet many firms have not attempted to utilize this innovative approach to their efforts at improving their contributions within the supply chain.

Benchmarking processes offer a number of advantages. As a key tool of TQM, it allows us to avoid the uncertainty of new experimentations in problem areas, as yet untested by others; why make expenditures and invest time and money on problems to be solved when someone else may have achieved success in that areas already and oftentimes through better, faster and cheaper solutions and approaches? With TQM we are able to continuously improve the processes and benchmarking gives us a tool to measure Turkey's status and activities in the organic farming sector.

With continued pressure to implement changes for improved operations, the strategically oriented planning managers must seek out and embrace new tools and processes that will help in achieving their goals and objectives. While the various approaches such TQM processes activities, such as benchmarking, do not represent the ultimate solution to the problems of OF planners, they may instill significant potential for creative problem solving in many situations. Agricultural planning managers who have not examined this approach may be over looking an opportunity to add to their firm's level of competitive advantage.

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USING THE LEAN PROCESS OF MAPPING TO DEMONSTRATE THE ADVANTAGES OF CULTIVATING A NEWLY DESIGNED HYBRID CORN FODDER BY THE AGRICULTURAL FARM CROP PRODUCER TO GAIN COMPETITIVE ADVANTAGE IN THE GLOBAL MARKETPLACE

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ABSTRACT

A nation's ability to produce agricultural goods and services for the international marketplace has long served as the measure of its natural, technical and human resources bases. With the importance of meeting agricultural and farm commodity goals has come the recognition for development of the supply chain network to define effectiveness and to achieve competitive advantage through total quality management (TQM). A review of both the academic and business-oriented literature reveals that there is a growing recognition, acceptance and deployment of lean processes, as the basis for TQM, in the firm's operations.

Given increasing pressures to contain costs, agricultural management and planning personnel need to be creative and find new ways to achieve their goals. In addition to using examples drawn from the trade press, the researchers conducted both a primary research survey through personal interviews of Turkish agricultural growers and business representatives, as well as an analysis of related empirical data collected from a large multinational agricultural processing firm engaged in crop development, hybrid programs, domestic production and export activities in Turkey.

With the deployment of the lean process of "mapping" on a hybrid corn seed program, it is suggested that agricultural crop planners can utilize lean processes to contain costs and simultaneously add value to their product or service offerings to the international farm products and commodities that are products of their country's natural resources base.

While much has been written about global business attempts at improving supply chains in both business magazines and academic journals, articles and books specifically addressing the agricultural processing firm's attempts to use the lean process of mapping for measuring the performance and effectiveness of hybrid seed programs are virtually nonexistent in the country of Turkey. Thus a basic purpose of this research work is to explore the firm's attempts to improve operational efficiencies, eliminate wastes and cut costs. However for this to occur, planners may want to consider the use of the creative methodology of mapping to gain competitive advantage in global business.

Keywords: Agricultural Program, Lean Processes, Mapping, Competitive Advantage, Hybrid Seed Programs, Supply Chain.

1. INTRODUCTION

With each passing day, civilization is threatened by global warming, air and water pollution, unplanned urbanization, technological wastes - all caused by excessiveness and without regard to environmental consequences; all are formidable and hazardous behavioral factors to our survival.

It has become increasingly difficult to feed and care for the rapidly growing world population despite the quantities of lands available for cultivation and various governmental regulations aimed at land stewardship and well-meant agricultural improvement initiatives. With the inadequacy of the volume of agricultural produce, the quality of the produce is also questionable. It's a fact that in the next century, in addition to the shortages in energy sources, nourishment of people and animals will be a big problem (U.S. Grains Council, 2001).

World governments and agricultural authorities charged with the responsibilities must take remedial measures in order that they do not lose their self-sufficiency thereby forcing them to import much of their foods. Within most countries the national agricultural industries producing wheat and corn are at the top of the list in nourishing both human and livestock populations. Never-the-less, we are having difficulty in serving our needs even though these two crops are cultivated as primary and secondary crops in ecologically suitable areas. This research work has as its objective to illuminate the options for developing a particular type of fodder crop for fowl production in Turkey that will best suit the needs of planners for the most efficient and productive development of the natural resources within the country.

2. PRIMARY RESEARCH SURVEY TO DETERMINE LEAN AWARENESS, EXPERIENCE, ATTITUDES

To support this work, the researchers conducted personal interviews with agricultural business representatives working in Izmir, Turkey (Levy, 2004). The non-scientific survey was conducted among those directly involved in an agricultural hybrid seed program to improve quality and crop yields in various areas. The survey was made to determine the level of awareness, past experience and attitudes of lean processes within business operations.

From those responding to the oral survey through personal interviews, the respondents (agricultural professionals and managers) do not deploy lean processes in Turkey. Although the lean processes approach is widely popular, none reported any significant experience or efforts made within this area of quality management (Levy).

In addition to commenting on awareness of certain quality improvement processes in Turkey, the participants at the interview sessions were asked if their company/organization used lean or continuous improvement processes (specifically, mapping) in the following functions:

- New hybrid crop design and development
- Productivity yields and production levels
- Access to new markets
- Environmental controls
- Crop management and rotation
- Government subsidies and incentives
- Supply chain awareness
- Market forces
- Strategic alliances and partnerships
- Technology transfers
- Farm manufacturing / production
- Inspection / quality assurance / quality control
- Land and conservation practices
- Irrigation services and water resources
- Impact of long term climate changes

3. INTERVIEW RESPONSES AND FINDINGS

With 4 agricultural representatives responding during the interviews, none indicated that they had knowledge of nor otherwise were involved in any forms of lean processes; none had been engaged in lean processes activities within the recent past.

Most significantly, all either agreed or are unsure or are neutral about the lean processes having a positive or favorable role in their business activity. (This high volume of non-negative responses may reflect the perception of the need to improve efficiencies and solve waste problems and of the need for greater efficiencies in their operations.) None of the industry representatives cited any disagreement for the inclusion of the lean processes in their agricultural business activities; they explained the rationale of already having cost cutting familiarity but not with any of the listed services. Not any of the meeting attendees had moderate or strong disagreement on the place for lean processes in the business operation. (This volume of responses reflecting relative agreement for a role of lean processes in the business operations may be explained by the nature of the economic times wherein there is rising pressure to attain levels of conformance standards within the European Union entrance criteria in relation to Turkey's candidacy for membership).

As a result, a non-scientific conclusion may be drawn which suggests lean processes may have applications in two agricultural areas: (a.) with those already established businesses in need of gaining a more competitive advantage for its manufacturing and logistics operations, and (b.) with the smaller and newer companies charged with new operational challenges by which more knowledge about lean processes may be needed to determine advantages to their business operations.

4. ILLUSTRATION OF AN AGRICULTURAL PROCESSING FIRM'S UNDERTAKING OF THE LEAN PROCESS OF "MAPPING" BY THE LOGISTICS WAREHOUSE ORGANIZATION

The researchers engaged in the collection of empirical data from that of a global multinational entity's agricultural processing business unit in Turkey - dealing in locally produced and imported agricultural-based hybrid seed products, later undergoing local manufacturing processes; by the firm is identified as Ayber Tohumculuk Ltd. Şti of Manisa, Turkey; within this research report, henceforth, the company will be referred to as the "Ayber Seed Company". Examination and analysis of the data illustrates how lean processes can be incorporated into the agricultural farming activities of firms and how they can be used as a means to improve competitive advantage. This work examines the use of lean processes by a firm's own attempts to improve its operation.

The empirical data reflects a review from participants in the planning process for including the HOC corn production into the company's operation.

In Turkey, corn is in a different situation from that of wheat; every year Turkey imports this crop in amounts equal to our exports. Imported without regard for quality standards, most of this corn product is used for the nourishment of animals and results in significant loss of precious foreign currency. The quality of corn being used as fodder is very important. Selected types of corn having high values of oil and proteins, known as HOC (high oil corn), are used in many countries.

With this realization the Turkish grain and fodder production company, Ayber Seed, has brought to the country a hybrid corn seed (GS 308 AYB 936) having high content values of oil and protein (Levy). Corn as an agricultural product is generally important for Turkey's economy and specifically for its fodder industry.

But why HOC corn? The rationale exists in the willingness of industrialists and consumers to use a product with beneficial, advantageous results and returns. HOC corn contains more oil and protein than other corns. Easily digestible, the quality of protein/oil in a kernel is higher. The oxidation factor of protein / oil in corn kernels is close to zero. HOC corn kernels with significant roughage are not transgenic.

The quality of protein/oil that is used in fodder is very important. With HOC the stored energy in kernels is very high. High metabolic energy (ME) in fodder substitutes and makes up for corns that contain low values of oil from corn consumed from unknown sources. A great content of poor quality oil increases the cost of fodder and negatively affects the quality of fowl production. The HOC corn mixes well with other ingredients during the fodder production processes. A high quality fodder is achieved because of an absence of dust particles. Broiler chickens - fed with HOC corn - develop muscles containing a fatty acid with a non-saturated fat profile. A high quality natural fodder means low cholesterol levels in meat production and subsequently healthy nutrition for consumers (U.S. Grains Council).

Additional advantages may accrue, including healthier fowl, a more disease-resistant corn crop, higher crop yields and a corn product with more oil and cellulose. Another possible result may be the general improvement and upgrade within the crop farmer's operations. With the use of corn containing HOC with its high levels of oil and protein in fodder, benefits accrue to the industry, the producers, to the animals that feed on the HOC corn, and ultimately to the consumers who consume the fowl (Duxbury-Berg, 1999).

The experience of the Ayber Seed Company provides a useful illustration of how lean processes applications within the organization can be used / deployed. Specifically, the following example focuses on the firm's design and implementation of a hybrid seed program as it is illustrated using the process of mapping current and future states. While the agricultural processes of the hybrid corn (HOC) are examined, the readily available "lean" application of the mapping methodology will also work for analyzing most agricultural production areas - such as crop rotation practices, land conservation measures, crop yields, bulk pressing for oils and juices, cleaning, spraying, drying, fertilizing and other such agricultural process activities.

A typical problem faced by many large agricultural firms is that of declining efficiencies, increasing costs and waste levels, schedule slippages and such problems (Kemp, 2001). One alternative to remedy the situation is to cut right away headcount levels, marketing and promotional expenditures, freeze hiring plans and eliminate supervisory levels. Sometimes this can work only on a short-term basis, with the underlying inefficiencies remaining within the firm, unresolved. Another way is to deploy studies to adapt lean processes to the operation. This is how the Ayber Seed Company has set about their tasks at improving their agricultural operation.

5. ROLE OF THE LEAN VALUE SYSTEM

What should be the role and expectations of the lean processes manager with respect to the firm's efforts to improve its agricultural hybrid seed operation? Getting started and making the most of lean process opportunities requires a learning process that suggests starting the learning process prior to the need by getting acquainted with the lean principals in several lean organizations (benchmarking) and work studies (Kemp). There is a need to work closely with the major contributors, i.e., the workers, on the adaptations to lean processes in the firm's environment.

The new initiative at Company X could begin with a strategic goal for the operations planning organization to improve output. The change reflects management emphasis on prioritizing the planning and analytical processes into all operations for maximum effect and for performance measurement and appraisal.

The methodology to be deployed by the firm may involve the theme of "Strategic Positioning," by which to preserve what is distinctive about the company's operations - its core of excellence. The self-analysis is to identify the firm's unique capabilities and all associated activities in support of the operation, thereby creating "fit" for synergy of all operations; trade-offs and alternatives were identified for management consideration (Marchwinski, 2003).

The self-analysis leads to defining those activities being performed that were different from the competition. Customers' needs and accessibility are matched to the firm's activities. The resulting creation of fit sets the goals for achieving competitive advantage in the global marketplace. Agricultural crop goals have long-term horizons, and continuous improvement processes provide opportunities for growth and performance measurement. A roadmap has been designed in concert with the Mission Statement in acknowledgement of changing trends and modifications of strategies. Current individual group objectives are reviewed, validated, integrated amongst all other groups and prioritized in concert with the firm's mission statement. An action plan will lay out with performance time frame schedules and designated assignments (San Filippo, 2002).

6. CURRENT STATE MAPPING

The current state mapping (refer to Figure 1 - Current and Future States of the Agricultural Hybrid Seed Crop Utilization Improvement Study) illustrates a comparison between the hybrid corn seed and the existing corn being harvested and how this drives agricultural operational actions. Included within the survey responses were the assertions that through the use of HOC, the results included healthier fowl, disease resistant fodder crops and higher crop yields. In this specific case, the current state shows the existing crop characteristics affecting production yields. Decisions for any changes in new machine acquisitions, identification and utilization of different work sites, farm machine equipment layout planning and material flow routings are mandated downward to the firm's agricultural operations involving processes and workers.

The result of such agricultural crop developments activities are determined and illustrated in subsequent mapping graphics. The improvement study also facilitates planning for the outsourcing of certain segments of the operation, i.e., material handling, equipment maintenance and calibration; it also assists in the decision-making processes for crop development program

acquisitions and make-or-buy decisions.

Typically decisions for outsourcing are evaluated by farm production supervisors of the related operations and processes. Marketing forecasts by the firm's technical staff drives production levels and activities, for example, processes dealing directly with new product development services. The production plan is prepared in accordance from crop forecasts and seasonal varieties of weather. Changes in production levels of certain crops and rotation procedures are all taken into consideration. Production planning is prepared at intervals of weekly, monthly and annually. Soil analyses are performed on an "as required" basis. Farm production machine maintenance schedules are fixed. A work improvement suggestion system collects inputs into a manual database for supervisory evaluations, testing and implementation activities. The storage and warehousing function is covered in this feedback system of performance measurement and appraisal.

Support of studies on crop yields, soil fertility, fertilizer and chemical applications marketing promotional initiatives is provided with other data about effective and optimal usage of inventory stock, machine operation, and attendant material flow and handling processes - all can place undue burden on the existing production plan which drives day to day farm efforts and activities in support of production levels.

7. IMPLEMENTATION PLAN TO ACHIEVE FUTURE STATE

Existing processes are examined to determine where wastes can be eliminated and efficiencies can be created. Alternative plans are developed for acquisition, set up and integration into new processes. Performance measurement and hybrid crop processes are applied on all cropland and equipment with correlations with each process and activity. Analysis and identification of alternatives takes place for changes to equipments and suppliers to achieve the Future State. A documentation trail of performance criteria for crop yield measurement is set up to identify areas in need of corrections/modifications of processes and implementation of changes.

Decision support systems are used that are comprised of mathematical modeling and simulation, cataloguing, internet based collaboration with materials suppliers and with customers using intranet utilities for coordination and benchmarking methodology using industry news and intelligence, attendance at seminars and agricultural trade fair observations. These analytical tools are deployed to critically examine specific material requirements in support of the new HOC farm crop production plan, manufacturing processes, feasibility plans for all changes, facility layout optimization, work simplification, standardization, material flow, movement and handling, traffic patterns production flow processes. With planning participants, an integrated production plan is prepared for all production processes, allowing the worker to input the processes, the time spans for uptime and downtimes and material handling and movement and storage. The collective impact and effects of projected production level changes to all product brands are to be analyzed during the planning of production.

Crop harvesting and baling machine maintenance schedules will be developed to minimize down times, using in-house system methodology that provides for the Maintenance and Calibration Work Program that prioritizes checks in accordance with latest equipment and production standards and needed manpower levels

for specifically designated agricultural work maintenance teams. All work will be in accordance with machine operation compliance standards and current and future crop production targets.

The strategic business-operating unit - based on results and experiences, drives supply chain management activities. Performance measurement and appraisals will be conducted using supply chain partner data and information (Stevens, 1989). Studies are initiated to expand existing warehouse capability in Turkey in order to meet requirements of the new integrated crop production plan by initiating a warehouse utilization and material flow improvement study.

8. FUTURE STATE MAPPING

Areas and processes to be modified are illustrated in a future state graphic, Figure 1 - Current and Future States of the Agricultural Hybrid Seed Crop Utilization Improvement Study, denoting results from the hybrid crop program changes made to the production area. Areas identified for changes may involve specialization, work simplification, standardization, work layout improvements and the transfer of work, workforce to suppliers, to competitors and to customers, as applicable (Womack, 2004).

The routing of materials storage and flow is simplified to improve and warehouse handling processes. This involves consideration for and examination of different experimental crop development possibilities, a new production plan, warehouse storage design and more effective usage of existing storage facilities and material handling equipment. The crop bundle system has been revised to incorporate mixed volumes for access to transport systems and to distributors, which will minimize confusion, handling processes, wasted materials, handling costs, inefficiencies in logistics and supply management, schedule delays and work times. The strategic management function will incorporate decision support systems that will be locally available for applications in real time analyses, updates, revisions, database maintenance and upkeep.

Outsourcing decisions are supplemented with various activities, such as source qualification, contracting activities, transportation, warehousing and other logistics processes and activities (Womack). The mapping graphic, in Fig.1, demonstrates 'the future state' to be attained in support of the Implementation Plan cited above.

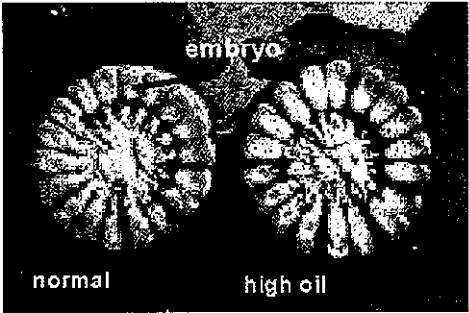
		
	Current State (Normal) Standard Corn	Future State (High Oil) HOC (GS 308) Corn
Dry Material (%)	88,62	89,73
Raw protein (%)	6,40	8,68
Raw ash (%)	1,00	1,26
Raw oil (%)	2,40	7,90
Raw cellulose (%)	1,72	2,37
Comstarch (%)	72,05	64,46
Sugar (%)	2,69	2,60
R-M. Energy (Kcal.)	2.901	3.104
P-M. Energy (Kcal.)	3.396	3.621

Figure 1. Current and Future States of the Agricultural Hybrid Seed Crop Utilization Improvement Study

9. SUMMARY AND CONCLUSIONS

Examples drawn from the trade and industry press and from the personal interview with industry representatives - a primary research survey, the study of empirical data from the multi-national agricultural processing firm in Turkey and from the lean processes involved in developing the improvement actions for the hybrid seed program development organization have been studied. It is suggested that agricultural industry strategic planning professionals can utilize lean processes within the organization, as part of their cost containment initiatives and simultaneously add value to their companies' product or service offerings - and ultimately to the firm's competitive advantage.

