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THE REFLECTIONS OF CULTURAL ASPECTS ON PACKAGING DESIGN AND
AN ANALYSIS ON JAPANESE PACKAGING DESIGN

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LIST OF ABBREVIATIONS

A.C.	After Christ
A.D.	Anno Domini
B.C.	Before Christ
E/VAL	Ethylene/vinyl alcohol
PC	Polycarbonate
PE-HD or HDPE	High-density polyethylene
PE-LD or LDPE	Low-density polyethylene
PELLD or LLDPE	Linear low-density polyethylene
PET	Polyethylene terephtalate
PP	Polypropylene
PS/GPPS	Polystyrene /Crystal polystyrene
PS-E	Foamed polystyrene
PS-HI	High-impact polystyrene
PVC	Poly vinyl chloride
US	United States

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ABSTRACT

Since his existence, a human being has always been in need of communication, and provided this need by assorted methods. Communication is one of the main frames of culture that creates the diversity within nations, so within cultures, and in general means, design is a part of this communication, which presents the different approaches of cultures.

Packages today, are design products, and they reflect the diversity of life styles and preferences. Globalization has added new values to our lives and even modified the way of contemplations. Therefore, the application of packaging has become ubiquitous throughout the world.

Since we know that every package contains the cultural values of the society in which it has been designed , Japanese culture is chosen to be analyzed as a case study for this research, for both being dedicated to the traditional values and being successful to merge Western perspective by implying the contemporary production techniques and material. As a result, Japan created a synthesis of East and West.

The distinctive food products of this country that had been produced because of the climatical and geographical features have become well-known and are consumed by other nations as a result of globalization and international trade. Which are also, the packages of the traditional products chosen to be analyzed in this study, although consumed world wide, reflect the Japanese values and culture in both graphic and structural means, and became the distinctive exemplars of the reflections of cultural aspects on packaging design, which is also aimed to give a perspective for our culture and its packaging design products.

Keywords: *Packaging, Design, Culture, Communication, Visual Communication Design, Japanese Culture, Japanese Packaging, Traditional Alimentary Products*

ÖZET

İnsan varoluşundan itibaren iletişim gereksinimi içinde olmuştur. Bu gereksinimi farklı zamanlarda çeşitli yöntemler kullanarak sağlamıştır. İletişim toplumları birbirinden ayıran en önemli özellik olan kültürün yapı taşlarından biridir. Genel anlamda, tasarım eylemi de nesneler üzerinden toplumu oluşturan bireyler arasında iletişim kurar ve her kültüre göre değişen bir anlayış sergiler.

Bugün bir tasarım ürünü olan ambalajlar, günümüz dünyasının yaşam biçimleri ve tercihlerindeki çeşitliliği yansıtmaktadır. Globalleşme hayatımıza yeni bir boyut ekleyerek düşünme biçimlerimizde bile değişiklik yaratmıştır. Bu sayede ambalaj kullanımı dünya çapında yaygın hale gelmiştir.

Her ambalajın tasarlandığı ülkenin kültürel değerlerini üzerinde taşıdığını düşünürsek, Japonya hem geleneksel değerlerine bağlı kalması, hem de modern dünyaya kapılarını açıp her gün gelişen malzeme ve üretim yöntemlerini benimseyip kullanarak çağı yakalaması hatta önüne geçmesi açısından Doğu ve Batı'yı bir sentez haline getirmiş ve bu nedenle inceleme konusu olarak seçilmiştir.

İçinde bulundukları coğrafi ve iklimsel koşullar nedeniyle bu ülkeye has üretilen ve tüketilen gıda maddeleri, globalleşme ve ticaretin yaygınlaşması nedeniyle tüm dünya tarafından tanınıp tüketilir hale gelmiştir. Ancak, seçmiş olduğumuz geleneksel ürünler her ne kadar dünya çapında tüketiliyor olsa da, ambalajları yapısal ve grafik tasarım açısından Japon kültürüne ait değerleri yansıtmaya devam etmesindeki başarısı sebebi ile bu tez çalışmasında analiz edilmiş ve kültürel değerlerin ambalaja yansıması konusunda örnek teşkil etmiş aynı zamanda Türk kültürüne ve ambalaj tasarımına yeni bir bakış açısı getirmeyi hedeflemiştir.

Anahtar kelimeler: *Ambalaj, Tasarım, Kültür, İletişim, Görsel İletişim Tasarımı, Japon Kültürü, Japon Ambalaj Tasarımı, Geleneksel Gıda Ürünleri*

1. INTRODUCTION

There are changes and transformations in every area all around the world. The human mind collects the information from the environment and human is able to adapt him to the changes by using the ability to conceptualize, synthesize, and generalize the information. The design products, build up a specific communication activity in the environment, through the use of the symbols and meanings within their design components that refer to common values of the society. Through communication, human being is able to continue to expand his horizons, by using different experiences that belong to different life cycles and cultures.

How we store and communicate our experience and how we present our cultural achievements expresses a great deal about the society we live in. It reflects our struggle to come to terms with what is essential to us. Therefore, the aim of this study is to explore the communicational features of design products in the society through their design, which involve cultural signs, codes and meanings.

As we live in the globalized world with varying technology, materials and product range, preserving the cultural values, codes and expressing the identity through associational symbols for communication becomes important for every culture. This research has the purpose of revealing the tendencies, approaches or methods for reflecting the culture-based values on design products, so as to preserve the identity in this ever-changing world.

In order to achieve our purpose, the context has two limitations: First of all, as design covers a wide range of products, packages are chosen as visual design products, due to the advantage of owning two and three dimensional qualities. The other boundary was set for the analysis of packages where traditional Japanese alimentary products are selected because of the success of their ability to adapt their culture on these design products.

Within this purpose and limitations, a literature survey for the research topic relating the conceptual frame with the practice of design, and the analysis of the design products in order to bring out the conclusion becomes the method used for this study. In this parallel,

the structure of the thesis is as follows: two chapters that follow the introduction builds up the conceptual basis of the thesis.

The second chapter discusses the concepts of communication in the frame of design discipline, for the reason that design enhances communication by becoming a channel to communicate with the use of components of design as the representation of signs, codes and meanings. In addition, the relation between communication and culture in which communication is defined as one of the main features of culture are discussed, as "the information load" from past to present.