It should be emphasized that lean processes - particularly the mapping of processes of the current state and that of the desired future state, can be an extremely beneficial alternative method of operational planning for the agricultural manager within the new hybrid seed crop program. Adaptations to lean processes in the crop farming organization are growing in the international global arena, yet many agricultural firms have not attempted to utilize this innovative approach to the operational activities of production, manufacturing and agricultural support services (like storage and warehousing) while at the same time seriously giving thought to outsourcing alternatives.

Lean processes offer a number of advantages. Primary among them is the potential to reduce a farm's overall costs by obtaining an improved return on operations. With continued pressure to reduce costs, the strategically oriented planning managers must seek out and embrace new lean tools and processes that will help in achieving the needed reductions. In addition, the impact of lean processes, such as mapping of agricultural processes can significantly impact the activities of other functional areas of the

firm. For example, multi-national sites for material sources and for production processing often creates problems when cost cutting goals become the major program emphasized (Stevens). A carefully conceived and cross-functionally integrated lean process plan can help maintain efficiencies and competitive advantages and ensure that the agricultural firm's activities are future-directed.

While the various approaches to lean processes activities do not represent a panacea for the problems of material and logistics managers, they do hold significant potential for creative corporate problem solving in many situations. Planning managers who have not examined these approaches may be overlooking opportunities to add significant improvement to their agricultural firm's level of competitive advantage.

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CONSIDERATION FOR THE APPLICATION OF A LOGISTICS SERVICES NETWORK-BASED SYSTEM FOR USE BY THE AGRICULTURAL FIRM IN SUPPORT OF ADVANCED PLANNING EFFORTS FOR OPTIMIZING THE OPERATION

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ABSTRACT

A great deal of focus is being placed on enterprise structures to meet demands of the global business environment. Globalization-driven economic changes have considerably modified the role of logistics, particularly in light of the services being demanded by the firm in the agricultural processing sector thereby placing additional burdens and challenges to the supporting logistics services networks. This study explores a logistics services network-based system - sometimes referred to as an advanced planner and optimizer system (APO) - being designed and adapted for use by an agricultural-based processing firm in Turkey within its operational improvement goals and objectives. (The identity of the firm will remain anonymous for purposes of this research report.)

The researchers surveyed the range of possible value-added services of warehouses and distribution centers and extended their role into the supply chain of a particular firm in the agricultural processing industry. Global production relations require flexible supply chains with local centers providing full level supply and logistics services in a multi-tier supplier network. Presented in this report is a model solution, a practical structure of a logistics services network that has been put into use with capabilities to cover such activities as collaboration, planning, forecasting and replenishment activities between supply chain members with coverage of the firm's capabilities involving storage facilities, related logistics activities, facilities and equipment capabilities. Management planners tasked to take an aggressive and proactive posture in increasing their competitive advantage may want to consider such a network system within their supply chain.

Keywords: Agricultural Firm, Logistics Services, Logistics Network, Supply Chain, Competitive Advantage, Advanced Planning.

1. Introduction

Agricultural processing centers have been integrated as crucial points in a country's logistics and transportation system; they play a strategic role in a region's or an individual country's economic growth and social development. As an integrated set of facilities and services the firm in this industry sector can be considered the site in a supply chain where the given location serves all physical (transport, distribution and warehousing), informational and financial or value flows from the point of origin to the final customer/consumer.

The development history of a country's agricultural base has proven that they are not only places for loading and unloading goods, but may provide value added for the national economy. Recent economic demands require that the firms serve as logistics centers - not only for farm warehouse storage and transport points where goods are in transit and provisionally stored and handled - but also such inventory handling functions as, partially processing and assembly, packing and distribution for improved customer service.

Multinational agricultural firms, in general, are called upon to play an increasing role in attempts to transfer more goods within an

acceptable time frame to the environmentally less damaging and less congested intermodal transportation and making it less expensive. Today's globalization pressures make it essential that nations integrate their transport systems into the global logistics network. Agricultural firms, in consideration of the perishable nature of processed and production materials, are naturally being incorporated into this changing system and have to adjust to new challenges and to environmental concerns.

For this reason coordinated development strategies are required where the international issues may leverage involvement into the global flow of goods and services.

The paper is structured into 8 sections. Following the Introduction, in Section 2, an overview of the current situation is given highlighting the need for coordinated logistics services development based upon the global environment. In Section 3 a focus is placed on virtual supply networks in a global context. Sections 4 and 5 cover the presentation and analyses of the empirical data from the agricultural firm; an implementation plan for the firm is developed, as the firm looks inward to improve its operation and outward to influence its achievement of the optimal performance level in concert with the other members in the supply chain.

Finally, in section 6 is the structure of a logistics network-based approach with advance planning, operational optimisation activities and adaptation of the system into that of the agricultural firm.

2. Current Operational Environment of the Agricultural Firm

Agricultural processing operations are vital to the world both in terms of trade and transport; they are principal interchange points for both international and domestic freight movements. Agricultural firms are functioning in a business climate that has been generally favorable for them, despite the stochastic fluctuations of the global economy. Sea transport of goods is a major enabling force in worldwide prosperity and development, and sea-borne trade in turn relies on efficient, safe and cost-effective operations. Competitiveness of nations and, especially enterprises within a supply chain in the global economy, increasingly depend upon an efficient and cost effective transportation network.

Certain trends in global sourcing and global trade seem inevitable, most basic of which is the dependency of business on international markets. The order cycle for products is shrinking significantly; more cargoes are "critical" in terms of perishable nature while shipment sizes are getting smaller; security considerations in the supply chain have become more prevalent. All these factors point to one thing: the critical role of the logistics services within the international supply chain and bringing with it the need for the development of information exchanges facilitated by collaboration, planning, forecasting and replenishment activities - all to arrive at a logistics processes network-based system that will create value-added products and services.

Transport services are of crucial importance and include cargo storage and handling - the level and quality of which have decisive influences on customer levels of satisfaction. The services represent a major part of the total costs of cargo transported through ports.

The twenty-first century is seeing fundamental changes and progressive growth in the scale of transport operations in most of

the leading ports of the world. Whereas previously a single, monopolistic service provider, in many cases publicly-owned or controlled, was the rule, competitive market forces have gained ground and the public sector has been marginalized. The results are generally positive; ports and various logistics and transport options have become increasingly attractive to the private sector. As a result, productivity in the agricultural processing industry has increased markedly.

The agricultural industry is of great commercial significance to Turkey and is a major contributor to the regional and national economy. Expansion of this industry is driven by trends and demands governed by market forces, the demands of the transport operators and the supply services by the logistics services providers.

Port terminal operations and landside access to port facilities are critical factors in ensuring the efficient movement of freight, which is vital to the nation's economy. Ports also face environmental challenges associated with both ship and landside operations. Efficiencies at these terminals need to be constantly monitored and reviewed (by terminal operators and users) in an attempt to continue as viable service providers, competitively and functionally, to global and regional shippers.

3. Emerging Logistics Services Network in Support of the Supply Chain

Global commerce has expanded at a double-digit pace in the last decade. Much of the cargo generated by this expansion moves on massive container and bulk cargo ships into and out of the largest ports of the world. Accelerated movement of goods requires high-level logistics support with improved information exchange. New trends in supply strategies and the intense pressure of globalisation have attracted the attention toward logistics service centers.

3.1. Global Supply Chain Management - An Adaptive Logistics Services Network

Supply chain management, of necessity involves a vision for adaptive networks that is supported by various deployment strategies. The dimensions and approaches to these challenges will determine success. There are many market forces that are changing the way companies are managing their logistics and transportation supply chains. Container security, technologies (like RFID), regulatory global trade compliance, cross border trade, increased network complexity, consolidating warehouse operations and pressures on lead time compression and total process cycle times are the challenges for business managers who are only controlling a small fraction of the assets in their supply chain. Add to this elements of workforce being contracted for overseas, workers retirement over the next five years, and organizations wanting to adopt lean processes concepts - all make the business planner seek a concept of global shared service that will serve as the infrastructure of a logistics network system.

The concept of shared services requires an advanced planning scheduling system that puts a common infrastructure in place with the ability to coordinate processes across different lines of business, with local execution and local decision-making with the attendant empowerment execution (Klappich 2004).

Transportation management is a global shared service. In the

1990s, inventory was 'evil' - "How do I lower inventory?" came the plea. Companies became very successful in cutting inventory costs level. But now shipments are frequently in smaller quantities, requiring the shifting of loads, from truckloads to less than truckloads, eliminating rail transport as an option. With recent fuel costs at the highest levels, the carrier at the port needs to have loads that do not need to be re-handled in order to keep their own costs down. This results in the addition of small regional carriers as members to the supply chain making the network more complex with carriers and customers trying to consolidate across geographies - inbound and outbound.

In a virtual based centralized logistics network-based system, there would be a central element that manages and administers the carrier data and rates system; it would maintain the planning environment for inbound and outbound moves across companies and geographies. Companies seek to leverage freight spends within the global shared services system. Different companies have various packaging and different operational processes - not every load is capable of being shipped and palletized alike - the logistics services network could address these needs (Klappich). Such a network clearly requires knowledge sharing and learning.

Globalization has become an imperative in the management of a true global supply chain, requiring the management of business processes across trading partners. By outsourcing manufacturing and logistics services, there is no need for controlling manual logistics systems - only communicate and work with integrated supply chain members, which brings information technology (IT) - a changing factor with the responsibility of implementing realistic applications, as manufacturing and logistics services are outsourced, bringing with it the challenge of adaptability within the shared services concept and the logistics services network-based system.

3.2. Virtually Integrated Supply Chains Using Outsourcing

The current market environment can be characterized by the growing volume of international trade and investment taking place in the context of increased competition and rapid technological change. Globalization encompasses an evolving pattern of strategic alliances for research and product development, production, sourcing, marketing and distribution.

Consumer pressure for lower prices and a more responsive and higher quality service are forcing retailers, manufacturers and distributors, to achieve higher cost efficiencies and improve lead times, making supply chain effectiveness a critical factor in gaining competitive advantage. Radical changes are being forced on manufacturers and distributors by this consumer led demand, which in turn is generating a need for a more dynamic supply chain.

The supply chain is the framework for management of upstream and downstream relationships with suppliers, distributors and customers to achieve greater customer value added at less total cost. Logistics services provide the flow of information and materials from raw material sourcing through manufacturing and distribution to delivery of finished goods to consumers. In this context supply chain management means a better product/service for the customer, produced or provided more efficiently. This definition may also be extended to include subsequent recovery and disposal of waste to satisfy environmental requirements.

Outsourcing has, in fact, been in practice for many years, but it is only recently that it has been pursued as a business strategy, recognising the substantial financial and management gains that it can bring to enterprises. Companies are constantly evaluating their activities and where they have a core strategic advantage, they will continue to develop in-house strengths. Where the company does not see itself having a strategic advantage then it will outsource this activity to a business partner who will add value to the supply chain.

Information sharing and true partnership is a key success factor in this process. An increasing number of manufacturers are choosing to concentrate on their core business and outsource a greater part of their logistics operations to third party services providers. Many of these logistics service providers take responsibility for an increasingly complex range of activity, such as inventory management, sub-assembly, labelling, packaging, information processing and other value added services, in addition to the more established outsourcing of warehousing, transport and shipping operations. In fact the leading service providers are developing their capabilities on an ongoing basis by investing heavily in new facilities, skills and information and communication technologies (ICT systems). With the great variety of goods passing through a port, as well as the many kind of services required for handling these goods, the harbor may provide the most favourable, centralized and integrated location for logistics service providers.

However, as a result of rapid technology development the trend of outsourcing seems to be replaced by new forms of collaboration. We are witnessing the emergence of a new production paradigm in which enterprises or individuals work together towards a common goal and share their responsibilities as well as their profit in virtually integrated supply chains.

The concept of a logistics services network system has emerged as a means of dealing with new type of alliances. Network systems, which serve as tools for advanced planning and optimising operations and alliances amongst and between independent companies, provide never experienced advantages for small SME ventures, with the SME working as a partner with large companies and with access to common market opportunities, resources and joint competencies they are able to realize a growth otherwise unattainable. In creating the essence of a logistics services network system there is an advanced and high capacity information network required - not only as a precondition of the logistics enterprise, but in the application of the latest technologies to provide an environment for further rapid development and application of this tool for advanced planning and optimising operations.

4. Presentation of Empirical Data from the Agricultural Firm

At the agricultural firm in Turkey, the challenges in the supply chain include:

- Delivery performance was inadequate to meet requirements of international retailers - thereby requiring additional investments in stock amounts to meet dynamic sales expectations
- Forecast accuracy and capabilities was poor leading to problems throughout the supply chain
- Stock planners had poor visibility during the production and distribution phases of the chain
- Data inaccuracy was being caused by inadequate and inefficient collaboration, forecasting, planning, replenishing

and execution phases - weak management decision support systems

- Improvements were needed in customer service to support increased brand types and levels and to meet customer order fulfilment time for both domestic and international deliveries
- Goals for the reduction in costs within the supply chain were established by reducing stock inventory levels, consolidating production and storage areas and merging warehouse sites
- Improvements in forecasting were deemed desirable by which implementing integrated forecasting and production planning processes would minimize lost sales due to out-of-stock events and would streamline ordering processes
- Simplification and the integration of effective order execution process were sought

Plans were arrived at for the implement of a performance measurement and appraisal system to determine actions for actual work and costs deviations from a budgeted/standard costing system throughout the supply chain for greater inventory visibility and tracking. As a result of the above-mentioned objectives, specific improvement proposals were developed within the supply chain process to meet the goals:

- To optimise the inventory storage/racking system, whereby all material pick up and move around movements to be done by contract workers and using smart business software and barcode readers
- To optimise warehouse movement study - improving floor utilization by 60% and avoiding acquisition of additional new warehouse valued at \$500K (involved movement and re-positioning of racking systems and relocation of spare parts and chemical materials being store)
- To optimise finished goods pallet layout in warehouse storage areas to gain additional storage
- To improve the bases for developing the 12 month sales forecast on a 12 month rolling plan
- To optimise logistics coverage in support of all sales days normally little or no coverage
- To optimise logistics coverage in support of all production materials - not just coverage for certain brands of finished goods
- To exercise control (configuration control) over changes to brands and size in order to minimize obsolescent materials
- To shorten response time of planning, combining meetings dealing with planning overview and budget vs actual reporting sessions
- To collaborate inventory control stocking information with vendors
- To synchronize budget cycles IAW cost collection periods
- To explore alternative and additional local suppliers for improvement of stock levels and to minimize response lead times
- To investigate options planning software as an aid to the overall planning process

Results of the different initiatives include substantial cost savings through reduced inventory levels, reductions in plant and warehouse operational costs, inventory days of supply reduced by 10%, gained predictability of demand and in-house and vendor capabilities which enables production to adhere to plans, improvements in international delivery performance, higher order fill rates, forecast accuracy and genuine reduction in finished goods inventory levels. Overall, the recent annual goal for increased total

revenue was realized by 11% toward the firm's five-year goal of 30%.

Future initiatives will include greater collaboration with supplier and customers on forecast levels - resulting with greater satisfaction levels with customers as sales volumes increase. In addition, planning is underway to expand into greater logistics services network planning in full consideration of domestic production and logistics services in support of production and distribution warehouses within the supply network applications that can create added value within the chain.

5. Implementation Plan to Achieve Logistics Services Network System

Existing processes are examined to determine where wastes can be eliminated and efficiencies can be created. Alternative plans are developed for acquisition, set up and integration into new processes. Performance measurement processes are applied on all equipment with headcount correlations with each process and activity. Analysis and identification of alternatives take place for changes to equipments, headcount levels, and suppliers to achieve an improved operation. A documentation trail of performance criteria for measurement is set up to identify areas in need of corrections/modifications of processes and implementation of changes.

Decision support systems of a virtual nature as the advanced planner and optimiser, described below, for managing the supply chain, are comprised of mathematical modelling and simulation, cataloguing, internet based collaboration with material suppliers and customers with intranet utilities for coordination and benchmarking methodology using industry news and intelligence, attendance at seminars and trade fair observations.

These analytical tools are deployed to critically examine specific material requirements in support of the production plan, manufacturing processes, feasibility plans for all changes, facility layout optimization, work simplification, standardization, material flow, movement and handling, traffic patterns production flow processes.

With planning participants, an integrated production plan is prepared for all production processes, allowing the worker to input the processes, the time spans for uptime and downtimes and cargo handling and movement and storage. Headcount/manpower planning is coordinated to optimize uptime and equipment capabilities, limitations and to maintain optimal levels of warehouse stock. The collective impact and effects of projected levels of service changes are to be analyzed during the planning for services.

6. System of Advanced Planning and Optimizing Through a Logistics Network

The adapted system being studied here will: provide safe, reliable, effective, efficient, and fully integrated transport operations and infrastructure which will best meet the needs of freight and passenger customers at continuously improving levels of service and at a cost which supports government strategies for economic and social development while being environmentally and economically sustainable. An introduction is made here to demonstrate the scope of work covered within the supply chain

management aspect of an advanced planner and optimiser oriented section of a logistics services network-based business system.

Areas and processes to be modified are illustrated in the following graphics, Figures 1-7 of the Integrated Logistics Services Network-Based System - known here as the Advanced Planner and Optimizer. Results are noted from the adaptation and implementation of the virtual logistics network-based system for the agricultural processes firm. Areas identified for changes involve specialization, work simplification, standardization, work layout improvements, transfers of work and of workforce to suppliers, to competitors and to customers.