In the third chapter, we outline packaging as a visual communication design product, which becomes an important medium to realize the communication for its information transmitting features, its evolution in parallel with the evolution of humankind and its structural and graphic components to create this mentioned conversation between designer and user from the communicational and cultural point of view.

In accordance with congregating the packaging design and the concepts of communication and culture, the Japanese packaging design has been studied. In the fourth chapter, the main characteristics of Japanese culture have been defined, and their reflections on packaging design have been studied in the frame of components of packaging by examining the unique alimentary products of Japanese culture and their packages.

The last part concludes the results and evaluations that come out from the analysis of the products in the frame of the conceptual information given in the previous chapters.

2. CONCEPTS OF COMMUNICATION AND CULTURE IN THE FRAME OF DESIGN DISCIPLINE

Discipline of communication and "culture" as our research topic are significant areas of studies, where many researches have been done. In parallel with our research theme, we need to make a brief definition of "design" in order to set accurate limits for this chapter:

Design, can be defined as a plan or arrangement of line, form, mass, color, and space in a pattern. A design can serve a functional purpose as in architecture and in industrial designs or else purely provide aesthetic pleasure. The design may refer to preparatory stages for a work of art or it extends to include the compositional elements in a finished work of art. (The Columbia Electronic Encyclopedia, 2007)

This chapter explores the basic definitions of communication, culture and the related concepts of symbols and meaning, in the frame of the discipline of design.

2.1. DEFINITION OF COMMUNICATION

There are many different definitions made for the concept of communication. The definitions given in this chapter are chosen according to their correspondence with our research topic.

Gerbner describes communication as being the "social interaction through messages" (Gerbner,1967). Likewise, communication in also defined as the transmission of information, ideas, attitudes, or emotion from one person or group to another (or others), primarily through symbols (Theodorson and Theodorson 1969). Actually, any social activity that occurs around or within human beings involves a process of communication that entails at least two beings and a reaction that occurs in respect to the action of the other. The perceived meaning causes the reaction given. (Taşkıran, 1997)

In the most general sense, we have communication wherever one system or a source, influences another, the destination, by manipulation of alternative symbols, which is transmitted over the channel connecting them (Osgood et al. 1957). For any kind of

communication to take place, there are basic components needed. These are the sender of the information, the receiver of that information, the channel or medium that to pass the info, the form of the message, a cultural code, the relative and context of information. (Rapoport, 1982).

The design product, both two-dimensional and three dimensional, involve the components of design like shape, form, color, tone, texture...etc. which involve signs, codes and meanings. That is how; we can say that any product of design becomes a channel for communication.

2.2. COMMUNICATION RELATED CONCEPTS AND DESIGN

Design enhances communication, by helping more people to understand the message through the artifacts. Therefore, the discipline of design relates with the area that communication also based on. In this section, the common concepts used by both disciplines are discussed.

2.2.1. Language

Language is the most developed level of communication. Actually, all objects, actions, behaviors that transmit any idea is a language. Language is the system of signs, which explains or indicates concepts. (Broadbent, Bunt, Llorens, 1980)

It is possible to say that, language becomes the main element in order to build up communication within the society. However, in parallel with our research subject, art and design are not flexible as language. Therefore, it may be better to study sign and symbols, in order to explore the meaning reflected through the objects.

2.2.2. Sign and Design Product

One of the most important features of human beings is the ability to create symbols and explain the events or conditions through sign, with the use of language. In this section, the basics for this discipline will be studied.

Any sign, sends a message through a form. So, a sign is made up of two components, which are "form" and "context". The form and context never goes apart from each other. Every context is created with the use of specific abstraction and generalization. The context created actually lies in the society's coded experience, while the form will not have any meaning, if it does not relate with the context. As a result, a context, which is not reflected through form, can not communicate (Erkman, 1987)

The most well known scheme about signs is given below. Jenks stated that the most important point of the scheme is the simple relation between language, idea and reality. The form is named as the signifier and the context is named as the signified, so the sign is defined with this dual structure (Jenks, Baird, 1987)

Signified

(Context/ concept)

Signifier   Sign

(form/expression)   (object)
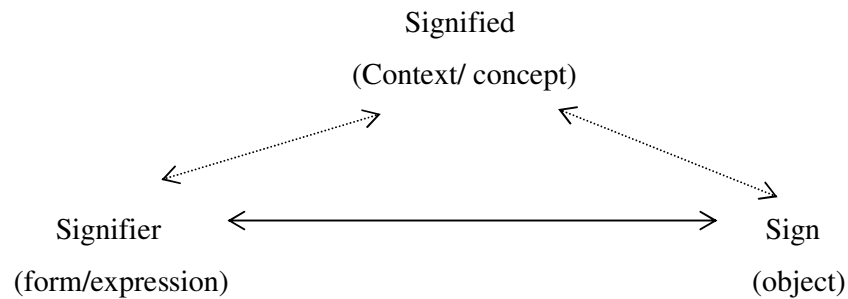
Semiotics is the area that analyzes the meanings transferred by symbols. This area also studies the mechanisms that involve the processes of creating a sign, building up an order and communicate. Within the frame of design products and art, the language has become the reflection of context using signs and codes. This language involves, color, light/shadow, texture, scale, dimension…etc. Therefore, signs that are related with each other make up the composition in order to transmit the idea behind it. (Taşkıran, 1987)

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2.2.3. Types of signs

The most attractive component becomes the "signified", as is it is the abstraction of our experiences, understandings and generalization of the world, being not exactly the copy of the real world. Pierce, classified the sign according to what and how they signify (Pierce, 1978):

    i.   Signal: There is a definite physical connection between the signifier and signified, but there is no aim as to transmit a message for the creation of the sign. North Star showing the direction of north, can be given as an example for this category.

    ii.   Icon: They are the images of the real object. They involve enough traces to look like the original and they are created with the aim of communication. They remind us the real object with its characteristic qualities or the similar hints. Maps, photographs, architectural plans can be examples for this.

    iii.   Symbol: Symbols are created without any reason and they only communicate. The relation between the form and the context depends on the associations in the community and through these quiet agreements in the society; the symbol becomes the interpreter of the signified concept. Symbols make the concepts concrete and communicate by reminding. The difference between the icon and a symbol is that the symbol refers to the idea in an indirect way. (Peirce, 1987)

In the areas of positive science, a sign only gives explanation to one signified. Like in arts, where the images function, a sign can become the bases for different concepts. On the other hand, there must be a definite association among users, in order for them to understand the meaning behind.