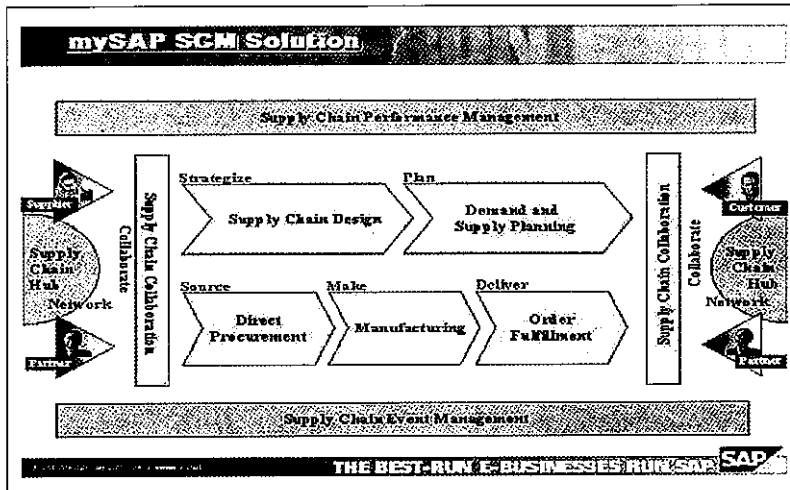


Figure 1. Supply Chain Performance Management

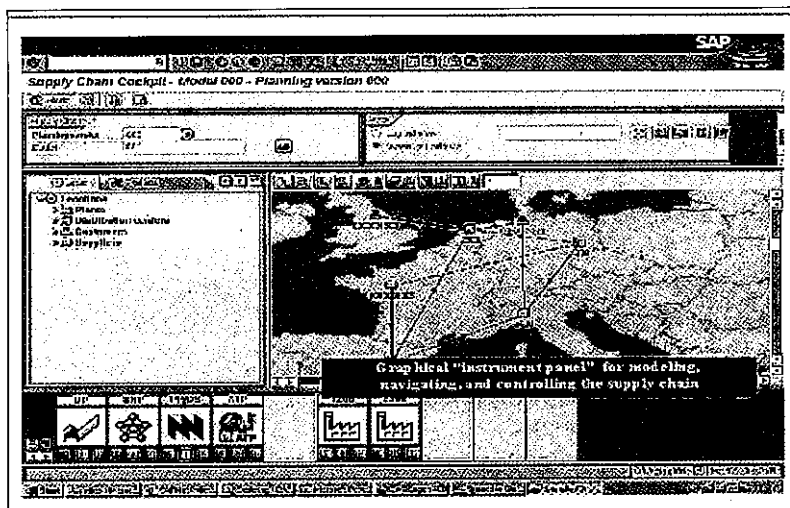


Figure 2. Modelling the Supply Chain

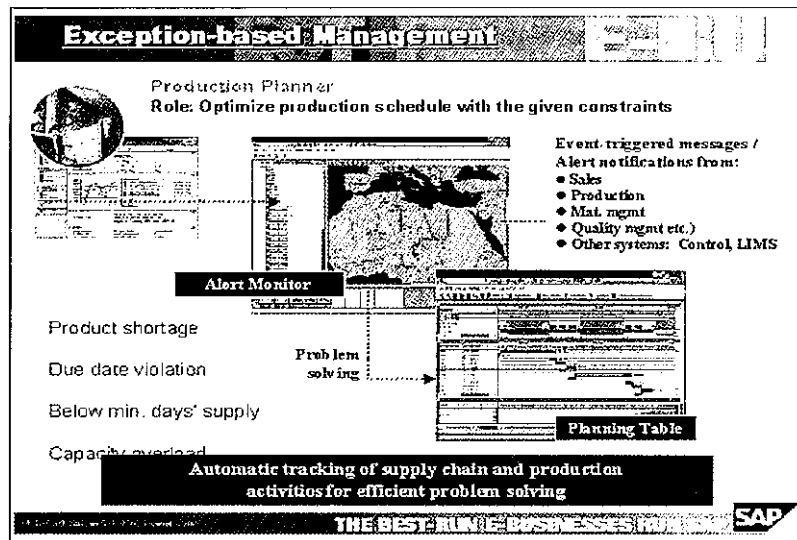


Figure 3. Exception-based Management

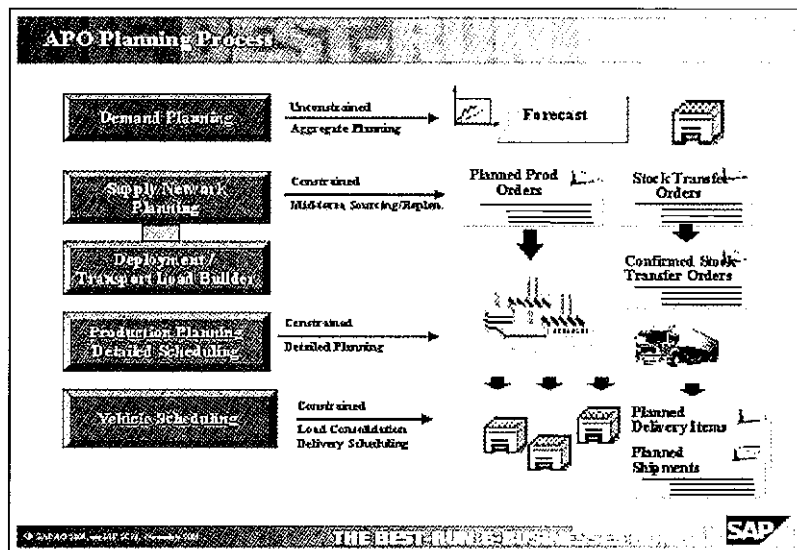


Figure 4. APO Planning Process

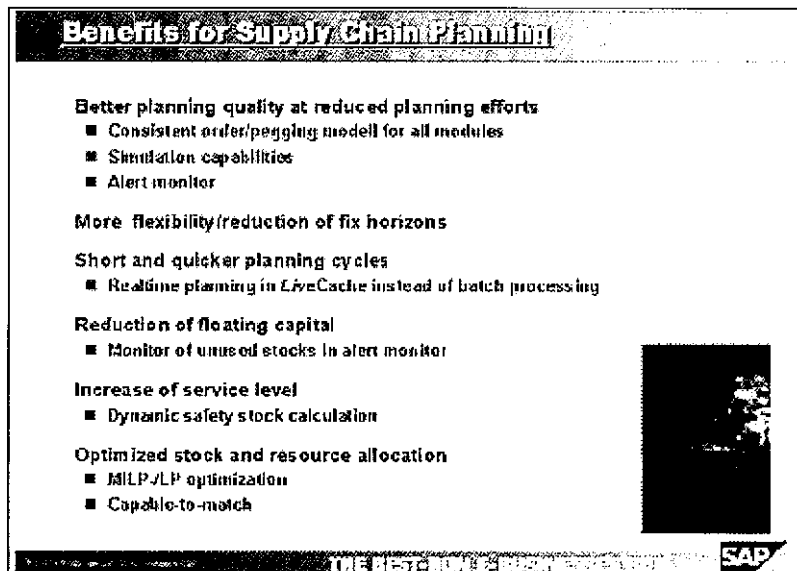


Figure 5. Benefits for Supply Chain APO Planning Process

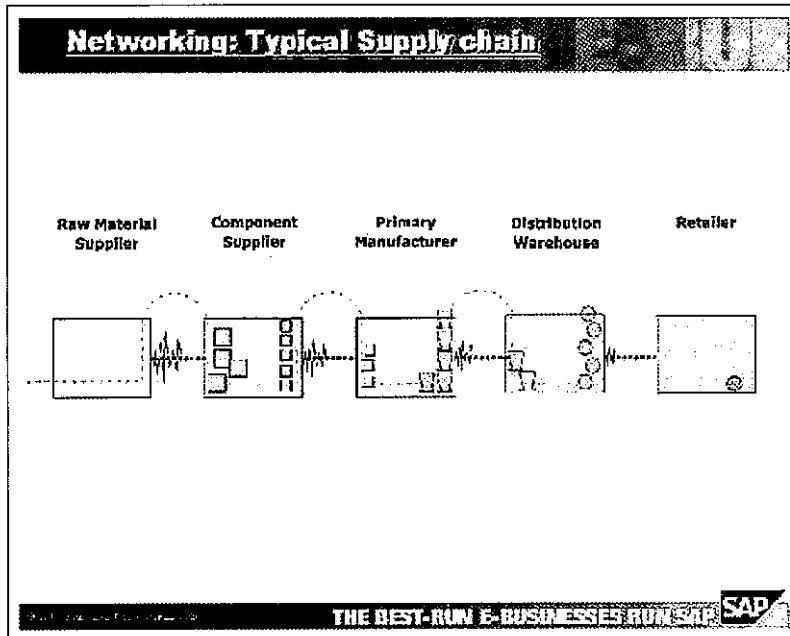


Figure 6. Typical Supply Chain Network

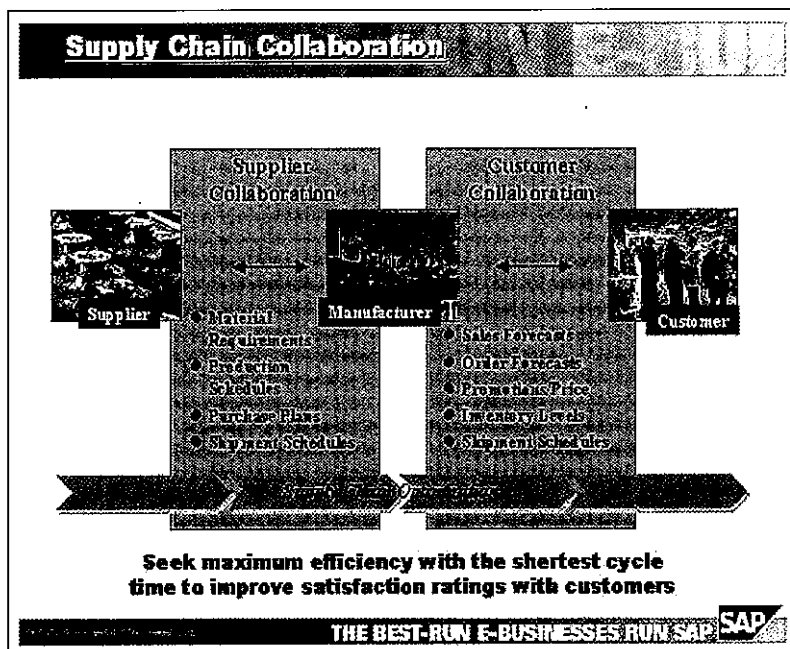


Figure 7. Supply Chain Collaboration

7. Summary and Conclusions

A firm's plans for optimising performance and efficiencies cannot be considered in isolation, but should be integrated into any national and local economic and spatial development initiatives. There should be synergy between members of the supply chain. Long-term location planning for chains should run parallel to the plans of the member players.

Competitiveness is a key aspect that influences any country's place in global markets. To compete successfully for business in domestic and international markets, supply chains must have the ability to move cargoes efficiently, reliably, and at a reasonable cost, without infrastructure impediments or congestion delays.

Examples drawn from the empirical data of an agricultural processing firm in Turkey have been studied. It is suggested that industry strategic planning professionals can utilize the essence of an integrated logistics services network-based system, like the advanced planner and organizer, to study processes within the organization as part of their cost containment initiatives and simultaneously add value to their companies' product or service offerings.

The logistics processes network-based system for the agricultural firm offers a number of advantages. Primary among them is the potential to reduce an organization's overall costs by obtaining an improved return on operations. With continued pressure to reduce costs, the strategically-oriented planning manager must seek out and embrace new systems and processes that will help in achieving the needed reductions. A carefully conceived and cross-functionally integrated logistics services network-based system can help maintain efficiencies and competitive advantages and ensure that the organization's activities are future-directed. The network system approach to the problems of agricultural firms and logistics services may hold significant potential for creative problem solving in many situations; as a direct result, planning managers may someday have the abilities to add significant improvement to the agricultural firm's competitive advantage within the supply chain.

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LOGISTICS IN AGRICULTURE RECOMMENDATIONS TO THE AEGEAN AGRICULTURAL SECTOR

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ABSTRACT

There are essential changes in the agricultural production, which require new approach to face and tackle the challenges of the market. Logistics based supply chain concept may be the solution to producers to overcome difficulties, because logistics, applying its set of means, may contribute to both reduce production and market expenses and improve customer service. Inherent information technology (IT) of logistics, by offering cheaper and more powerful communications and data collection and processing, is rapidly changing the way business is done up and down the supply chain, and it offers new tools to address opportunities once considered infeasible.

Keywords: Economical Changes, Logistics, Supply Chain, Information Technology (IT), Efficient Consumer Response (ECR), Quality Driven Logistics.

Introduction

In the agriculture there are major changes to be observed today - changes in product characteristics, in worldwide production and consumption, in technology, in size of operation, etc. Moreover, the pace of changes seems to be increasing along with the speed of implementation. Added value is more and more important in the current links of the agricultural production column, while primary agriculture and horticulture are increasingly less important than the chain as a whole. A number of studies prognosticate that future agricultural and horticultural activity will take place at the crossroads of production, nature conservation and land management. New management styles are emerging and quantity is exchanged for quality. Although, changes affecting the flow and storage of goods and services in agriculture have been in motion for a long time, cumulative affects of these overall changes have currently become most visible.

Prognosis

At the same time, market developments demand the agricultural supply chain of the future to respond in a quick and high-frequent manner to changing market needs. Products would have to be delivered within a manageable and reliable lead-time to a great diversity of outlets. As far as the agribusiness is concerned, the guarantee of product quality, in particular, becomes more and more important. Customers and consumers have more specific wishes, in which quality has to be guaranteed and the delivered product has to have details of its origin and nutrition value.

Based upon these facts, agriculture in the 21st century likely to be characterized by;

- adoption of manufacturing process in production as well as processing,
- a systems or supply chain approach to production and distribution,
- negotiated coordination replacing market coordination of the system,
- a more important role for formation, knowledge and other soft assets (in contrast to hard assets of machinery, equipment and facilities) in reducing costs and increasing responsiveness,
- increasing consolidation at all levels raising issues of market power and control.

Opportunities

These profound changes in the agriculture present new challenges and new opportunities that require new ideas and concepts to analyse and implement. As the development of different industry branches represent, logistics based supply chains may become the part of agriculture, too. According to a definition of Council of Logistics Management, USA, "business logistics is the planning, implementing and controlling the efficient and effective flow and storage of raw materials, in process goods, final goods and related information from point of origin to point of consumption for the purpose of meeting customer requirements."

Because logistics deals with the flow and storage, one's attention may be drawn immediately to transportation and warehousing. However, transportation and warehousing is just a portion of business logistics, recall that the definition includes planning, implementing and controlling. Other concerns addressed within a business logistics perspective include;

- design and organization of value chains and supply chains that produce buyer value for the customer and strategic value for the firm(s),
- coordination between value adding activities,
- the flow of information needed to coordinate effectively and most efficiently,
- network modelling to address spatial and temporal demands, and
- global logistics.

If logistics can accomplish its role efficiently, it can help, on the one hand, to cater to the demands of the consumer, and, on the other hand, to reduce unnecessary transport kilometres and load on our environment.

With respect to organize the supply chain, two complex aspects can be considered as core factors:

- transfer pricing and risk allocation,
- logistics management and time competition.

Now, we focus on the second issue only.

With respect to logistics and time competition, more demanding consumers combined with pressures to lower costs in the supply chain will result in the implementation of efficient consumer response - ECR - principles not just in retail markets, but through the entire supply chain. With more limited opportunities to develop

a competitive advantage solely around product, performance or price, or around the provision of services, in increasingly important technique for establishing competitive advantage is responsiveness and cycle time. Just-in-time (JIT) inventory systems, faster product development cycle times, and supply chain integration in the consecutive food industry are all techniques to be more timely and responsive throughout the chain. Increasingly, time competition will replace product, price and service competition in the agricultural input supply and distribution markets.

Quality-driven logistics is necessary to tackle the demands of customers with regard to customisation, quality guarantee and product information. An essential aspect is, for example, an intelligent tracing and tracking system and the use of intelligent load carriers. The complete agro-food system and, in particular, the distribution of today, need to adapt to the new circumstances. Distribution costs are rising and make up a large part of the total cost throughout the agro-food chain. Retailers offer consumers a wide range of products and therefore need more space, transport and business management. These new demands, and the need to minimise costs in the new competitive environment necessitate a comprehensive look at the most dynamic aspects of distribution. Modern logistics is an opportunity to lower costs and to increase the efficiency of customer service.

In order to remain competitive, time related concepts play also an important role in future agricultural supply chains.

Delivering a time-based advantage through effective logistics is a complex undertaking with a number of key processes. One set of these processes encompasses;

- marketing related activities;
- assessing the product and service requirements or
- attributes desired by specific customer segments; and
- developing a distribution system that minimizes cost, provides competitive levels of service, and is customer responsive.

Another set involves system coordination: developing the appropriate channel linkages and level of integration to efficiently and effectively supply, exactly what customers want.

An additional set of these processes focuses on more traditional logistics management activities:

- choosing materials handling and storage technologies which will provide the desired level of customer service with optimum level of investments in facilities and equipment;
- implementing inventory management procedures to simultaneously minimize potential stock out problems and reduce the cost of excessive inventory; and
- controlling and/or reducing transportation and warehousing costs in both the short- and long-term through strategic positioning of processing and warehousing facilities and better flow scheduling to reduce inventories.

A final step involves implementation of an information system that conveys accurate messages in due time with respect to consumer satisfaction, product flows and system efficiencies, quality characteristics of both product and service, and overall financial performance.

Conclusion

As it can be observed, logistics is integral to the whole area of supply chain management. Critical to good business management is, however, the good information. Information technology, by offering cheaper and more powerful communications and data collection and processing, is rapidly changing the way business is done up and down the supply chain, and it offers new tools to address opportunities once considered infeasible.

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PART V
LEGAL ARRANGEMENTS,
INTELLECTUAL PROPERTY RIGHTS
AND DESIGN

Hüsnü Himam

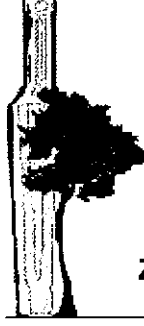
Türkiye'de Zeytinyağı Üretimini ve Zeytinyağı Kalitesini Artırmaya
Yönelik Tecrübeye Dayalı Görüşler
(*Views Related to the Experience on Increasing Olive Oil
Production and Quality in Turkey*)

Melih Pabuççuoğlu

Cumhuriyet'ten Bu Yana Zeytincilik Hakkında Yasal Düzenlemeler
(*Legal Arrangements about Olive Farming since Foundation of the
Republic*)

Zekeriya Şimşek

Türk Şarap ve Zeytinyağı Sektörlerinin Uluslararası Rekabet Gücü
Üzerine Sınai Haklar Bakış Açısı ile Gözlemsel Bir Değerlendirme
(*An Observational Evaluation on the Power of International Rivalry
of Turkish Wine and Olive Oil Sectors through a Viewpoint of
Industrial Rights*)



TÜRKİYE'DE ZEYTİNYAĞI ÜRETİMİNİ VE ZEYTİNYAĞI KALİTESİNİ ARTIRMAYA YÖNELİK TECRÜBEYE DAYALI GÖRÜŞLER

Hüsnü HİMAM

Ziraat Mühendisi, Zeytin ve Zeytinyağı Üreticisi - Türkiye

Bu sempozyumun amacı, Türkiye zeytinyağı ve şaraplarının marka haline getirilmesine yönelik üzerinde durulması gereken esaslar olduğuna göre, bu başlık aklımıza hemen zeytinyağının nefasetinin artırılması ve Türk zeytinyağının pazarlanabilir bir konuma gelmesi için hangi koşulların gerektiği sorusunu gündeme getirmektedir.

Benim üzerinde durmak istediğim; 60 yıllık ömrümün 50 senesinde sürekli içinde yaşadığım zeytin ve zeytinyağı sektörünün sorunlarını, aynı zamanda da 25 senelik zeytinyağı imalatı konusundaki nâçizane tecrübelerimi sunmaktır.

Öncelikle zeytinyağımızın nefaset sorunu hem vardır, hem yoktur diyebiliriz. Birçok zirai üründe olduğu gibi zeytinyağcılıkta da nefaseti etkileyen birçok çevresel ve ekolojik faktörler söz konusudur. Zeytin ve zeytinyağının uygun çevresel ve ekolojik koşullarda üretilmesi zeytinyağının pazarlanma aşamasında önemli avantajlar sağlar. Buna Edremit Körfezi çevresinde üretilen zeytinyağlarının mâkbul, aromatik nefasetini örnek gösterebiliriz.

İkinci olarak değinmek istediğim nokta, yurdumuzun pek çok bölgesinde üretilen zeytinyağlarının da dış çevrelerde sürekli müşterilerinin bulunması ve dünya çapında aranan bir marka haline gelmeleri yönünde çalışmanın hedeflerimiz içinde olmasıdır. Türk zeytinyağının kalitesi üstündür, bir kere yendiği zaman adeta alışkanlık yaratan zeytinyağ grubumuzda, üretimin, bugünkü durumundan en az on misli daha yüksek seviyeye çıkarılmasını mümkün görmekteyim. Aynı artış diğer zeytinyağı kategorilerinde de mümkün olabilir.

Neden öncelikle artış konusu üzerinde duruyoruz? Zira bugünkü zeytinyağı üretimimiz Türk zeytinyağını dünyaya tanıtmaya çalışmaları aşamasındadır, ayrıca yurt içi tüketimimiz bile zeytinyağı ihtiyacını karşılamaktan adeta uzaktır. Pazar için üründe artış ve kalite gerektiğine göre ve her sene o kalite ve miktarı müşterimiz olacak ülkelere sürekli olarak satabilmemiz gerektiğine göre; zeytinyağı üretimini artırmak, artırırken de belirli bir seviyede standart bir nefaset tutturmamız gerekmektedir. Şu anda Türkiye zeytinciliğinde eksik olan pek çok nokta bulunmaktadır. Ağaçları gençleştirme çalışmaları çok sınırlı sonuçlar vermektedir. Zira ağaçların aşıları 2-3 metre seviyelerindedir. Oysa ağaçtan ürün 0-4 metre arasında %90 oranında alınabilmektedir. Ayrıca toprak suyunun içinde eriyik hâlede bulunan ağaca yararlı minerallerin en optimum biçimde ağaç tarafından kullanılabilmesi, ağaç 4 metre olduğu zaman mümkün olabilmektedir. Bunun sebebi, hem zeytin ağaçlarının yamaçlarda bulunması, hem de bu yörelerde su ve minerallerin ağaçta etkin bir biçimde yerçekimi gücünü yenerek gövdeye ve dallara ulaşmasının zorlaşmasıdır. Bir de aşıların gövdenin yüksek kısımlarına vurulması, ürünün ancak ağacın yüksekliğinin %10-15'ine tekabül eden kısımdan elde edilmesiyle mümkün olmaktadır. Burası da ağacın ürün veren en zayıf bölümüdür.

Peki bu aşılar neden ağaçların üst bölümünde bulunmaktadır. Bunun sebebi, son derece trajikomik bir olaydır. Çünkü zeytinliklerin çoğunun bütün masrafları mülkiyetlerinden dolayı sahiplerine aittir. Dolayısıyla zeytin ağacı yapraklarının ve altlarındaki otların, yöredeki köy mallarının koruma teşkilatlarının etkinliğine bağlı olarak gelişi güzel otlaklar haline dönüştürülmüş olmasıdır. Bu gerçek, ağaçlarımızın verimli alçak boylu ağaçlar olarak yetiştirilmesinin önlenmesinin ötesinde, aşılardan koyun ve keçi zararından korunması maksadıyla yükseklerle vurulması nedeniyle, verimin trajik biçimde düşmesine neden olmaktadır. Aşağıdaki fotoğrafta bu tahribatın nasıl olduğu gözlemlenebilir.



Ayrıca bütün bunların ötesinde yeni plantasyonların ihdası da aynı nedenle zorlaşmaktadır. Bir taraftan mevcut haliyle kötü budanmak zorunda kalan ağaçlar, bir taraftan da yeni plantasyonların kaçak otlatmadan korunamaması nedeniyle adeta yapılamaması, zeytinyağı üretimimizin önündeki en önemli engeldir. Türk zeytincisinin açıkça rahatsız olduğu bu olay, koruma ve asayişin ilgililerce nedenini anlayamadığımız şekilde yerine getirilmemiş olmasından kaynaklanmaktadır.

Bu konuyla ilgili çıkarılan kanun tasarısı bir başka değinmek istediğim konudur. Bu kanun tasarısı şu şekildedir:

3573 sayılı zeytinciliğin ıslahı ve yabanilerin aşılattırılması hakkında kanunun bazı hükümlerinin değiştirilmesi ve yürürlükten kaldırılması hakkındaki kanuna göre; Madde 3.-26.1.1939 tarihli 3573 sayılı kanunun 14. maddesi aşağıdaki şekilde değiştirilmiştir:

Madde 14.- Zeytinliklere her çeşit hayvan sokulması, yerleşim sahaları hariç zeytin sahalarına en az 1 km. yakınlıkta koyun ve keçi ağılımının yapılması yasaktır. Ancak çift sürme ve nakliyatıta kullanılan hayvanlara ağızlık takılması suretiyle müsaade edilir. Bu hükme riayet etmeyenler, zarar görenlerin şikayeti üzerine 1 aydan 3 aya kadar hapis ve meydana gelen zararın vahametine göre iki milyon liradan on milyon liraya kadar hafif para cezasına mahkum edilir. Fiilin tekrerrürü halinde hapis ve para cezası bir misli artırılır. Çiftçi mallarını korumakla yükümlü bulunanlarca düzenlenen tutanaklar, aksi sabit oluncaya kadar geçerlidir.

Madde 17.- Devlet; zeytinciliğin ıslahı, yeni zeytin alanlarının tespiti, zeytin dikim ve yetiştirilmesinin teşviki ile verimin artırılması, hastalık ve zararlılarla mücadele ile ürün elde etme, masrafları azaltıcı araç ve gereçlerin imal ve ithali gibi hususlarda gerekli kolaylıkları sağlar (ödüllendirme bahsinde geçen ücretsiz araç gereç sağlama yöntemi gibi). Zeytinlik bölgelerinin il veya

ilçelerinde, zeytin hastalık ve zararlıları ile mücadele amacıyla 1580 sayılı kanun hükümleri çerçevesinde birlikler kurulur. Zararlılarla mücadelede devlet, birliklere gerekli araç, gereç ve finans kaynaklarını sağlar ve bu konuda Tarım ve Köy İşleri Bakanlığı yoluyla yeterli eleman görevlendirir.

Madde 5.- 26.1.1939 tarihli 3573 sayılı kanunun 20. maddesi aşağıdaki şekilde değiştirilmiştir.

Madde 20.- Zeytinlik sahaları içinde ve bu sahalara en az 3 km. Mesafede, zeytinyağı fabrikası hariç zeytinliklerin vegetatif ve generatif gelişimini engelleyecek kimyevi atık bırakan, toz ve duman çıkaran tesis yapılamaz ve işletilemez. Bu alanlarda yapılacak zeytinyağı fabrikaları ile küçük ölçekli tarımsal işletmelerin yapımı izne tabidir (Tarım ve Köy İşleri Bakanlığı izni). Zeytincilik sahaları daraltılamaz. Ancak belediye sınırları içinde bulunan zeytinlik sahalarının imar hudutları kapsamı içine alınması halinde, alt yapı ve sosyal tesisler dahil toplam yapılaşma zeytinlik alanının %10'unu geçemez. Bu sahalardaki zeytin ağaçlarının sökülmesi Tarım ve Köy İşleri Bakanlığı'nın fenni gerekçeye bağlı iznine tabidir. Bu halde dahi kesin zaruret görülmeyen zeytin ağacı kesilemez, sökülemez. İzinsiz kesenler veya sökenlerden ağaç başına iki milyon liradan beş milyon liraya kadar hafif para cezası alınır. Kesilen ve sökülen ağaçlar müsadere edilir.

Değişikliğe uğrayarak, yukarıda yeni maddelerinin bazılarıyla ifade olunan manada, zeytinciliğimizin hassasiyetle üzerinde durulduğu zannedilmiş olabilir. Bu kanun teklif edilip bin bir meşakkatle ortaya çıkartıldıktan sonra, üreticilerin uygulamadaki başarısızlıkları gördükleri zaman ne kadar hüznü duyduklarını sizlerin takdirine bırakıyorum. Çiftçilerimiz devlet tarafından bu kanun dahilinde korunduklarını zannederek, zeytinliklerine gidip orada kaçak otlayan hayvan sürüleriyle karşılaşmaktadır. Sürülerin çıkarılmasını ikaz ettiklerinde ise bu sürülerin başındaki çobanlar tarafından tehdit edilmekte ve kötü sonuçlar ortaya çıkabilmektedir. Olaya genel olarak bakıldığı zaman zeytini korumaktan öte; insan hakları, can ve mal emniyeti meselesi haline gelmiş olan bu durumun çıkarılan kanunlarla değil, onların uygulanmasıyla olumlu sonuçlar getirebileceği bir gerçektir.

Yarım kalmış bu hizmetin bir an evvel yerine getirilmesi, devletin, zeytin mustahsiline olan borcudur. Zeytin üreticisi ve çiftçi zaten yorgun olan bir insandır. Alın terini tarlasına döktükten sonra gerçek bir yorgun savaşçı olarak evine döndüğünde, istirahate ve yeniden ertesi gün tarlasına gitmeye, tekrar verimli bir şekilde çalışmaya ihtiyacı vardır. Kendisinin malının başında bulunmadığı bir sırada mülkünün korunmamış olması ve kendi arazisinin bekçiliğini yapması durumunda da, yukarıda bahsettiğim gibi adeta dördüncü sınıf vatandaş muamelesi görmesi utanç verici bir durumdur.

Zeytinlikler ya mera ya da zeytinlik olmalıdır. Ülkenin mera ihtiyacını zeytinciye karşılatmamak gerekir. Bu tespitlerimin neticesinde, sorunların giderilebilmesinin çiftçiye verilebilecek en huzur verici ve en tatmin edici cevap olacağını ifade etmek isterim.

Sonuç olarak, Türk zeytinyağının bir dünya markası olmasını istiyorsak, yılda en az 1 milyon ton kaliteli zeytinyağı üretimine ulaşmamız gerekmektedir. Bu da, zeytin veriminin en az 300 kg. olduğu zeytin ağaçlarının yetiştirilmesiyle ve onlarca üniversitemizde, İl ve İlçe Tarım Müdürlükleri'nde ve Tarım Bakanlığı'mızın diğer birimlerinde bahsettiğim konuya önem verilmesiyle mümkün olabilecektir.



CUMHURİYET'TEN BU YANA ZEYTİNCİLİK HAKKINDA YASAL DÜZENLEMELER

Melih PABUÇÇUOĞLU

19. Dönem Balıkesir Milletvekili - Türkiye

Bildirime başlarken sempozyumu düzenleyen İzmir Ekonomi Üniversitesi, Güzel Sanatlar ve Tasarım Fakültesi, Endüstriyel Tasarım Bölümü Koordinatörü'ne, Sempozyum Düzenleme ve Yürütme Kurulu üyeleri ile siz dinleyen ve okuyanlara saygılarımı sunarım.

Sempozyuma katılmam istendiğinde, mesleğimle direkt ilgisi bulunmayan, ancak, gözlerini hayata 76 yıl önce açtığında ilk gördüğü yeşilin Zeytin ağacı olduğunu bilen bir kişi olarak son derece mutluluk duydum.

Bildirimde özetle zeytinin hukukla olan ilişkisine, coğrafi kimliğine ve patentine, zeytincilik bilimine, zeytin ve maden arama-işletme kanunlarının çarpıcı noktalarına değinmekte yarar bulmaktayım.

1. Cumhuriyet'ten bu yana zeytincilik hakkında yasal düzenlemeler

a.Yüce Atatürk Yalova'ya yaptığı bir seyahatinde Türk zeytinciliğinin neden ilerlemediği üzerinde durmuş, Ziraat vekiline konunun araştırılmasını, özellikle İtalya'dan uzman getirilerek yasal düzenleme yapılması talimatını vermiştir. Bundan dolayıdır ki, zeytinciliğin gelişmesini amaçlayan ilk yasal düzenleme 1929 yılında yürürlüğe giren 1528 sayılı kanun ile Türk zeytincilik hukukunda yer almıştır. Bu yasa ile önemli kuralları getirilmiştir.

b.1939 yılında ise 1528 sayılı yasa yürürlükten kaldırılarak zeytinciliğin ıslahı ve yabancıların aşılatılmasına hakkında 3573 sayılı yasa yürürlüğe konulmuş ve buna, yabancı zeytinlerin aşılatılmasına yanında, antepfıstığı, harnupluklar, sakız neveleri de ilave edilmiştir.

c.Ancak, 1961 ve 1982 yıllarında yürürlüğe giren Türkiye Cumhuriyeti anayasalarında kabul edilen Orman rejimi ile ilgili hükümler karşısında 3573 sayılı kanunun önemli hükümleri geçerliliğini yitirmiş ve kanun uygulanamaz hale gelmiştir. Bundan dolayıdır ki, Ege ve Akdeniz sahil kesiminde bulunan zeytin ağaçları kesilmiş ve bu kıyılarımız konut yapımlarıyla beton yığınlarına dönüşmüştür. Türk zeytinciliği en az 1/3 lük bir darbe yemiştir.

d.Ne-yazık ki bu hal 56 yıl devam etmiştir. Kasım 1991 yılından Ocak 1996 yılına kadar süren parlamenterlik görevimiz sırasında bizzat hazırlayıp TBMM'ye sunduğumuz ve kısaca zeytinciliğin ıslahına dair kanun teklifimiz iki yıl gibi bir süre zarfında komisyonlarda ve genel kurul gündeminde beklemekten 28.02.1995 tarihinde kabul edilerek 4086 sayılı kanun olarak yürürlüğe girmiştir.

Özetlersek bu kanun; zeytin alanlarının içten ve dıştan korunmasını; zeytin alanlarının genişletilmesini; orman sınırları dışında kalan, devletin hüküm ve tasarrufu altındaki zeytin ekolojisine dahil alanların, devletçe maliyetine fidan vermek suretiyle zeytinlik haline getirilmesini sağlayan tapunun bedelsiz olarak devrini; dikim ve

yetiřtirmenin teřvikini; zeytinle ilgili hastalık ve zararlılarla m¼cadelenin devlet ve vatandař iřbirlięi ile gerekleřtirilmesini m¼mk¼n kılmıřtır.