The design products generate codes within the society, so the abstract codes become visual. As Barthes mentions, a community develops, where every used object in the community becomes a sign of itself. They represent their function and still have a meaning when they are not used. (Barthes, 1968)

Actually, all communication involves signs and codes. Signs are artifacts that refer to something other than them. Codes are the systems into which signs are organized and they determine how signs are related to each other. It is possible to say that signs and symbols have a definite role in the design of product in order to build a communication with the users.

2.2.4. Meaning and the Design Product

Language and signs are used to transmit a message. Every message has a place in the system of meaning. This means, message is in a constant relationship with other concepts and gains value for being a part of this whole.

Meaning consists of values and information about a community in respect to the lifestyle, status, culture and other parameters and has an important role on the context that effects communication. (Rappoport, 1982)

When we are dealing with the concepts of sign, code and meaning, two different phases for communication occurs. In the first phase of communication, concepts develop in relation with nature, cultural aspects and environment. It is also referred as "the denotative meaning", which is the common interpretation made without any suspicion in the community. The demonstration of these concepts, which involves developing the meaning, occurs in the second phase. "Connotative meaning" is the term used, where the meaning is perceived according to the cultural and associational commons. For example, when we are reminded of a house, firstly an image appears in our mind with all of its physical components. At the same time, we also feel the emotional qualities that the image brings, which becomes the second phase of the communication (Taşkıran, 1997).

Language can only maintain communication if it can convey meaning and so the signs can hit their target. As meaning is a function of social communication, we can say that design artifacts can bring out the meaning by using various styles. Form is a group of visual components and meaning is a group of values. The physical components of a design product consist of form, color, texture, smell, material…etc., while the signified form is the abstraction of the physical appearance of the same object.

2.2.5. Symbol and the Design Product

There are different classifications given for the concept of meaning. As mentioned above, we can understand that, one group has the potential to carry functional, while the other group of meanings are sensual and based on the understanding of the observer or participant. The second group is studied in parallel with our thesis.

Symbol drives from ancient Greek and means the demolition of a whole to interrelated pieces and later to bring these pieces that are preserved apart from each other to make up the whole (Taşkıran, 1997) Symbol is used in order to define a basic function of visual communication. Symbols are used in order to give reference to pure signs. The main function of a symbol is to communicate and symbols are well understood if what they represent is meaningful (Arnheim, 1983).

As for the design products, a symbol represents the result of a conceptual process which is created by understanding and recall during the use of that object. Being in connection with committing to memory, the symbol involves a far more deep meaning, than the object itself conveys function wise. Gibson points out this relation by giving example of St.Peters Church in Rome. He claims that the image of St.Peters is only an image, nothing more than that; when it represents Rome and The Vatican City, it becomes a symbol (Lang 1987).

Any design artifact can stand for the values or meanings of a community that is gained through time. Oakley (1970), defines 3 ways for the creation of symbols:

  i. For the perception to happen there must be a natural relationship between the observing eye and the perceived idea. The relation is maintained through the similar structural qualities of one object with the other.
  ii. An object can also be perceived as a symbol without having similarities in its form and structure, but through the associated and fixed meaning attained to that object.
  iii. The symbols can be perceived through the meanings gained with personal experience.

To what extent can an object transmit an abstract concept? These concepts only come from a specific source, which is "culture". We need to define culture, in order to relate communication and design artifacts.

The symbols are mostly driven and created from cultural attributes.

2.3. THE RELATION BETWEEN CULTURE AND COMMUNICATION

As studied in the part above, language, signs, meaning and symbols own communicational values when they can combine with design artifacts. When the concept of design drives from the tradition and cultural values, the products can transmit common ideals known to everybody.

With reference to above-mentioned concepts, this part explores the topic of culture and its relation with communication, in order to understand how human beings relate to symbols, through cognition of mind.

2.3.1. Definition of culture

According to Webster's New Twentieth Century Dictionary, some of the definitions that describe culture are given below:

- The concepts, habits, skills, art, instruments, institutions, etc. of given people in a given period; civilization.
- The training and refining of the mind, emotions, manners, taste, etc.
- The result of this is; refinement of thought, emotion, manners, tastes, etc.
- In sociology, the spread of a culture trait or pattern from its point of origin to other areas.
- In anthropology, the integrated system of socially acquired values, beliefs and rules of conduct that delimit the range of accepted behaviors in any given society. (Webster's Dictionary, 1971:444)

Cultural differences distinguish societies from one another. One of the first anthropological definitions of the term was given by Sir Edward Burnett Tylor in the late 19th cent. By 1952, Alfred Kroeber and Clyde Kluckhohn had cataloged over 100 different definitions of the word.(The Columbia Electronic Encyclopedia, 2007)

Culture can be defined as "The total, generally organized way of life, including values, norms, institutions, and artifacts, that is passed on from generation to generation by learning alone".

It would be related with visual design in terms of how cultural identity has effects on visual communication.

> "Culture is a difficult word to define. Matthew Arnold defined it as the best that has been thought or said in the world, but this view tends to focus on what we might call 'high culture'. The English cultural theorist Raymond Williams came up with three useful definitions of the term "culture":
>
> . The process of a society's intellectual spiritual and aesthetics development (e.g. the great philosophers, poets, artists etc.)
>
> . The particular way of life of a people, period or group (e.g. the development of literacy, the type of sports played, the celebration of festivals)
>
> . The works and practices of intellectual and especially artistic activity (e.g. poetry, novels, ballet, opera, fine art).

In other words, culture is often described in terms of people, events, practices, and artifacts and more often than not, it is 'the best' of these things that are considered to be worth preserving." (Baldwin and Roberts, 2006) There fore, the preserved and constant values can manifest itself through a design or a physical sign and owns an important role to unify the community.