Zeytin alanlarının iten korunmasına; 1 km. mesafede aęıl yapılması ve bu alanlarda hayvan otlatılmasının yařaklanarak cezai yaptırıma baęlanması, yine bu alanlara 3 km. mesafede tař ve duman ıkaran kimyevi atık bırakan tesis yapılması ve alıřtırılmasının yařaklanarak maden arama ve iřletme alıřmasına son verilmesi, k¼¼k ¼lekli tesisler ile zeytinyaęı fabrikası yapımı istisna kılınmakla birlikte bunların gerekleřtirilmesi iin dahi ¼nlemler alınması ve evrenin doęal yapısını bozacak giriřimlere son verilmesi ilave edilmiřtir. Dięer taraftan imar mevzuatının uygulanmasında zeytin alanlarının ancak 1/10'una kadar altyapı dahil yapılařmanın m¼mk¼n olmasına cevaz verilerek, yarısı alt yapıya gidecek inřa alanının dięer yarısı yapılařma olarak gerekleřmesine izin verilmiřtir. Bir misalle aıklarsak, 10 d¼n¼ml¼k bir zeytinlięin ierisinde tasarlanan yapılařmanın, alt yapısı dıřında sadece 500 m²lik bir inřa alanında inřaat yapılabilmesine izin verilerek, zeytinin yeřil yapraęı yanında betonlařmaya kesinlikle son verilmiřtir. Dięer taraftan, zaruret olmadıka zeytin aęacının kesimi ve s¼k¼lmesine son verildięi gibi, aksine davranan ve zeytinlięine bakmayana da para cezası yaptırımı getirilmiřtir. Bu kanuna baęlı olarak ıkarılan iki y¼netmelikle uygulama ayrıntıları yeterince g¼sterilmiřtir.

T¼rk zeytincilięinin d¼nya ¼lkeleri iinde gerek hakkı olan yerini alabilmesi iin 4086 sayılı yasa ile getirilen h¼k¼mlerin, tıpkı devlet ormanının muhafazası iin y¼r¼rl¼kte bulunan orman kanunu paralelindeki h¼k¼mlerde olduęu gibi, idare amirleri ve tarım teřkilatınca tam anlamıyla uygulanmadıęını ¼z¼nt¼ ile g¼rmekteyiz. Ne var ki, s¼z¼n¼ effięimiz yasa ile getirilen teřvik tedbirleri sonu vermiř, 1995 ve takip eden yıllarda milyonlara ulařan fidan ekimini iftiharla g¼zlemiř bulunduęumuzu burada ifade etmek isterim.

2. Zeytincilik bilimi y¼n¼nden

¼lkemiz ¼niversitelerinin ¼nemli bir b¼l¼m¼nde ziraat fak¼lteleri ¼ęretim vermektedir. Ancak bunların hibirinde zeytincilik dalı bulunmamakta, dięer bitkiler arasında bu dal iřlenmekte ve bundan dolayı zeytincilik uzmanı yetiřtirilememektedir.

Olanaklarımızın elverdięi imkanla yapabildięimiz arařtırmaya g¼re, d¼nya ¼niversitelerinde bu tarz eęitim yapılmaktadır.

Bundan dolayı 1992 yılında Balıkesir ¼niversitesi'nin kuruluř kanununun g¼r¼ř¼lmesinde řahsen verdięimiz ¼nergenin kabul¼ ile bu ¼niversiteye baęlı olarak zeytincilięin bilim olarak doktora, mařter alıřmalarına konu olması ve bu alanda bilimadamı yetiřtirilmesi amacıyla "zeytincilik enstit¼s¼n¼n kurulması" ¼ng¼r¼lm¼řt¼r.

Ne var ki aradan buna yıl gemesine raęmen enstit¼ faaliyete geememiř, bilim alanındaki amacımız gerekleřmemiřtir. Bu yıl, Edremit End¼stri Meslek Lisesi'nde zeytincilik dalında bir sınıf aılmıř ve yine Edremit Meslek Y¼ksekokulu'nda Zeytincilik B¼l¼m¼ adlı bir dal eęitime bařlamıřtır. Ancak ana bilim dalı ¼zerinde, ¼niversite b¼te imkanları ile kabul g¼r¼lmedięinden enstit¼ kaęıt ¼zerinde kalmıřtır.

Burada bir hatıramı ifade etmeme izin vermenizi dilerim. Ankara Hukuk Fak¼ltesi 1. sınıf ¼ęrencisi olduęum 1948-49 eęitim yılında, devletimiz b¼y¼k maddi fedakarlıkla, d¼nya hukukunun temeli olan

Roma hukuku dalında dünyanın sayılı bilim adamlarından olan Alman Profesör Koşakar'ı bu dalda eğitim görmemiz için ülkemize getirmişti. Milyon dolarlarla futbolcu transferi yapan ülkemiz, elbette Zeytincilik Enstitüsü'nü bilim ve fen öğretecek düzeye getirecek bilim adamını dünya ülkelerinden ülkemize getirmekten aciz değildir. Yeter ki, bilim ve fene, bilimsel araştırmaya değer verip üstünlük tanıyalım.

Zeytini bilim merceği altına yatırıp her zerrisinin ne getireceğinin ve doğal yöntemlerle yağ haline gelmesi sırasında bıraktığı acı suyun tarımda kullanıma olanakları dahil olmak üzere çekirdeğinden elde edilecek kimyevi maddelerin ve herşeyinin tasarım yöntemleriyle birlikte değerlendirileceği bilim yuvasının ülkemize çok şeyler kazandıracağından kuşkusuz yoktur.

3. Coğrafi patent ve rekabetin korunması kanunu hakkındaki düşünceler

Bilindiği gibi, coğrafi işaretlerin korunması hakkında 555 sayılı kanun hükmünde kararnamenin tanımlar bölümünü içeren 3.cü maddesi, kararname anlamında coğrafi işaret; belirgin bir niteliği, ünü ve diğer özellikleri itibariyle kökeninin bulunduğu bir yöre, alan, bölge veya ülke ile özdeşleşmiş bir ürünü gösteren işaret olarak tanımlamıştır. İşaret, menşe adı ve mahreç olarak ikiye ayrılmış olup, bu kararname hükümlerini uygulatmak ve yürütmekle yükümlü olmak üzere Türk Patent Enstitüsü görevli kılınmıştır.

Kuşkusuz Coğrafi Patent'in uygulanmasıyla 4054 sayılı rekabetin korunması hakkındaki kanunun yakın ilgisi vardır. Rekabeti engelleme, bozma ya da kısıtlama gibi hukuka aykırı eylemler bu kanun gereğince yasaklanmıştır.

Sempozyumun amacı, coğrafi kimliği olan Zeytinyağı olduğuna göre, S.S. Tarış Zeytin ve Zeytinyağı Tarım Satış Kooperatifleri Birliği'nin 555 sayılı kanun hükmündeki kararnameye dayanarak 29 Nisan 2003 tarihinde yaptığı ve resmi gazetenin 29 Ağustos 2004 tarihli nüshasında ilan edilen başvurusuna değinmek isterim.

Bilindiği gibi, 1 Haziran 2000 tarihinde yürürlüğe giren 4572 sayılı kanun, Tarım Satış Kooperatifleri ile ilgili yürürlükteki tüm mevzuatı kaldırmış ve 8. maddesinin 2. fıkrasına göre; Tarım Satış Kooperatifleri ve Birliği, 1163 sayılı Kooperatifler Kanunu ve Türk Ticaret Kanunu'nun hükümlerine tabi kılınmıştır. Adı geçen kanunun 7. maddesine göre hazırlanan örnek ana sözleşme Bakanlar Kurulu'nun onayı ile 24 Aralık 2000 tarihinde yayınlanarak yürürlüğe girmiştir.

Buna göre, birlik ana sözleşmesinin 39. maddesinde birlik yönetim kurulunun görev ve yetkileri ayrı ayrı belirtilmiş olmasına rağmen, coğrafi işaret talebinde bulunma hak ve yetkisi birlik yönetimine verilmemiştir.

Zeytin ve Zeytinyağı Tarım Satış Kooperatifleri Birliği aynı mahâl ve yerlerde bulunan 33 kooperatiftan oluşmaktadır. Her kooperatifin menşe alanı farklıdır. Türkiye coğrafyasında Edremit, Havran, Burhaniye, Gömeç, Ayvalık ilçelerini içeren bölge Edremit Körfezi'ni teşkil ettiği halde; bölgenin kuzeyindeki Ezine, Ayvacık gibi gerçek Edremit Körfezi Bölgesi olan ilçelerin yanına Dikili, Bergama, Alağa (Şakran) ilave edilerek Edremit Körfezi'ni İzmir'e kadar ürün alanı olarak gösterip tescil talebinde bulunulmasında itade ettiğimiz gibi iyi niyet yoktur. Kuşkusuz, yöneticilerin amacı, bu yöre kooperatif üyelerinin desteğini sağlayıp, yıllardır kaldıkları yönetimlerini sürdürmektir. Oysa ki, 555 sayılı kanun hükmündeki kararnamenin

gayesi ile bağdaşmayan, yasanın koyduğu ilkelere ve gerçeklere aykırı davranış, hakkın kötüye kullanılması olup, bunu da kanunun himaye etmeyeceği tabiidir.

İfadeye çalıştığımız nedenlerin yanında diğer yasal talepler ile coğrafi işaretin tescili talebine Ayvalık, Burhaniye, Edremit Ticaret Odaları ile Edremit Ticaret Borsası, Türk Patent Enstitüsü nezdinde, süresi içerisinde itirazda bulunmuşlardır. İtiraz sonucuna göre konu, idare mahkemesine şüphesiz taşınacaktır. Halbuki Tariş, ürünlerinden zeytinyağının tanıtımını yaptığı neşriyatta ve bastığı broşürlerde, ülkemizde Körfez Bölgesi olarak yöreyi Ayvalık, Burhaniye, Edremit olarak belirlemiş; bu yöre zeytinlerinden elde edilen zeytinyağının tüm dünyada en kaliteli zeytinyağı olarak kabul gördüğünü açıkça resimleyip belirtmiştir.

Gerçekten büyüklerimizin anlattıklarına göre, Rusya ve İtalya kiliselerindeki kandillerde kullanılan zeytinyağı özellikle körfez yöresinden sağlanmaktadır. Zira, bu kandillerde yakılan yağın hiç zifir çıkarmaması ve iş bırakmaması, Kreis (acılık) maddesinin zeytinyağında bulunmadığını göstermektedir.

Bütün bunlar birliğin samimi ve hüsnü niyet içinde olmadığını göstermektedir ve tüketiciyi yanıltma sonucunun doğacağı aşikardır. Zeytinyağı ticareti yapanlar körfez zeytinyağlarını diğer yöre yağlarından duyusal özellik olarak ayırmaktadır ve farklı yüksek fiyatla satın almaktadırlar. Oysa ki birlik, coğrafi işaretleme talebiyle körfez yağlarını alım ve satım politikasında kullanabilmek için, tarım içine almak istediği yöre yağlarını da eklemek suretiyle aynı zamanda haksız kazanç sağlar hale gelmiş olacaktır.

Oysa ki dünyada zeytinyağı, elde edildiği yörelere göre değer taşımaktadır. Misal verecek olursak, İtalya'da Toskana Vadisi yağı değer olarak kiloda 30 Euro, diğer yağlar 5 Euro ile değerlendirilmektedir. Ayrıca rafine ve riviera zeytinyağından söz edilmesi menşe ile bağdaşmayacak bir olgudur. Birliğin ticari bir aktör olmasına karşılık, devlet kurumlarından atama yaparcasına görevlilerden oluşacak üst ve alt denetim kurulları ihdası, aralarında menfaat zıtlığı ve menşe farkı bulunan kooperatiflerden atamalar yapması ve birlik kombine laboratuvarını nihai laboratuvar olarak belirtmesi başlıbaşına diğer ticari aktörler yanında haksız rekabet olarak açıkça gözlenmektedir.

Bildirimi sunarken bu gözlem ve düşüncelerimi ifadede zaruret görmekteyim.

Sempozyuma başarı dilekelerimle saygılar sunarım.



TÜRK ŞARAP VE ZEYTİNYAĞI SEKTÖRLERİNİN ULUSLARARASI REKABET GÜCÜ ÜZERİNE SİNAİ HAKLAR BAKIŞ AÇISI İLE GÖZLEMSEL BİR DEĞERLENDİRME

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ABSTRACT

Türk şarap ve zeytinyağı sektörlerinin uluslararası rekabet gücü üzerine Türkiye-ABD gözlemlerimize dair tespitleri sinai haklar bakış açısı ile konu alan çalışmamız, dört soruya cevap aranması üzerine kurgulanmış olup, dört bölümden oluşmaktadır. Giriş bölümünde, şarap ve zeytinyağı uluslararası ticaretindeki yerimiz küresel tüketici tercihleri bağlamında irdelenmiş; ikinci bölüm şarap ve zeytinyağı sektörleri açısından sinai hakların sanayicilerimize ne gibi avantajlar sağlayacağı ve uluslararası arenada nasıl kullanılması gerektiği konusuna ayrılmıştır. Üçüncü bölümde ise, her iki ürün bağlamında "yerelden evransele gıda standardı" olarak da tanımlayabileceğimiz coğrafi işaret koruması açıklanmıştır. Sonuç bölümünde, Türkiye ihracatı açısından konunun uluslararası boyutuna atıflar yapılarak uluslararası rekabetin kilometre taşları arasında gördüğümüz tasarım ve tasarımcının önemi, şarap ve zeytinyağı sektörleri açısından değerlendirilmiştir.

1. GİRİŞ: DÜNYA TÜKETİCİ TERCİHLERİ KARŞISINDA TÜRK ŞARAP VE ZEYTİNYAĞININ DURUMU NEDİR?

"Dünya tüketicisi nereye gidiyor?"

Sorumuz bu. Konumuz ile ilgili veriler ise şöyle:

- Türkiye şarap üretimi.....65.000 litre/yıl
- Türkiye şarap tüketimi.....net veri yok
- Türkiye şarap ihracatı.....net veri yok
- Türkiye zeytinyağı üretimi.....155.000 ton/yıl
- Türkiye zeytinyağı tüketimi.....70.000 ton/yıl
- Türkiye zeytinyağı ihracatı.....70.000 ton/yıl

Gerek şarap gerekse zeytinyağı sektörlerimizin uluslararası ticaretten aldıkları pay, ne yazık ki kimi kaynaklarda her iki ürünün de anayurdu olarak telaffuz edilen bir ülke için onur kırıcı olduğu kadar hayal kırıklığı yaratıcı bir konumdadır kanısındayız. Bu tablo içinde sergilediğimiz görünüm itibarıyla, Türk şarap ve zeytinyağı sektörlerini temsil eden modern işletmelerimizin, bir yandan rekabet gücü sıfır olan atölye ve merdiven altı üreticilerle mücadele etmeleri, öbür yandan ise "özgünleşerek" (marka, tasarım ve coğrafi işaret perspektifinde) uluslararası arenada yol almak-yer edinmek bağlamında ivedilikle bir uzun vadeli stratejik plan yapmaları ve bunu kesintisiz uygulamaya koymaları rekabet oyununun olmazsa olmaz kriteridir.

Türk şarap ve zeytinyağı sektörlerinin uluslararası ticarete başarısı, dünya vatandaşlarına -ki her vatandaş bir tüketici her tüketici bir kraldır- değişik ürünleri (ürün çeşitlendirmesi yani yeni ürün geliştirme), değişik şekillerde (ambalaj ve tasarım geliştirme) ve değişik fiyatlarla (markalaşma) sunabilme yeteneklerinde saklıdır.

2. ŞARAP VE ZEYTİNYAĞI SEKTÖRLERİNDE SINAI HAK NEDİR, NASIL ELDE EDİLİR, NE SAĞLAR?

Sinai hak koruması, kısaca kar maksimizasyonunda tek yol ya da uluslararası rakabette evrensel avantaj yöntemi olarak kodlanabilmektedir.

Tarihsel gelişim olarak özetlersek; 20. yüzyılın ikinci yarısı müthiş bir üretim patlamasına tanık olmuştur. Özellikle 80'li ve 90'lı yıllarda daha çok üretmek, daha çok yeni müşteri kazanmak ve daha fazla kar etmek amacıyla yoğun pazarlama çalışmaları yürütülmüştür. Bunlara karşılık 21. yüzyıl ise ne yazık ki tatsız başlamıştır. Tapetâklâk olan piyasalar, savaşlar, terör ve ekonomik durgunluk insanlarda ne harcayacak para ne de tüketmek için neşe bırakmıştır.

Artık geçmişin yatırım, üretim ve kar bolluğunun en azından yakın gelecekte bir daha geri gelmeyeceği herkesin zor da olsa kabullendiği bir gerçektir. Diğer bir gerçek de, tüketicinin "velinimetlikten krallığa terfi ettiği" ve sadık müşteriler yaratılabilmenin giderek zorlaştığıdır. Arzın talepten daha yüksek olduğu günümüzde, mal ve hizmetlerde fark yaratmanın, yani yukarıda altını çizdiğimiz özgünleşmenin, ancak güçlü markalar ve tasarımlar ile başarıldığı ispatlanmış bir olgudur.

Başarılı markalar, tasarım kimliğiyle ayrılan, güvenilen ve yakın hissedilen, insanların hayatının içine girebilen varlıklardır. Bu yüzden ekonomik durgunluklarda bile insanlar tanıdıkları ve sevdikleri markaları terk etmemek için direnmektedirler.

Marka olabilmeyi temel koşullarından birisi özgün bir marka kimliği geliştirebilmek ve böylece benzer özellikler sunan rakiplerden farklı olmaktır. Özgünleşebilmek, yani ayrışabilmek için göze çarpmak, dikkat çekmek ve hedef kitleye hoş görünmek gerekmektedir. Artık insanlar, ürünlerden yalnızca tat almak yerine, prestij de talep etmektedirler. Kısacası, tüketiciler, satın alacakları her üründen, öncelikle, göz zevki, estetik beğeni ve yaşam kalitelerine katkıda bulunmasını istemektedirler.

İşte "görünen bu köy"den hareketle içinde bulunduğumuz yüzyılın yaratıcılık ve tasarım yüzyılı olacağını söylemek kehanet sayılmamalıdır. 21. yüzyılın üretim anlayışı, daha önceki yüzyıllarda yalnızca zenginlerin talep edebildikleri estetik boyutun, tüm sosyal katmanların hakkı prensibi üzerine şekillendiğinden standart mal ve hizmetler sunan kuruluşlar rekabet yarışında geride kalmakta ve kalacaklardır. Şarap ve zeytinyağı sektörlerimiz de gerek ürün tasarımlarında, gerekse satış noktalarında bu prensipten hareket ile kar ve katma değer sağlayan öğeler olarak marka ve tasarımı öne çıkarmak zorundadırlar. Alışveriş merkezlerinin sunduğu ürün bolluğu karşısında oluşan yeni tüketici profilinin tasarıma ve markaya daha fazla para ödemeye hazır olduğu tüm araştırmaların ulaştığı ortak sonuçtur.

Dünya ticaretinden büyük paylar koparan ülkeler tasarım kültürüne sahip, marka yaratabilen ve markalarını uluslararası piyasalarda yüksek değerlerle pazarlayabilen ülkelerdir. Sanayicilerimiz bu alandaki "kimlik" arayışlarına hız kazandırmının yanı sıra, üniversite-sanayi işbirliğini de gerçekleştirmek zorundadırlar.

Firmaların tüketicilerin isteklerine odaklı ürünler geliştirmeleri, değişen tasarım-üretim- pazarlama anlayışıyla beraber tüketicinin son nokta olmaktan çıkıp en başa yerleşmesi ile "milat" bulmuştur. Bu bağlamda marka, tasarım vb. değerleri daha objektif ölçmek

amacı ile özellikle son yıllarda tüketiciye ne istediğini sorma yerine onunla birlikte yaşamak, ne istediğini "keşfetme", hayatına karışmak ve onu gözlemlenme ve sonunda ona "tam da bunu istiyordum!" dedirtme bakiş açılı pazarda araştırma çalışmaları da yoğunluk kazanmıştır.

Buraya kadar hep marka dedik, tasarım dedik. Nedir bunlar? Genel olarak sınai hak kavramı ile ifade edilen markalar, tasarımlar, patentler ve coğrafi işaretler, özellikle şarap ve zeytinyağı sektörlerinde kar ve katma değer açısından "can simidi" kavramlardır. Kısaca bunların hukuki pozisyonlarını tanımlarsak:

MARKA, bir firmanın mal ve hizmetlerini bir başka firmanın mal ve hizmetlerinden ayırt etmeyi sağlamak koşuluyla kişi adları dâhil, özellikle sözcükler, şekiller, harfler ve sayılar ile çizimle görüntülenebilen veya benzer biçimde ifade edilebilen her türlü işaretlerdir. Marka tescilli ile bir firmanın ürünleri üzerine koyduğu tanıtım ibaresini yani "alemeti farikeyi" başkalarının izinsiz kullanmasını önlemek amaçlı hukuki koruma sağlanmış olmaktadır. Şarabı ve zeytinyağını bir isim ile piyasaya sunmak zorundasınız. Yani marka önemlidir.

TASARIM, "bir ürünün tümü veya bir parçası veya üzerindeki süslemenin, çizgi, şekil, biçim, renk, doku, malzeme veya esneklik gibi insan duyuları ile algılanan çeşitli unsur veya özelliklerinin oluşturduğu bütün" olarak tanımlanabilir ki; endüstriyel tasarımın korunması ile yeni ürünlerin şekilsel ve duysal ayırt edici niteliklerini hukuki koruma altına almak mümkün olmaktadır. Görsel farklılık veya estetik özellik taşıyan yeni ürünlerin endüstriyel tasarım olarak tescil edilebilmesi hukuki koruma yolunu açarak rakiplere göre avantajlı duruma geçmeyi sağlamaktadır. Tasarımların korunabilmesi için tasarımın "yenilik veya ayırt edici nitelik" kriterini taşıması gerekmektedir. Örneğin; şarap ve zeytinyağı şişeleri, etiketleri, karton kutuların hapsi birer tasarım tescilli konusudur. Tüketicilerin satınalma eğilimleri çağın zaman ürün kalitesinden çok bu vb. görsel öğelerde yoğunluk kazanmaktadır. Yani üründen ziyade sunum asıdır. Şarabı ve zeytinyağını bir şişe, ambalaj vb. içinde piyasaya sunmak zorundasınız. Yani tasarım önemlidir.

PATENT, Fonksiyonel içeriği olan ya da teknik bir problemi çözen fikirlerin korunma biçimidir. Bir patent başvurusunun belgelendirilebilmesi için "yenilik", "buluş basamağı" ve "sanayiye uygulanabilirlik" kriterlerinin eş zamanlı olarak sağlanması gerekmektedir. Örneğin; gazlı ayran yapımı patente konu olabilmektedir. Şarabı ve zeytinyağını farklı içerik ve yapılarda piyasaya sunmak zorundasınız. Yani patent önemlidir.

COĞRAFİ İŞARET ise, konumuz ürünler açısından özel bir önem arz etmesi diğer sınai hak kavramlarına nazaran daha az bilinmesi nedeniyle aşağıda ayrı bir bölüm olarak ve daha ayrıntılı olarak ele alınacaktır.

Bu arada belirtmemiz gerekir ki; sınai haklarla ilgili tescil belgeleri, gerekli evraklar ile Türk Patent Enstitüsü'ne (TPE) başvuru yapılmasını takip eden işlem prosedürü sonunda adı geçen tek yetkili kamu otoritesi tarafından verilmekte; hukuki koruma başvuru dosyasının kurum evrak girişine teslim edildiği tarih itibarıyla başlamaktadır. Markalar 10 yıl, tasarımlar 5 yıl, patentler ise 7 (incelemesiz), 10 (faydalı model) veya 20 (incelemeli) yıl süre ile koruma altına alınmaktadır. Markaların süresi 10 yılda bir 10'ar yıl şeklinde sonsuza kadar uzatılabilmekte; tasarımlarda bu süre 5'er yıllık 4 dönem halinde yenilemek kaydıyla 25 yıllla sınırlandırılmakta;

patentte ise talep edilen süreler sonunda hukuki geçerlilik kendiliğinden sona ermektedir.

Taklit ve belge sahiplerinin haklarına tecavüze dayalı kötü niyetli davranışlar, şikayet halinde cezai yaptırıma yol açacaktır. Bunlar;

- Taklit ürünlere el konulması,
- Taklit ürünü üreten üretim araçlara el konulması, el konulan araçların mülkiyetinin hak sahibine verilmesi,
- Hak sahibinin uğradığı maddi ve manevi zararların tazmini,
- Hapis cezası,
- Para cezası,
- Mahkeme kararlarının basın yoluyla ilan edilmesi,
- Taklitçi işyerinin bir yıldan az olmamak üzere kapatılması,
- Taklitçinin bir yıl süreyle ticarettten men edilmesi.

Şimdi sıra geldi iki can alıcı soruya yanıt aramaya;

- TÜRKİYE ŞARAPTA MARKA OLABİLİR Mİ?
- TÜRKİYE ZEYTİNYAĞINDA MARKA OLABİLİR Mİ?

Mutlaka ve muhakkak evet. Çünkü gerek şarap gerekse zeytinyağı, artık dünya sofralarının seçkin ve değerleri günbegün artan baş tacı konukları durumuna gelmiştir. Yani talep vardır. Bize düşen, işbu talebe uygun arzı yaratabilmektir. Önemli nokta sunumdur. Bu da firma bazında "marka-ambalaj", ulusal bazda "tanıtım-etkin lobi" çalışmasını gerektirmektedir. Her iki çalışmanın da lokomotifini tasarım ve tasarımcıdır.

3. ŞARAP VE ZEYTİNYAĞINDA TÜRKİYE COĞRAFI İŞARET SAHİBİ OLABİLİR Mİ, NE YAPMALI?

Coğrafi işaret nedir?

ABD ve özellikle Avrupa Birliği tarafından özel önem verilen COĞRAFI İŞARETLER, MENŞE ve MAHREÇ işaretleri olarak iki grupta değerlendirilmekte ve korunmaktadır.

Bir ürünün menşei olan yöre, alan veya bölge adı MENŞE ADI olarak anılır. Bu şekilde anılabilmesi için ürünün, coğrafi sınırları belirlenmiş bir yöre, alan, bölge veya çok özel durumlarda ülkeden kaynaklanan bir ürün olması; tüm veya esas nitelik veya özellikleri bu yöre, alan veya bölgeye özgü doğa ve beşeri unsurlardan kaynaklanan bir ürün olması; üretimi, işlenmesi ve diğer işlemlerinin tümüyle bu yöre, alan veya bölge sınırları içinde yapılan bir ürün olması şartlarının birlikte karşılanması gerekir. Örneklersek, Çerkez Peyniri, Kayseri Pastırması, Malatya Kayısı, Bozcaada Şarabı, Van Otlı Peyniri bu tür ürünlerdir. Bu ürünlerin nitelikleri, kalitesi, ünü ve diğer özellikleri belirli bir coğrafi yerin doğa ve beşeri unsurlarından kaynaklanan özellikler taşır ve bu ürünler bu özellikleri ile ün kazanmışlardır. Menşe adını taşıyacak ürünler ait oldukları coğrafi bölgenin dışında üretilemezler. Çünkü ürün, niteliklerini ancak ait olduğu yöre içinde üretildiği takdirde kazanabilir. Bir ürünü tanınmış hale getiren tüm özellikler sadece belirli bir alandan kaynaklanabiliyorsa bu tür coğrafi işaretler menşe işaretidir. Söz konusu alan, bir ülke olabileceği gibi bir il, ilçe ya da çok daha küçük bir yöre olabilir. Türk Rakısı, Kangal ve Akbaş Türk Çoban Köpekleri ülkesel özelliğe; Malatya Kayısı, Kayseri Pastırması, İzmit Pişmaniyesi şehirlere; Anamur Muzu ise ilçeye özgü coğrafi işaretlerdir.

Bir ürünün menşei olan yöre, alan veya bölge adının, MAHREÇ İŞARETİ olarak tescil edilmesi içinse, coğrafi sınırları belirlenmiş bir

yöre, alan, veya bölgeden kaynaklanan bir ürün olması; belirgin bir niteliği, ünü veya diğer özellikleri itibarıyla bu yöre, alan veya bölge ile özdeşleşmiş bir ürün olması; üretimi, işlenmesi ve diğer işlemlerinden en az birinin belirlenmiş yöre, alan veya bölge sınırları içinde yapılan bir ürün olması şartlarının birlikte karşılanması gerekir. Bu tür ürünlere örnek olarak Trabzon Ekmeği verilebilir. Bu ürünlerin nitelikleri, kalitesi, ünü ve diğer özellikleri belirli bir coğrafi yere ait doğal hammadde ya da beşeri unsurlara dayalı işlemlerden kaynaklanan özellikler taşır. Mahreç işaretini taşıyacak ürünler ait oldukları coğrafi bölgenin dışında da üretilebilirler. Ancak bu üretimde ait oldukları coğrafi bölgeye ait hammadde ve üretim yöntemlerinin aynen kullanılması ve ürünün kalitesinin aynı olması şarttır. Ürüne tanınmışlığı sağlayan özelliklerden en az biri belirli bir coğrafyadan kaynaklanmak zorunda ise mahreç işareti olarak korunmaya hak kazanır; Ardahan'ın Damal Bebeği, Çorum Leblebisi, Erzincan Bakır El İşlemeciliği Sanatı gibi.

Coğrafi işaret korumasının diğer sınai haklardan farkı, sağladığı korumanın kişiye özgü olmayışı, yani "münferit tekelleşim" değil "anonim tekelleşim" sağlamasıdır. Çünkü belirli standartları taşıması kaydıyla coğrafi işaret korumasına tabi ürünü üreten tüm üreticiler bu işareti kullanabilmektedirler. Ancak bu kullanım, belirli zamanlarda coğrafi işaret tescili sahibince yapılacak ya da yaptırılacak denetimlere bağlılığı gerekli kılmaktadır.

Coğrafi işaret tescilinin diğer bir özelliği de hem üreticileri hem de tüketicileri eş zamanlı korumasıdır. Çünkü tüketiciler, satın aldıkları ürünün nitelikleri konusunda işbu "yasal zamine" istinaden emin olmakta; üreticiler ise, bu niteliklere dayalı öncelikli tercihler karşısında rekabet gücünü elinde bulundurmaktadırlar.

Coğrafi işaret olarak tescil edilemeyecek işaretler nelerdir?

- Coğrafi işaret tanımına uymayan adlar ve işaretler,
- Ürünlerin öz adı olmuş adlar ve işaretler,
- Ürünün gerçek kaynağı konusunda halkı yanıltılabilecek olan bitki türleri, hayvan soyları veya benzer adlar,
- Kamu düzeni ve genel ahlaka aykırı işaretler,
- Uluslararası anlaşmalara (Paris Sözleşmesi ve Dünya Ticaret Örgütü Kuruluş Anlaşması) taraf ülkelerde korunmayan veya koruması sona ermiş veya kullanılmayan adlar ve işaretler.

Coğrafi işaret hakkına tecavüz halleri nelerdir?

- Tescilli adın ününden herhangi bir biçimde yarar sağlayacak kullanımlar veya tescil kapsamındaki ürünleri andıran ya da çağrıştılabilecek ürünlerle ilgili olarak tescilli adın dolaylı veya dolaysız olarak ticari amaçlı kullanımı,
- Sözcük olarak gerçek coğrafi yeri ifade etmekle birlikte, halkta haksız biçimde ürünün başka yer kaynaklı olduğu izlenimini bırakan kullanımı veya korunan adın tercümesinin kullanımı veya "stilinde", "tarzında", "tipinde", "türünde", "yöntemiyle", "orada üretildiği biçimde" veya benzeri diğer açıklama veya terimlerle birlikte kullanımı,
- Ürünün iç veya dış ambalajında, tanıtım ve reklamında veya ürünle ilgili herhangi bir yazılı belgede doğal veya esas nitelik ve özellikleri ile menşei konusunda yanlış veya yanıltıcı herhangi bir açıklama veya belirtiyeye yer verilmesi,
- Ürünün menşei konusunda halkı yanıltılabilecek biçimde ambalajlanması veya yanlışlığı yaratabilecek diğer herhangi bir biçimde sunulması,
- Yukarıdaki dört şıkta yazılı fiillere iştirak veya yardım veya bunları teşvik etmek veya hangi şekil ve şartlarda olursa olsun

bu fiillerin yapılmasını kolaylaştırmak,
-Kendisinde bulunan ve haksız olarak üretilen veya ticaret
alanına çıkarılan coğrafi işarete sahip malın nereden alındığını
veya nasıl sağlandığını bildirmekten kaçınmak.

Coğrafi işaret hakkına tecavüz hallerine uygulanacak cezalar
nelerdir ?

2. bölümde zikrettiğimiz cezai yaptırımlar coğrafi işaretler içinde
aynen uygulanmaktadır. Coğrafi işaret başvurusu, yayımlandığı
takdirde, başvuru sahibi, coğrafi işarete vaki tecavüzlerden dolayı
hukuk ve ceza davası açmaya yetkilidir.

Özellikle AB bu konuya ilişkin topluluğa şümul düzenlemeler
yaparak, Fransız Konyacı, İsviçre Çikolatası gibi ürünleri evrensel
bir koruma düzenine kavuşturmak uğraşı içindedir.

Biz ise, coğrafi işaret tescil başvurusunda bulunmadığımız için
LOKUMU İNGİLİZLERE, YOĞURDU BULGARLARA "kaptırmış"
bulunmaktayız. Türk lokumu İngiltere, beyaz peynir ve yoğurt
Bulgaristan tarafından tescil ettirilmiş durumdadır. TPE'nin bu
konuda gerekli girişimlerde bulunmuş ve Türkiye'nin kendine ait
coğrafi işaretler için o ülkelerdeki ticaret ataşeleri aracılığıyla şikâyet
başvurusu yapmış olmasıyla birlikte, bu çabalar büyük olasılıkla
sonuçsuz kalacaktır. Çünkü "atları alanlar Üsküdar'ı geçmişlerdir".
Ne yazık ki, yabancı ülkeler ve uluslararası otoriteler nezdinde
ürünü ilk tescil ettiren ülke ve/veya kuruluşlar, ürünün üretim
haklarını da elde etmiş olmaktadır.

Ülkemizde bugün birçok ürün sahiplenilmeyi, yani coğrafi işaret
korumasını beklemektedir. Şarap ve zeytinyağı da bu ürünler
arasındadır. Örneklersek, Şiş Kebap, Ankara Döneri, Kayseri
Mantısı, Aydın İnciri, Oltu Taşı, Anzer Balı, Afyon Kaymağı, Antep
Baklavası, Rize Çayı, Avanos Çömleği, Adana Şalgamı, Bursa
Kestane Şekeri, Diyarbakır Karpuzu, Meraş Dondurması, Denizli
Horozu, Ankara Keçisi ve daha yüzlercesi.... Tüm bunlar, kaliteyi,
güveni ve Türkiye'ye has olan yüzlerce yıllık emeğin, yöresel birikim
ve tecrübelerin süzgecinden geçerek oluşmuş ürünlerdir. Ülkemiz,
kültürel zenginliği ve doğası sebebiyle dünyada eşi benzeri olmayan
bir coğrafi ürün çeşitliliğine sahip bulunmaktadır. Her yörenin özgün
bir ürünü bulunmakta ve bir çok ürün de kendisine kaynak teşkil
eden coğrafi bölge adları ile anılmaktadır. Bu ürünlerin coğrafi işaret
tescili ile ticari açıdan hukuki koruma altına alınmaları uzun vade
milli menfaatlerimiz (ticari, siyasi ve turistik) açısından büyük önem
arz etmektedir. Halihazırda uluslararası ticari arenada, Türk
ürünleriyle rekabet eden ülkelere her gün bir yenisi eklenmekte,
hangi ülkenin coğrafi ürünü daha fazla ise o ülke avantaj
sağlamaktadır. Tüketiciler daha çok güven duyduğu için, alışveriş
yaparken coğrafi işaret korumalı ürünleri tercih etmekte, piyasada
bir ürüne bu derece büyük bir rekabet gücü kazandıran bu imtiyaz
şemsiyesi ile korumaya tabi ürünün üreticileri ülke olarak önemli
pazar avantajları sağlamaktadırlar.