A cultural system is a complex system composed by the concrete objects on a conceptual space. The concept of culture comprises the techniques and methods serve for the understanding of the nature of the physical space in relation with God and humans, determine and provide the social and religious needs of the human and the areas that meet the desires (Oakley, 1970).

With these basic definitions, the next part will be studying how communication and culture relate to each other, and how this relation is structured in the human mind.

2.3.2. Communication as the transmitter of culture

Human beings live in a society and one of the most outstanding characters that differs this society from other living societies is the cultural dimension. As the human is a communal being, communication becomes one of the main features of culture. Culture is not only based on communication but also communication serves as the building bricks of culture. Language, actions and symbols become the main carriers of culture through decades. (Lang, 1987) The information that is transmitted through decades builds up the culture. If the information cannot be conveyed, then it cannot be a part of the culture. Culture has its strength as being societal but not personal (Erkman, 1987).

As culture is the load of information from past to present, it involves values that are meaningful to the community. The associational meanings within the community make up the culture in human mind with signs and codes. When a person can interpret through those signs, he can communicate in the society.

The motivated needs and perceptional processing with the guidance of schemes achieve the information coded. Some of these schemes are known by instinct, some of them are learned later. Moreover, they build up the bond between perception and memory.

2.3.2.1 Perception

The starting point of the relation between a human being and the physical world is perception. Perception is the action of understanding and sensing. The image processing of our brain and eyes are universal, but perception relies on the experience received from the society and culture (Lang, 1987)

Culture plays varying roles in the creation of perception. It acts like a filter that accepts the meaningful information and leaves out unnecessary values. With its most concrete way, we perceive physical characters with their forms. These forms own culture based meanings in its most symbolic level. For example, a cross sign on a building is perceived as a form to reach the sky, where it is perceived as a religious organization representing the utmost value of the society in a symbolic perspective. Actually, groups from different cultures will assembly these symbols in a different way and relate to different symbolic values, this explains us how people from different cultures perceive events. (Lazano, 1990)

2.3.2.2 Memory

The process started with the perception continues with recalling. Memorizing is getting the information consciously and coding the symbols attained from the physical objects to be kept in mind.

Memory is also dependent on culture. Memorizing involves, the acceptance of information, organizing and storing. In order to adapt themselves to the changes in physical world, organize the information and gain new aesthetical sensations, human beings learn, memorize and categorize. The learning process of the relation between objects and categories and how these categories are used are based on the generalization of the information in the memory. (Lazano, 1990)

As Kuban (1979) points out, human beings have a natural tendency to transform real objects into symbols. This process requires using the memory and recalling. Actually, memory and recalling past experience are the basics for the continuance and development of society.

2.3.2.3 Scheme

We truly accept the being of scheme, in order to explain the behavior that is connected with perception and memory. Ulrich Neisser (1997) defines scheme as a concept, which is owned by the perceiver, shaped by the experience, and defines the perceived. Scheme accepts the information, changes with the information and directs with this information.

To whatever meaning we approach to symbols and meaning, Kuban (1979) mentions that we must pay attention to its contemporary use, because there is no trace powerful other than symbolic meaning to build up the memory and scheme.

There fore we can say that, all mental processing needs a cultural foundation, as culture, being the utmost whole of values, plays an important role to build up the communication between the community and the physical world.

2.4. DESIGN AS THE MEETING POINT OF CULTURE AND COMMUNICATION

As defined in the beginning of this chapter, **design** can be understood in terms of a plan or arrangement of line, form, mass, color, and space in a pattern. Actually, as Rand (1993)implied, to design is much more than to simply assemble, to order, or even to edit; it is to add value and meaning, to illuminate, to simplify, to clarify, to dignify, to dramatize, to persuade, and perhaps even to amuse.

Design is a conversation between designer and user, one that can go both ways, even though the designer is no longer present once the user enters the scene.

It is common to think of interaction between a person and technology as communicating with the technology. De Sousa shows that the real communication is between designer and person, where the technology is the medium. Once designs are thought of as shared communication and technologies as media, the entire design philosophy changes radically, but in a positive and constructive way.

Once we start to view design as a form of communication between designer and the user, we see that perceived affordances become an important medium for that communication. Designed affordances play a very special role. Now we see that the designer deliberately places signs and signals on the artifact to communicate with the user.

Design may be considered as an instrument of organization, a medium for persuasion, a means of relating objects to people, and a method for improving safety and efficiency.

Design enhances communication. It helps more people to understand a given message.

2.5. DEFINITION OF VISUAL COMMUNICATION DESIGN

When we speak of the visual design disciplines, we include communication-oriented graphic design (often described as visual communication design), industrial design, and architecture. These are the professions concerned most directly with the user's experience of a form in the context of a specific task or problem, as opposed to its functional or aesthetic qualities in isolation.

Visual design attempts to solve communication problems in a way that is at functionally effective and aesthetically pleasing.

By communication, we mean the full process by which the behavior of one goal-seeking entity becomes to be affected by that of another through the reciprocal Exchange of messages or signs over some mediating physical channel. Research in communication theory (Cherry, 1978) has investigated the statistical properties of communication channels, the structure of language systems, the psychological and social characteristics of message senders and receivers, and the effectiveness of various coding techniques. All of these factors must be considered in communication-oriented design. Even more fundamental is the field of semiotics-The general theory and practice of signs (Pierce, 1931, Morris, 1938). The goal of communication-oriented design is to develop a message that can be accurately transmitted and correctly interpreted, and to produce the desired behavioral outcome, after it has been understood by its recipient.

We refer frequently to visual language, by which we mean the visual characteristics (shape, size, position, orientation, color, texture etc.) of a particular set of design elements(point, line, plane, volume etc.) and the way they are related to one another (balance, rhythm, structure, proportion etc.) in solving a particular communication problem. Any language system defines both a universe of possible signs and a set of rules for using them. Every visual language thus has a formal vocabulary containing the basic design elements from which higher-level representations are assembled, and a visual syntax describing how elements may be combined within that system. (Mullet, Sano,1995)

3. PACKAGING AS A VISUAL COMMUNICATION DESIGN PRODUCT

If we think about design as a conversation between designer and viewer, we can start to consider it as a form of communication. In this form of communication, there is a transmission of information, even the designer is no longer present at the moment the viewer meet the design product. Regarding this circumstance, we can easily notice that, -as a visual design product- Packaging becomes an important medium to realize this communication.

3.1. DEFININING PACKAGING DESIGN

We live in a world of infinite consumer choice. From the moment we wake up in the morning, until the moment we sleep, we are surrounded with thousands of products. Everything we touch has a packaging, the toothpaste while brushing our teeth, the milk and cereals in breakfast, all kind of soft drink etc. we can keep giving diverse examples. We use these products because we have chosen them amongst their competitors for a reason and most products are meaningless without their packaging.

Regarding this, we can say that, packages are everywhere and as the product inside, they also contain various information. This information directs two different points in consumer's perception. The first point is the rational mind with names, words, numbers and all kind of written element and the second is the emotions of the consumers', this type of information bypass the rational mind with facets consisting of shapes, color, typography, graphic design and appeal directly to the consumers' emotions. As Hine stated "Emotion can be seen as a very rapid means by which humans process information. And no field of design deals more effectively with the emotions than does packaging."

Even though packaging has been described as a container to keep products inside and to protect throughout its distribution and sale, today it is something more than a container, it is definitely more sophisticated and developed than ever.(Denison&Cawthray, 1999)

In short terms we can define packages as wrappings to preserve things that were produced far away or while ago in such a way to allow people to make use of them and protect its content during transportation, distribution and sale at the point of purchase.

> "Packaging is a key factor in practically all forms of trade: it is crucial to protect, store and ship goods, and, in many cases, the design of a package is the first a customer sees when confronted with any type of product." (Roojen, 2004: 7)

Fundamentally, there are two key types of packaging: either 'primary' or 'secondary':

The primary packaging is that which immediately covers a product, the wrapping and containers handled by the consumer, such as the bottle of water, the tube of toothpaste or the jar of marmalade etc. and it has the most important mission of presenting the product and/or brand identity.

The secondary packaging is larger boxes or cases that contain the group quantities of many individual primary packaged goods, usually for transportation, distribution and display in point of sales. (Denison&Cawthray, 1999)

As packages are not designed only for customers' concerns, it has also a huge importance for manufacturers, because packaging is the crucial final pay off to a marketing campaign. In many cases, marketers prepare the customer for the shopping experience by colorful print advertisements and television mini dramas, but to realize the sale, they must use the power of packaging. Because it is the package that creates the final sales background, seals the commitment and get itself placed in the shopping cart. (Hine, 1995)

> "In the 1960s, an American, James Pilditch, coined the phrase "the silent salesman" to describe packaging's role at the "point of sale". This role is of vital importance today. In the vast majority of cases, consumers select the product they want or need without the intervention of store staff. As a result, packaging's relevance and resonance with consumers at the point of sale is vitally important if it is to persuade consumers to buy a particular product or help them identify the one they need." (Calver, 2004: 253)

As pointed above package is also useful for the customer. A well-designed package helps the customer for buying process, because among similar products, the successful package simplify and speed decisions.

In the modern age packaging has become a powerful weapon for the market, new technologies and new materials helps designers to enhance product perception, in terms of aesthetic appeal to improve sales.

3.2. HISTORICAL PERSPECTIVE OF PACKAGING DESIGN

The evolution of mankind tells the story of our creative skill as a species for adapting to an ever-changing environment. Evidence shows that clothing, wood and bone tools, and containers of all kinds were an essential part of our early ancestors' survival kit.

Much as nature evolved skins and peels to protect the fruit of its vines, people from the very earliest times have wanted to preserve what they hunted, gathered and prepared. Our ancestors created earthen pots and leather pouches to store their food. They wove baskets and carved wooden chests to carry their possessions. Until the invention of paper, human used as sacking clothes and other textiles.

Figure 3.1.
Greek parchment paper

Figure 3.2.
Natural material woven basket

The first great advance was, in the third millennium BC, the use of papyrus by Egyptians. At 200 BC Chinese developed a sheet of mulberry bark to wrap things. A few hundred years later Arabs discovered the process and transferred it to Europe passing by Spain in 1200's. After the invention of papermaking technique, in 1500's, the art of labeling is created. Until 1799 papermaking was not a continuous process, the new method was patented by Nicholas Louis Robert in England. As a result of it, in 1841 first paper boxes were cut and creased by hand. In the United States, the 1870's saw the advent of corrugated board and folded paperboard boxes for the packaging of products such as

biscuits. At the same time Kellogg's launched their first cereal packaging and the first major use of paperboard boxes by National Biscuit Company for Uneeda Biscuits. Paper and Paperboard packaging increased in popularity throughout the 20th century.

Figure 3.3.
Uneeda biscuit box
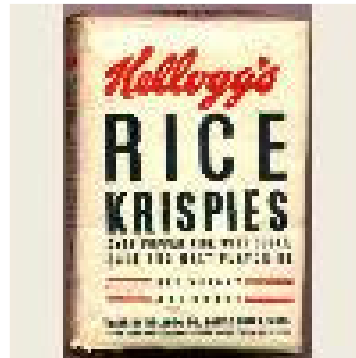
Figure 3.4.
 Kellogg's cereal box

Glass blowing most likely developed during the first century BC in Syria. In 3000 BC Egyptians used cast and/or blown glass containers for the storage of liquids. The use of bottles, jars and drinking vessels become widespread in society households and for packaging in Roman society and have been uncovered in ancient Roman sites. The glass making process spreaded slowly across Europe and in 1700's due to strong glass bottles and the invention of tight-fitting corks champagne was bottled for the first time by Dom Perignon. At the end of the 19th century first milk bottles appeared under the name of United Dairies. In parallel with the improvements of glass making techniques, the use of glass bottles increased and suddenly glass became an economically attractive consumer product. In 1977's glass was used only to pack high-value products such as perfumes, but with the introduction of environmental movement glass gained its place back in the 1990's for its recycling features.