Coğrafi işaret tescili, ürünün üretildiği bölgeyi temsil eden tüzel
kişiler, tüketici dernekleri ve coğrafi yöre ile ilgili kamu kuruluşları
tarafından TPE'ye ve/veya yurtdışı yetkili makamlara başvuru
sonucunda gerçekleştirilmekte olup; ülkemizde, tek yetkili kamu
otoritesi olan TPE tarafından yaklaşık 2 yıllık bir işlem süreci
sonucunda belgeye bağlanmaktadır.

ARTIK SANAYİCİLERİMİZ BİRLİK OLUP BU KONUDA ELLERİNİ
ÇABUK TUTMALI; GEREK ŞARAP GEREKSE ZEYTİNYAĞI
YEREL VE/VEYA ÖZGÜN ÜRÜNLERİMİZİN TİCARİ

DEĞERLERİNİ İVEDİLİKLE HUKUKİ KORUMA ALTINA ALMALIDIRLAR.

4. SONUÇ: MARKALARIN, AMBALAJLARIN VE COĞRAFİ İŞARETLERİN ULUSLARARASI KORUNMASI NEDEN ÖNEMLİDİR?

Bir ülkede alınan tescil, tüm dünyada geçerli bir hukuki koruma sağlar mı?

Hayır. Türkiye'de tescil edilen bir sınai hak sadece Türkiye sınırları içinde geçerli bir hukuki koruma sağlar. Ülkemizin de taraf olduğu uluslararası anlaşmalar gereği koruma istenilen her ülkede ayrı bir tescil alınması şarttır.

Tasarımı size özgü bir ürünü ihraç ediyorsanız ihracat şansınız %100 artmaktadır. Bu gerçek hem tasarımcıların hem de bu konuya zaman, emek ve kaynak ayıran firmaların beyanları ile sabittir. Günümüzde artık bir ürünün üretilmesinden ziyade asıl olan o ürünün kimliğidir. Bu şu demektir. Herhangi bir ürünün tasarım kimliği olmadan dünya pazarlarında alıcı ya da satıcı bulabilmesi neredeyse imkansızdır. Ülkemizde üretimin uzun yıllar ucuz işçilik ile kaliteden ödün verilerek gerçekleştirmiş olması, Türk sanayiinin tasarım ve tasarımcı olgusuna yabancı kalmasına yol açmıştır. Oysa dünya ticaret savaşları artık "tasarım" silahıyla kazanılmaktadır.

Peki, şarapta ve zeytinyağında firmalarımız bu savaşlarda kendilerine özgü tasarımlar geliştirip/gerçekleştirip başarılı olabilirler mi?

Elbette. Ülkemiz firmalarının çoğunun şahıs/aile şirketleri olduğunu dikkate alırsak bunlar, iç pazara ürün yapmaya alışmış, pek ihracat yapamayan, çalışkan ve dürüst, ancak vizyonları küresel bir bakış açısından uzak firmalardır. Çoğu sıfırdan gelmiş olduğu için; yönetim (muhasabe ve pazarlama) ile üretim (mühendislik) alanları dışında kalan "tasarım" mesleğine/bilimine uzun yıllar şüphe ile bakmışlardır. Sadece dünya gerçeklerinin farkına varmış; bir şeyler yapması gerektiğini idrak eden işletme sahipleri ise kısıtlı maddi olanakları ile yol alarak bu ortamda aradan sivrilmeyi becerebilmişlerdir.

Artık;

- "Dünya markası olmak/yaratmak" safsatasından kurtulmalıyız. Tescille, akşamdan sabaha dünya markası olunamamaktadır. Dünya markası olmak "iğne ile kuyu kazmak" gibi çetin ve uzun bir yol olup; sabır, inanç ve en önemlisi dev bütçeler istemektedir.

- Talebi doğru algılayıp, buna akıl katmalıyız. Bunu yaparken her yeni gün, dünü yaşamak ve farklılık alanları bulmak ve ortak emek ile liderliği doğru buluşturmak gerektiğini aklımızdan çıkarmamalıyız.

- Sürekli ürün farklılaştırmak, maliyetleri düşürmek, AR-GE yapmak ve kalite çemberleriyle insanımızı olaya odaklamak zorundayız.

Marka olmak formülünde bunlar var. "Hadi artık bir marka yapalım" demek işte bu yüzden olanaksız. Çünkü marka yaratmak, "logo geliştirmek" ya da herhangi bir ülkede temsilcilik açmaktan, fuarlara katılmaktan ibaret değil. "Bütünsel bir değer yaratmak" gerekli ki bu da yenilikçilik ve yaratıcılıkla sağlanabilmektedir. Dolayısıyla, şirketlerimiz taklidin getirdiği haksız rekabetten korunabilmek için

sürekli olarak ürünlerini yenilemek ve geliştirmek zorundadırlar. Önümüzdeki 10 yıllık terimde dünya pazarlarında adından sıkça söz ettireceğine inandığımız Türk şarap ve zeytinyağı sektör mensuplarına tavsiyemiz odur ki:

- Tescilsiz marka kullanmayınız. Markalarınızı ihracat yaptığınız ve ihracat yapmayı planladığınız ülkelerde de ivedilikle (pazara girmeden önce) tescil ettiriniz. Tescilsiz bir markayla ihracat yapılması halinde adı geçen markanın ihracata konu ülkede bir başka firma adına tescilli olması halinde, gümrüklerde mallarınıza el konulma riskinin bulunduğunu unutmayınız.
- Üretmiş olduğunuz ürünlerin model ve ambalajlarını tasarım tesciliyle koruma altına alınız. Türkiye’de tescil ettirmiş olduğunuz tasarımlarınızı ve patentlerinizi yasal süreleri içinde ihracat yaptığınız ve yapacağınız ülkelerde de tescil ettiriniz.
- Sektörel anlamda biraraya gelip, birlik olup, coğrafi işaret üzerine kafa yorunuz.
- Uluslararası tescil kolaylıklarından yararlanmak ve hak kayıplarına uğramamak için profesyonel "vekillik" hizmeti alınız.

Sektörler anlamında İtalya, İspanya ve Fransa’ya, genel perspektifte Çin’i ticari arenada yenmenin yolu, markadan, tasarımdan ve coğrafi işareten geçmektedir. Bu ise, tasarım-üretim-pazarlama faaliyetlerini iç içe gerçekleştirmek ve özgün ürün kimlikleri oluşturmak demektir. Ülkemizde son 10 yıl içinde dünya çapında isim yapmış birçok tasarımcı yetişmiş ve artık sanayicilerimiz özgün tasarımlar üretecek ve tüm dünyaya satabilecek kapasiteye gelmiştir. İnancımız ve gözlemimiz budur.

Sunum artık bilimsel sanattır. Bu bilimsel sanatın adı ise tasarımdır. Kazanan hep ve her zaman, market rafında ya da reklâmda gördüğümüz bir ürün karşısında tüketiciye "işta aradığım buydu" dedirtecek sunumdur. Bu ise, tasarımcının sinerjisi ile işadâminin vizyonundan ortaya çıkabilecek bir karışımdır kanısındayız.

Giriş bölümündeki rakamlardan anlaşılacağı üzere, ABD her iki sektörde de en büyük ithalatçı ülke konumundadır. Bu veriye dayanarak ABD’deki incelemelerimiz sırasında gördüklerimiz ışığında, ülkemiz açısından uluslararası ticârette -varolabilmekten ziyade- yüksek katma değer elde etmek temelli bir modelleme yaparsak;

- şarap ve zeytinyağında markalaşacaksınız;
- şarap ve zeytinyağını pazara sunarken tasarımda özgünleşeceksiniz;
- şarap ve zeytinyağında yeni aromalar, doğal karışımlar, özel işlemler geliştireceksiniz, yeni buluşlar yapacaksınız;
- şarap ve zeytinyağında ülkesel ve yöresel tatlılarınız vâsâ bunların coğrafi özelliklerini tescil ile taçlandırıp koruyacaksınız;

ki her pâyasından aldığınız pay olabildiğince "kocaman" olsun. Yolunuz açık olsun.

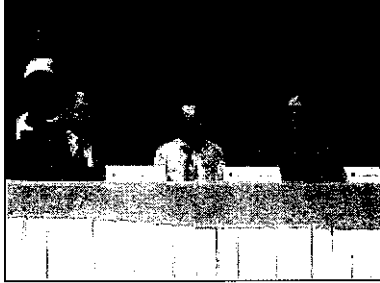
KAYNAKLAR

1. Giriş bölümündeki istatistiksel veriler EİB’nden sağlanmıştır.
2. Patent Haklarının Korunması Hakkında KHK/551
3. Endüstriyel Tasarımların Korunması Hakkında KHK/554

4. Coğrafi İşaretlerin Korunması Hakkında KHK/555
5. Markaların Korunması Hakkında KHK/556
6. Muhtelif Türk ve ABD Sektör Firmalarının Web Siteleri ve Birebir Görüşmeler
7. 1-30 Kasım 2004 ABD Gezisi Notları



TRANSCRIPT OF THE PANEL



Left to Right: Nihat Aktan, Ken Friedman, Tunçdan Baltacıoğlu.



Left to Right: Tefik Balcıoğlu, Maryse Posenae, Hüseyin Bekçi.

NİHAT AKTAN

Bunu tasarımları öne çıkarma çalışması olarak görüyorum. Çünkü Türkiye'nin ihracatında ve dünyaya açılımlarında hiçbir ürünün bu kadar etkili olacağını zannetmiyorum, çünkü bu iki ürün için de gerek hammadde bakımından, gerek işleme sırasında kazandığı katma değerlerle hiçbir şekilde yabancı para girmiyor, kısmen çok az miktarda birkaç makineye girmekle beraber bu makinelerle artık Türkiye'de de aynen dışarda üretilenler gibi hatta bazıları daha üstün olarak üretiliyor, onun için Türkiye'nin ihracatında o büyük rakamların içinde az bir sayı da olsa, gerçek ihracat olarak görüyorum ben. Ve otomobil öne çıkıyor, tekstil hatta öne çıkıyor; tekstil bile geri kalıyor bu hususta. O nedenle büyük bir yarar sağlamaktadır. Teşekkürler.

KEN FRIEDMAN

...And I was talking a little bit with Cən about this before and I was saying that I think this could be a rather exciting area to develop as a kind of focus or some kind of conference tradition, because nobody is really doing anything quite like us. You see one paper, or one track, or one stream coming up in other conferences. The thing I would like to see in addition to some kind of tradition going out of this in a conference way would also be when you are doing it, a chance to do more things like the trip that will take tomorrow, so when you come, for example either before or after, you are gonna have the chance to have a special day where you are going with few enough people to actually to see things being produced, to learn about the area, to learn how it is produced, so when you go home you not only have this rich interaction with people in the conference, but you will actually know more about what is here. And the part that I also liked very much -again that I would like to see expanded- I thought the exhibition was wonderful with the actual products, with the materials. Again to learn more one of the things that I always do when I go to a new place, everyone else goes to museums, I go to the supermarkets and grocery stores to see what is produced, what it feels like and tastes like. So some little things like that where, in addition to the conference, where we learn as scholars and academics to have a chance to interact more with the actual, the food culture, the wine culture and the oil culture. So those were my

thoughts.

TUNÇDAN BALTACIOĞLU

Günümüzde pazarlamaya baktığımızda, özellikle küreselleşen, globalleşen bir dünya içerisinde rekabetçi üstünlük sağlayabilmek birkaç unsurun elinde. Üretimi bunlardan bir tanesi olarak saymıyorum. Çünkü üretim, artık herkes tarafından bilinen ve kolaylıkla yapılabilen ve kolaylıkla satın alınabilen, teknolojiyi bol bol satın alabildiğiniz ve uygulayabildiğiniz bir alan. Fakat önemli olan bunun dış pazarda yer alabilmesi ve insanların ve tüketicilerin bütün dünya üzerinde istedikleri yerde bulabilme ve satın alma kararı verebilmesi. Şimdi burada temelde en önemli unsur tabii ki günümüzde birkaç noktada düşünülüyor. Bunlardan bir tanesi tasarım, bir tanesi de lojistik. Ve dikkat ettiyseniz bu toplantıya lojistik alanından oldukça fazla sayıda tebliğle katılımı ben özellikle arzu ettim ve konferans düzenleme komitesi de bunu tahmin ediyorum olumlu buldu, uygun gördüler ve kabul ettiler...

HÜSEYİN BEKÇİ

Tasarım artık öyle bir noktaya gelmiş ki, burada da biraz daha farkettim, neredeyse hayatın her alanında bir tasarım izi var. İşte özellikle son gelişmeler, burada aktarılan bildiriler, özellikle İtalya'da yaşanan örnekler benim çok ilgimi çekti ve Türkiye'de böyle bir şey yapılabilir mi diye bir taraftan da proje geliştirmeye çalıştım. Türkiye'de gerçekten yapılacak şey var. Özellikle bu noktada tasarım faaliyeti önemli. Hocamın da dediği gibi tasarım artık her noktada. Rekabetin en önemli unsurlarından birisi de tasarım. Ben şunu açıkyüreklilikle söylüyorum, en azından firmanın temsilcisi olarak: Şarap ve zeytinyağı konusunda yapılabilecek her türlü çalışmaya -tasarım olsun ya da bundan sonra yapılacak değişik ilgi alanlarında sempozyumlarda olsun- gerçekten katkı vermeye hazırız. Bizim için de bunlar çok önemli konular. Bundan -gerçi hep ambalaj üreticileri biraz haksız bulunuyor ama- 2-3 sene önce ortaya attığımız bir fikir vardı; zeytinyağı üreticilerine inmeden, daha üst seviyede, birlikler seviyesinde bu fikir pek kabul edilmedi. Niye biz %80 ürünümüzü dökme olarak İtalya'ya ve Fransa'ya gönderiyoruz? Onlar kendi ülkelerinde katma değer yaratarak 3-4 katı fiyatlarla Amerika'ya ve Japonya'ya gönderiyorlar. Amerika'da ve Japonya'da özellikle son yıllarda ciddi artışlar var. Niye bu tek çatı altında olmasın? Çünkü zeytinyağı ihracatı inanılmaz düşük fiyatlarda...

MARYSE POSENAER

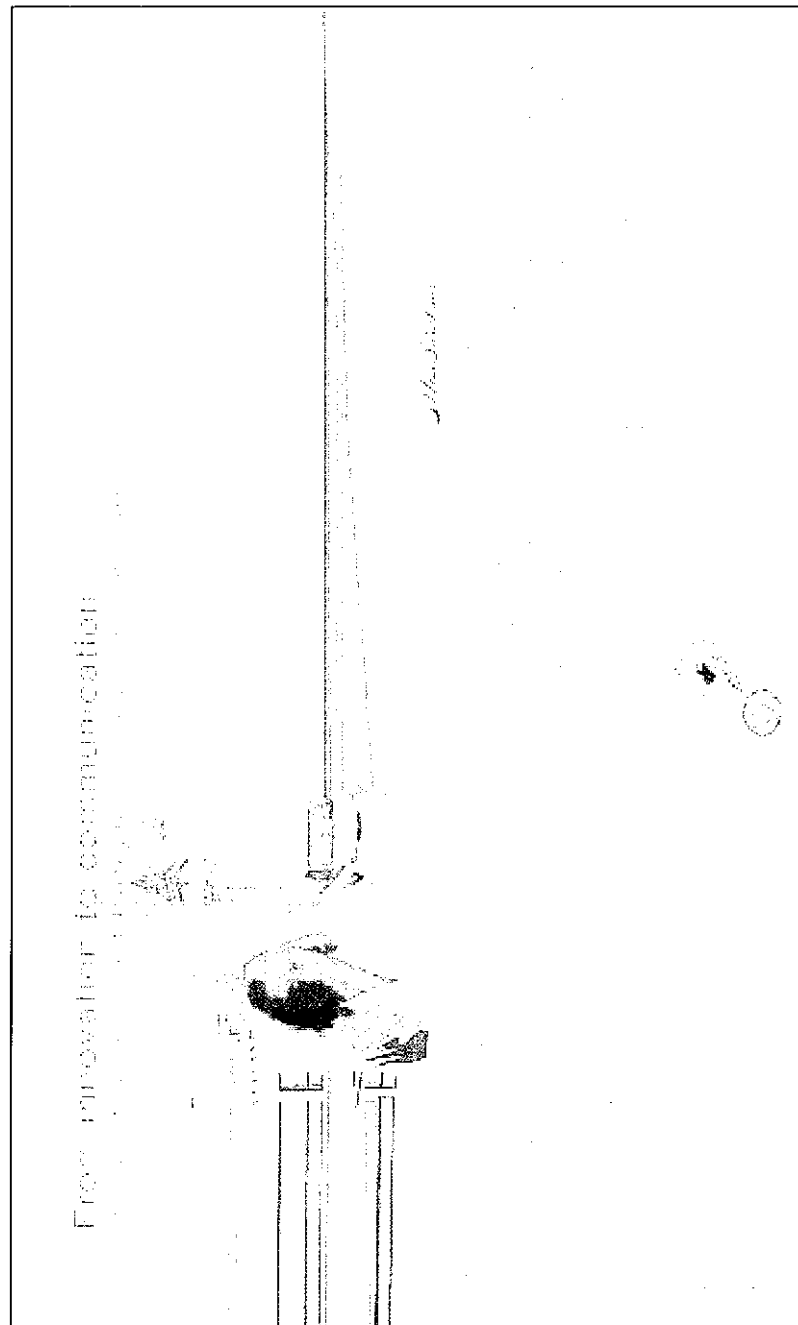
...And I am sort of looking at that tomorrow in terms of like what is happening in Turkey, in terms of education, and the great number of industrial design departments. Yes, I think it is a very good idea of this conference which according to Can, Ozlem, Alpay and so on, is more like an explanatory type of nature could really need to a specialization of the university in terms of design and focus on look of product range and so on, which I think is a wonderful idea. And maybe a way to use the resources of industrial designers, perhaps more efficiently, instead of finding everybody do interior decoration which I think is a lot the case in Ankara for instance. So I am looking at that in a different perspective and for one point I also very much agree with Ken that I would have loved to see more of the practical aspects of what you have been talking in a very large range like how do you make olive oil; I mean I sort of understand the idea I would like to see that. And I think something like that would have added something to the conference which today and yesterday afternoon was very nice.