Figure 3.5.
Ancient glass bottles

Figure 3.6.
Dom Perignon Champagne bottle

The use of paper and glass products was not sufficient to preserve and transport some fresh goods. In 1795 Napoleon offered a prize to anyone who could suggest a method for preserving food. A chef, Nicholas Appert, proposed sealed containers and glass bottles. The Napoleonic Wars ushered in the use of sealed metallic containers that not only protected but also preserved their contents. An English inventor, Peter Durand, used metal plates which were dipped into tin to protect them against rust, and then soldered to make a container. The "tin canister" was born. Collapsible metal tubes were used for the first time for artist paints dating back to 1841 and right after that toothpaste is invented and starts to appear and sold in tubes. At the beginning of 20th century aluminum covers were used for Mason Jars and wooden barrels were replaced by steel ones to carry oil. In 1913 foil wrapper was first used in US Life Savers candy packaging. In early 1950's foil-lined composite cans were introduced for biscuits. Continued down gauging of tinplate containers, moved to design two-piece cans caused the reappearance of interest in tinplate as a nostalgic packaging in 1990's.

Figure 3.7.
Collapsible metal tube

Figure 3.8.
First use aluminium foil wrapper

One of the first plastics for packaging was discovered in the early 1930's by accident during an experiment with ethylene. In 1924 Du Pont manufactured first Cellophane in New York, a few years later PVC become available as a commercial product. Those days expensive plastic caps were only used for luxurious items such as perfume bottles. Nylon was invented in 1938 by Du Pont. With the development of better production techniques in 1946 use of plastics raised. As a result of first tubular was blown in 1949 and a squeezable plastic bottle was designed for Stopette Deodorants. During 1950's in West Germany Polycarbonates were developed and at the same time in UK and US high-density PE was developed by Exxon. In consumers product range stretch wrapping was introduced in Sweden in 1973. In 1977 PET becomes widespread as bottle material for carbonated drinks and during 1980's it was used for foods and hot-fill products such as jam. Current packages began to incorporate recyclable and recycled plastics and with biodegradable plastics.

Figure 3.9.
First squeezable plastic deodorant bottle

Figure 3.10.
Use of shrink on PET bottles

Packaging's development has been affected over the centuries by advances in technology, by transportation developments, and by societal changes. Just as progress and change have had impact on all aspects of our lives so have these things influenced packaging.

3.3 TYPES OF PACKAGING

3.3.1. Cartons

One of the most widespread forms of packaging is cartons. They are used in various fields and are employed to package products as diverse as frozen food and cosmetics, electrical goods and medicines, and confectionery and household goods. While designing the package, size must be determined by the need of protection or the product itself. Its shape may equally be influenced by the product it holds and the envy to create a different and eye-catching form.

> "There is no limit to the number designs for carton packaging. Despite the proliferation of standardized templates and a preponderance of similar or successful designs available on the market, there remains always scope for improvement, innovation and creativity." (Denison, 2006:25)

3.3.2. Bottles

In the last century, with the invention of new plastics and production methods, such as extrusion blow and injection molding, the domination of glass as the material of choice for bottles has been challenged. Until the use of plastics become widespread, glass bottles were preferred as container for all kind of liquid product. A composite material of sand, lime, soda and alumina, glass can be moulded into a huge range of shapes and sizes.

Today designers' choice of material for packing liquids depends on several factors. One of them is the physical state of the product to be packed, for example, some products need to be filled hot such as jam and peanut butter, so the use of glass necessary because some plastics are effected by the heat, another glass case is the pharmaceuticals in which the bottles must be cleaned and sterilized. Another concern is the cost; with fast-moving consumer goods, keeping the cost of packaging is sometimes necessary for retailer store products, so use of plastic is much more suitable. However, with prestigious products such as perfume and spirits use of plastic would not be appropriate to reflect the products' quality in consumer's eye. The last one is the field of use of the bottles. The fragility of the glass makes it sometimes unsuitable for its use in areas such as baby products and bath or shower products. (Calver, 2004)

3.3.3. Cans

Cans are used widely for food and beverages, and are made from a variety of materials. For certain types of products such as, drinks and aerosols aluminium is commonly used. Lack of side seams in extruded cans give them the 'clean' look and let the design roll over the can. Cans are manufactured using a variety of methods. Three-piece, seamed cans are created using three pieces of metal, formed into the desired shape, then welded or soldered together. Two-piece cans have been developed to try to reduce the amount of materials used, the most significant cost in any can. (Kelsey, 1989)

> "The size, shape, and finishing of cans can have a huge impact on consumers' perceptions of a product, and designers have a role to play in selecting formats that supports the range line-up and brand proposition." (Calver, 2004: 86)

Sapporo, Japan's oldest beer brand is a good example of it with its newly designed ring-pull and distinctive shape. When the hole is removed the can become a drinking vessel. The novelty of the format made it a success in the market.

3.3.4. Tubes

Tubes are the containers to pack all kind of creamy product such as toothpaste, artists' paint and glue. The material used in the production of tubes varies regarding the product range. Nowadays, collapsible tubes are generally made of plastic films laminated to foils or aluminium. However, for some cases like ointments and adhesives requires the use of straight tinplate is necessary for reasons of compatibility.

Researches pointed out that consumers prefer to use plastic laminated tubes rather than aluminium ones for aesthetic reasons. A crumpled or cracked and torn metal tube is unlikely to enthusiast the repeat buy. (Sonsino, 1990)

3.3.5. Tubs and Jars

From medicines to foodstuff and homecare products, tubs and jars are used as packaging in every sector.

> "The range of shapes and sizes that tubs and jars come in is huge, as is the spectrum of closures-from tamperproof to child-resistant, metal lids to plastic caps." (Calver, 2004: 88)

Manufacturers and designers work constantly to create a difference in the way to present their product and to position their brand. There are several concerns about the selection of tubs and jars regarding price, product usage, market sector and product range. To create a difference among their competitors they have to create something different. Sometimes it is the use of a new cap, another time a completely new tub distinct from anything else. Whether large or small, this distinctiveness affects consumers' perception of products' relevance, usability and lifestyle compatibility.

3.3.6. Clamshells and Blister packs

Clamshells are plastic containers made of two moulded part within the two the product is inserted and sealed by heat. It is a very rigid structured packaging which protects the product while in transit and at the point of sale from unwanted invasion of consumers. Regarding its sealed format clamshells are very effective to reduce theft because it is quite hard to open it.

Skin and blister packs share one thing in common. They both use paperboard card as the backing to the packaging. Other than that they are different. With skin packaging, the porous card has a heat-seal coating, which enables plastic film to bond to the card. Blister packaging is different in that the blister for the product is pre-formed using a mold. The blister is attached to the backing card using either heat-sealing or stapling. In both skin and blister pack formats, the backing card is the primary design vehicle. (Calver, 2004)

3.4. DESIGN COMPONENTS OF PACKAGING

Design components of packaging are divided into two main titles as Structural Design and Graphic Design. Than Structural Design subdivides into Material, Form and Size, on the other hand Graphic Design subdivides into Color, Typography and the use of Symbols and Icons.

3.4.1. Structural Design

Structural design is a term generally used to describe three-dimensional aspects of packaging and all its formats such as boxes, bottles, jars, tubes and so on. The term structural design developed for the reason that it is usually created by designers with different educational background and skills than the graphic designers have.

The first consideration for creating the package is the physical state of the product. A designer has to define various questions before looking for competition with similar products. The product to be packed is a liquid or a powder, is it soft or hard, fragile or rigid, is it sensitive to light or heat or cold? And so on, it is possible to increase the number of questions. Beside these questions, another consideration for the designer is the range of product such as, food products, personal care and health products. After defining all necessary properties of the product, they can start the design in a concept to differentiate the product among its competitors. As we mentioned before, all kind of product is meaningless and undifferentiated without their packaging, for this reason packaging is a key factor in many industries, but certainly the most important within the food and beverage sector. (Morgan, 1997)

> "The form or structure of the packaging often creates strong product imagery and becomes widely recognized as 'being' that product." (Denison&Cawthray, 1999: 10)

People memorize packages regarding on previous experiences, to exemplify the fact we can state some worldwide known packages as its classically curved bottle world's popular soft drink Coca-Cola, and instantly recognizable long triangular tube of Swiss delicacy Toblerone chocolate bar. Even a consumer's eyes are closed; it is definitely possible to

choose these products amongst their competitors because the form has been known for the product itself.

Figure 3.11.
Classically curved Coca-Cola bottle

Figure 3.12.
Triangular box of Toblerone chocolate

As a result of it consumers react immediately to package shapes, these shapes influence them for making the final buying decision. Characteristic forms and aspects of the packages ease the recognition of products in different categories such as cleaning and toilet products, milk cartons and chocolate boxes. On the other hand, a manufacturer of an exclusive product, such as jewelry or perfume, may consciously choose an unusual, eye-catching form. (Roojen, 2004)

As Denison claims in his book when structural design is applied effectively, it will often exceed the various other methods of winning customer loyalty, like advertising, branding and graphic imagery and as the way it offers improvements in performance it will also develop competitiveness in the marketplace.

3.4.1.1. Material

Generally, the choice of the material is determined by the product to be packed. At this point designer's primary consideration is to provide the necessary conditions to preserve, protect, transport, display and deliver the packaged product in a hygienic and secure manner as possible.

To control consumers' perception of a product, material selection is also important. Both initial perceptions and more considered appraisal. These perceptions can be manipulated through the appearance of a piece of packaging and through the way the packaging feels in the hand.

3.4.1.1.1. Paper

Pulp and paper manufacturing is one of the oldest major industries in the world. By the time the civilization has evolved, human needed writing mediums. One of these medium dates back to 3000 B.C. called Papyrus, a basic type of paper made from the same named plant growing along the Nile River. The plant was cut into thin slices and pressed together to create the sheet. However, the invention of paper as we know it today is credited to Chinese, and was first produced around 200 A.D. from fermented and beaten mulberry bark fibers. This method was kept as a secret since the Arab's discovery. The Arabs learned paper making and passed it into Europe from Spain.

Paper is made from wood and other materials such other materials as cotton, linen, papyrus and sugar cane fibers. Since its invention, many different fibers have been used for its manufacture. Today wood is the primary raw material from which most paper pulp is made. Before wood can be made into paper, it must be reduced to its basic components. Wood is made up primarily from cellulose of fibers bound together with sugar, gums, resins and other components. The objective of pulp manufacturing is to separate the fibers and the other undesired components from each other to provide a suitable pulp to go to the paper mill.

There are different types of paper products used in packaging industry. Modern and rigid constructions of paperboard for product containers and for the shipment of all kinds of individually packaged goods are of recent origin. The concept of paperboard boxes have begun many centuries ago in China to pack their fine teas. Since then, this oldest form of paperboard packaging has become an essential attachment to the marketing. Automatic production of paperboard cartons was developed as an accident before the turn of the 20th century. In the 1890's a Brooklyn printer, has deliberately make up a plate containing cutting knives and used a press to cut out the carton.

As Sacharow implied, basically folding carton construction consists of making a three-dimensional solid from a two-dimensional piece of paperboard by cutting, scoring, folding and gluing. Improvements in materials and printing methods in the recent years makes carton packaging possible to create full colored and attractive containers as part of the point-of-sale impact.

Another form of paperboard packaging is the corrugated board, which is started as a fluted band of paper used in England and then in United States used to pack bottles and vials takes its shape after an American inventor tasted the fluted paper between two flat paper sheets. So the corrugated container industry was born. Corrugated board, as we know it today, is manufactured from three basic sheets-two liner boards and a central corrugated sheet. These materials can be varied as to weight, type and number of height of the corrugations in the fluting medium. There are three types of liner used in corrugated, pure craft, test liner and low grade pulp with a craft sheet and chip. The properties of a corrugated board depend on type, number and position of the corrugations. The central flute can be seen in four different sizes, most used are A, B, C, E flute and their combinations. Each of these flute sizes has different use in various sectors. Corrugated board provides more cost effective protection to products previously packaged by other methods and is a major contribution to the modern distribution system. (Sacharow, 1978)

There are also wrapping papers, grocery bags made of virgin craft, big bulk bags used to bulk shipping and molded pulp packages used for eggs, food trays and cushioning for industrial items.

3.4.1.1.2. Glass

Few of us can imagine modern life without glass. Glass packaging is used for many products, wines, spirits and beers all come in glass as do medicines and cosmetics not to mention numerous foodstuffs. Today, glass making is a modern, hi-tech industry operating in a fiercely competitive global market where quality, design and service levels are critical to maintaining market share. With increasing consumer concern for the environment, glass has again come into its own proving to be an ideal material for recycling.