TEVFİK BALCIOĞLU

....Kısa bir toparlama yapmak istiyorum. Benim gözlemlediğim şu: Son yıllarda, tasarım ve beden ve insan çok önemli olmaya başladı. Biz daha çok ne giydiğimizi, ne yediğimizi, ne içtiğimizi düşündüğümüz, kendimize özgü kimlikler oluşturmaya yönelik bir ortamda bulunuyoruz. Bunun bir çok nedeni var: Ekonomik, politik, ideolojik diyebilirsiniz belki. Ama tasarım bilincinin daha çok ortaya çıkıp yaygınlaşması, insanın kendine daha fazla değer vermeye başlamasıyla, spordan tutun da vücudunun yeniden şekillenmesine kadar bir çok alanda tasarımın söz konusu olmaya başladığını görüyoruz. O yüzden de bugün bu sempozyumun burada olması çok anlamlıdır.



WORKSHOP



by Lida Hujic



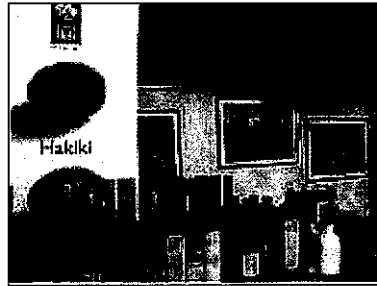
EXHIBITION

PARTICIPANTS:

- Izmir University of Economics, Department of Industrial Design with Tariş Olive Oil
- Izmir University of Economics, Department of Fashion Design
- Istanbul Technical University, Department of Industrial Product Design with "Anadolu Cam" Glass Company
- Dokuz Eylül University, Department of Textile
- ELDA Marketing and Commerce with "Efe Rakı"
- TARIŞ Agricultural Sales Cooperatives' Union with Tariş Olive Oil
- Sevilen Wines
- Yazgan Wines
- ALVISUAL Visual Communication Systems with "Aion" Olive Oil
- Külahçioğlu Wine Coolers
- Gusto Magazine



TARIŞ Olive Oil



TARIŞ Olive Oil



Photography Exhibition by TARIŞ



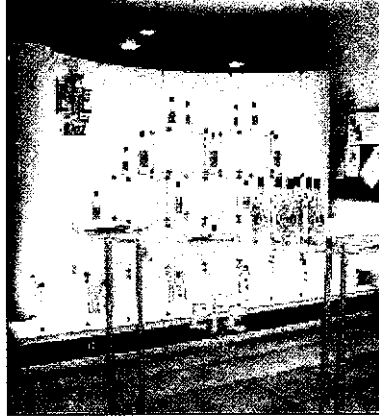
Photography Exhibition by TARIŞ



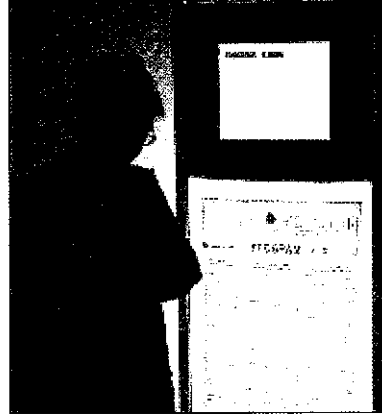
Sevilen Wines



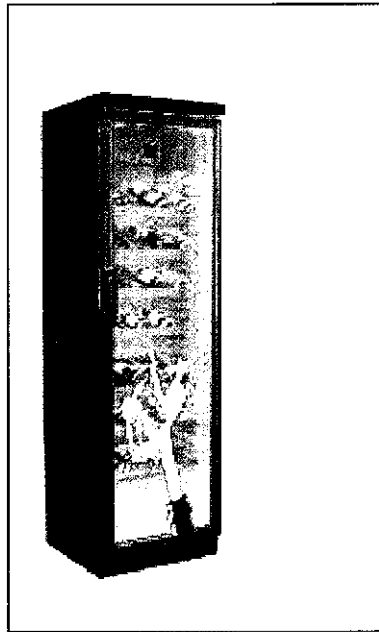
Yazgan Wines



ELDA Marketing and Commerce with
"Efe Raki"



ALVISUAL Visual Communication
Systems with "Aion" Olive Oil



Külâhçioğlu Wine Coolers



Dokuz Eylül University,
Department of Textile



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Department of Textile



Izmir University of Economics,
Department of Fashion Design



Izmir University of Economics,
Department of Fashion Design



Izmir University of Economics,
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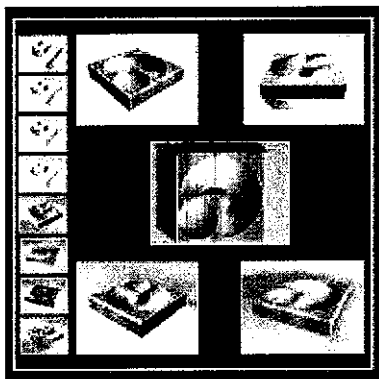
Izmir University of Economics,
Department of Fashion Design



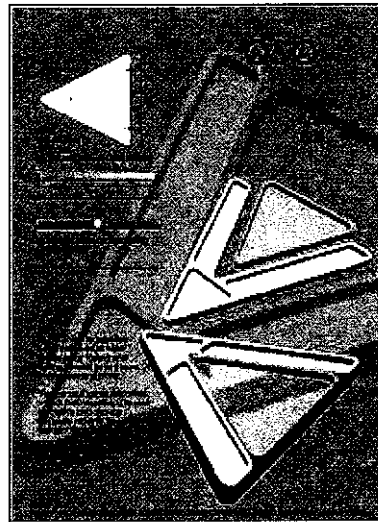
Izmir University of Economics,
Department of Industrial Design with
TARİŞ Olive Oil



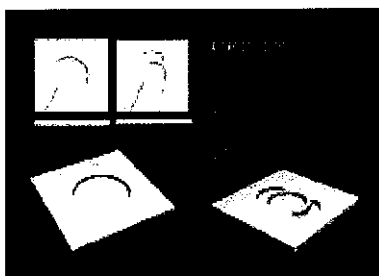
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Department of Industrial Design with
TARİŞ Olive Oil



Izmir University of Economics,
Department of Industrial Design with
TARİŞ Olive Oil



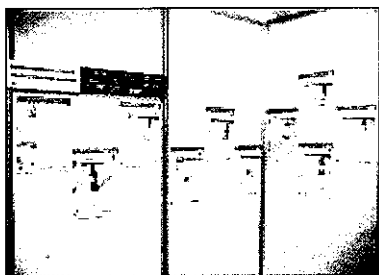
Izmir University of Economics,
Department of Industrial Design with
TARİŞ Olive Oil



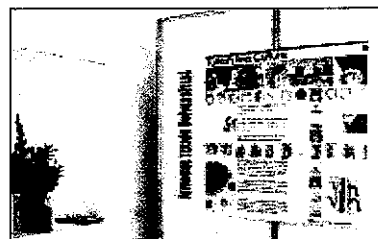
Izmir University of Economics,
Department of Industrial Design with
TARİŞ Olive Oil



Istanbul Technical University,
Department of Industrial Product Design



Istanbul Technical University,
Department of Industrial Product
Design with "Anadolu Cam" Glass
Company



Istanbul Technical University,
Department of Industrial Product Design

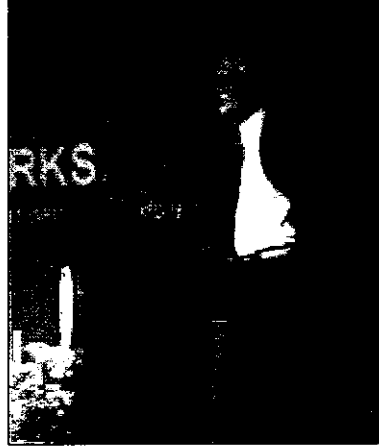


SYMPOSIUM PHOTOGRAPHS

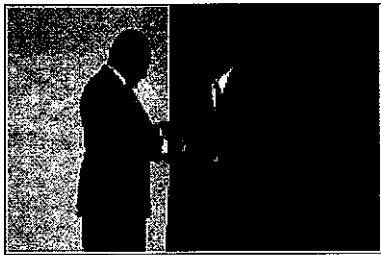




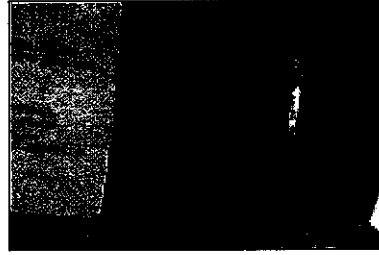
Ekrem Demirtaş, the President of the Board of Trustees and Aziz Kocaoğlu, the Mayor



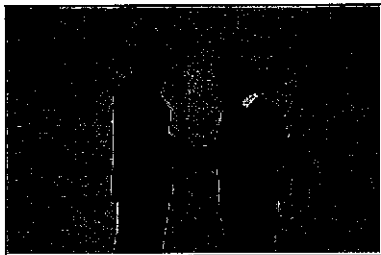
Ezio Manzini



Attila Sezgin, the Rector and Ezio Manzini



Nihat Aktan



Tevfik Balcıoğlu and Nihat Aktan



Ken Friedman



Can Özcan and Ken Friedman



Tevfik Balcıoğlu



Registration



Registration



Opening Dance by Zeynep Dinç



Conference Hall



Room A2



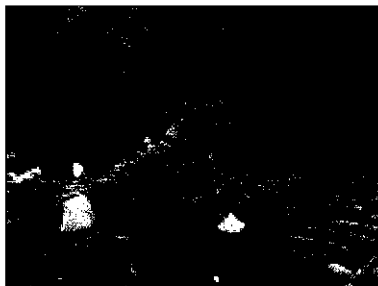
Conference Hall



Workshop by Lida Hujic



Workshop by Lida Hujic



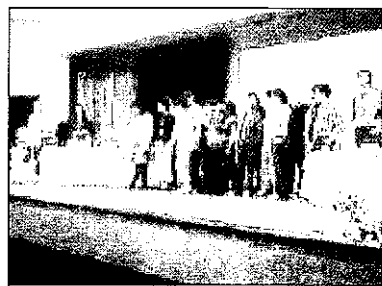
Alex Velasco



Ken Friedman



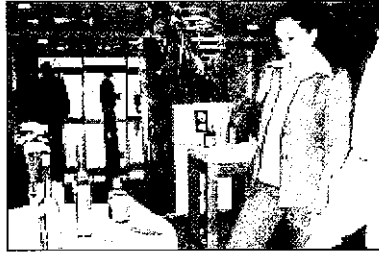
Closing



Closing

COFFEE BREAKS

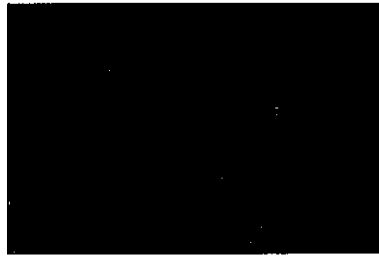




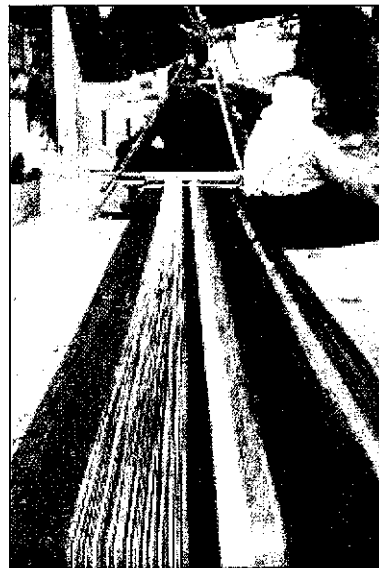
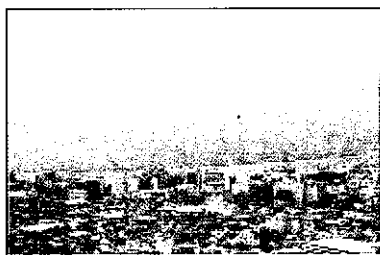
WELCOMING COCTAIL



DINNER BY SPONSORS SEVİLEN AND TARİŞ AT THE SEVİLEN VINEYARD HOUSE



TRIP TO IZMIR'S OLD MARKET AREA OF *KEMERALTİ*
AND CITADEL OF *KADİFEKALE*



TRIP TO THE HOUSE OF VIRGIN MARY, EPHESUS, AND THE VILLAGE OF ŞİRİNCE





LIST OF PARTICIPANTS



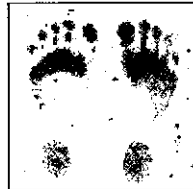
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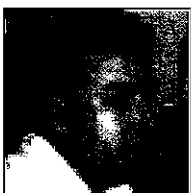
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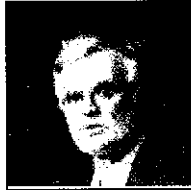
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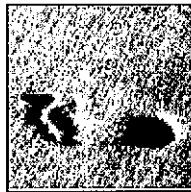
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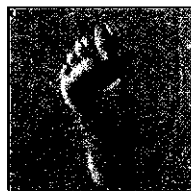
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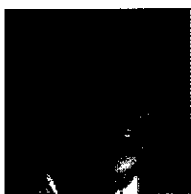
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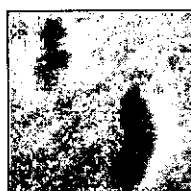
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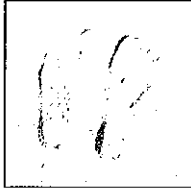
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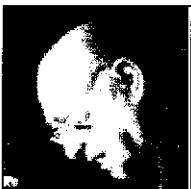
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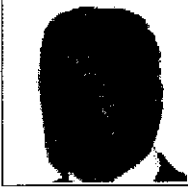
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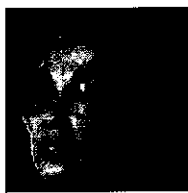
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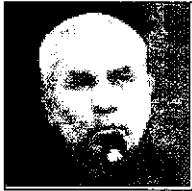
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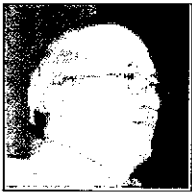
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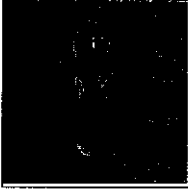
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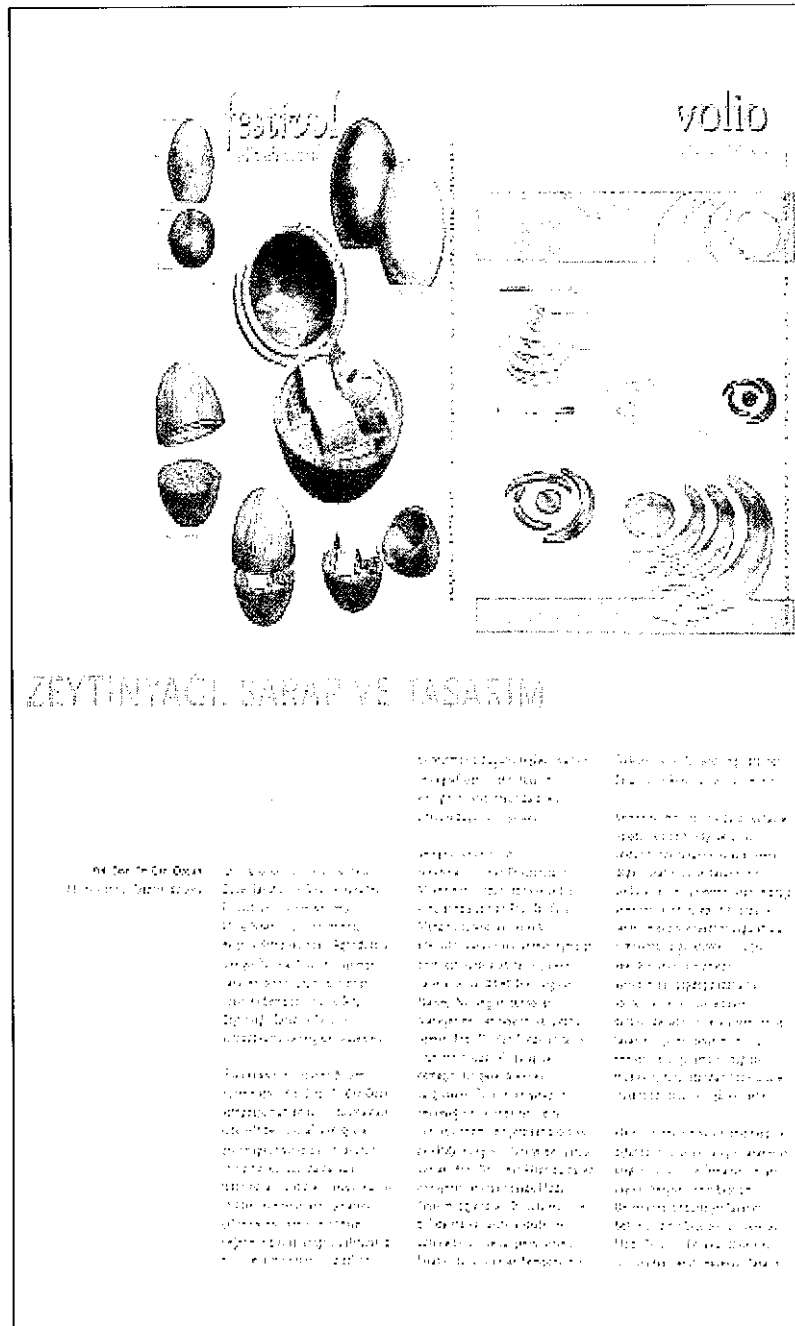


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