Glass is a combination of sand and other minerals that are melted together at very high temperatures to form a material that is ideal for a wide range of uses from packaging. Today man has mastered the glass-making process and can make many different types of glass in infinitely varied colors formed into a wide range of products.

Silica in the form of sand is the main ingredient of glass and this is combined with soda ash and limestone and melted in a furnace at temperatures of $1700^{o}C$ becoming fluid. This property allows glass to be poured, blown, pressed and moulded into such a variety of shapes. Other materials are added to glass to obtain different colors or properties. Glass can also be coated, heat-treated, engraved or decorated. (Kelsey, 1989)

For nearly 2,000 years, glass blowing by hand was the main method of forming glass articles. The last few years of the 19th century saw the beginnings of blowing glass by compressed air and the 20th century brought in the revolution of mechanization, although glass blowing is still carried out by craftsmen today. All bottles and jars are now made automatically by one of two methods - 'Press and Blow' or 'Blow and Blow'. As part of the production process some types of glass are subjected to secondary processing such as annealing, toughening, coating and decorating. Mostly used decorating methods for glass packaging are labeling, sleeving, printing and embossing. Pressure Sensitive Labels (PSL) achieve a 'no label' look and offer real flexibility in color and shape. Intricate graphics can be created that can include metallic, varnishes (tactile effects) and foils (silvers and golds). (British Glass, 2007)

Sleeving is a popular and cost effective technique that beside visual benefits, it offers added protection in filling and handling and reduces a product's exposure to UV light, increasing shelf life. A variety of screen print options are available like lead-free, ceramic inks and organic inks. Embossing is achieved within the primary process of glass manufacture and is created as a permanent feature within the container and is the most cost effective way.

3.4.1.1.3. Metal

Consumer rigid metal packaging uses only two materials: steel and aluminium. The chief advantage of all metal containers is high ratio of strength to weight.

Containers of steel and aluminium have made significant impact on the distribution of foods and chemicals. These two metals, in combination with protective coatings either of other metals or of plastics, are fabricated into various types of containers (cans, containers, tubes). Coatings provide added strength, better storage conditions. Direct printing of the labels combines decoration and information with protection. (Kelsey, 1989)

Steel is usually in the form of tinplate. Tinplate has changed over the years, today is formed from a thin sheet of steel covered with a very thin coating of pure tin. The steel gives the can strength and the tin; shiny, attractive appearance, resistance to corrosion. (Sonsino, 1990)

Tinplate is used for products such as drinks, aerosols, processed food, powdered food, flour and sugar confectionery, paint, chemicals, automotive, health & beauty, giftware packaging, vacuum closures, pre-threaded closures in the form of cans.

> "Backplate is tinplate without the tin. It can corrode very easily and has limited applications like oils and greases." (Calver, 2004: 84)

On the other hand aluminium is used for products such as drinks, aerosols, health & beauty, roll-on pilfer-proof closures and pre-threaded closures. Aluminium has the advantage of lighter weight and greater resistance to chemical interaction with products.

"The material is protected from corrosion by the thin layer of oxide that forms on the metal when it is exposed to the air. Like tin free steel, aluminium cannot be easily soldered or welded and is mostly used for drawn cans.

Cans are manufactured using a variety of methods. Three pieces, seamed cans are created using three pieces of metal, formed into the desired shape, then welded or soldered together. Two piece cans have been developed to try to reduce the amount of materials used. They are produced using steel or aluminium." (Calver, 2004: 84)

The decoration of cans offers many marketing advantages. Containers are direct printed before they are formed into shape ; foil, films, paper labeled or sleeved which is the most popular and cost effective way to give attractive appeal to containers. (Sonsino, 1990)

Another range of metal packaging is collapsible tubes which with the introduction of plastic lamination increase market share rapidly especially in cosmetics. It is widely used for toothpaste, sauces and cosmetic products.

The most common aerosols are made in metal the same way as the beverage and food cans. Aluminium canisters are usually made in one piece and utilized for cosmetics and personal hygiene products.

3.4.1.1.4. Plastics

Plastics are used everywhere, from electrical appliances, medical equipment, packaging, automobiles to space travel. They are an essential part of our lives because of their special properties of being versatile, lightweight, hygienic safe, durable, and cost efficient. Plastic packaging benefits from the availability of a range of polymers, which has its own combination of physical and chemical properties, processing characteristics and cost. The polymers can be used alone, in combination with other polymers or with other materials such as aluminium or cardboard. In each of these cases, the package can be flexible or rigid. It is possible to examine varieties of packaging ranges listed on the table below.

	Flexible	Rigid
Mono-Material	Shopping bags Candy wraps/twist wraps Shrink-wrap, cling film	Bottles for soft drinks Pallets/crates/drums Food trays/clamshells
Polymer Multi-layers	Detergent refill packs PP bigbags with PE liners Blood/fluids bags	Sauce bottles PP Isotainers insulated with PUR
Combined with other materials	Metalllised film PE liner in steel drum Bag-in-box packages	Blister packs PE/cardboard/aluminium drink cartons

Table 3.1.
Varieties of packaging materials and structures

There are many different plastic polymers but for the majority of packaging needs, a few of the main polymers are used, either alone or in combination with others. However, polymer producers regularly introduce new technologies, improve the properties and cost performance of their products. Polymers, combined with design creativity and engineering innovation, result as an extremely dynamic environment for packaging plastics.

High-density polyethylene PE-HD or HDPE	Used for milk containers, cleaning products, industrial drums, bottles for pharmaceuticals and shampoo, containers for cosmetics and deodorants, closures and cast films used in flexible packaging applications for many food items.
Low-density polyethylene PE-LD or LDPE	Used for food and clothing bags, industrial liners, vapour barriers, shrink and stretch-wrap films.

Linear low-density polyethylene PELLD or LLDPE	Used for stretch/cling film, grocery bags and heavy duty shipping sack are made of Linear low-density polyethylene
Polypropylene PP	Used for medical packaging, clothes, bakery products, bottles, containers, caps, moisture-proof wrapping and fat-resistant films.
Polyethylene terephthalate PET	Used for the production of containers for food products such as mustard, oils and syrups, bottles for mineral water, carbonated soft drinks and beer, heat-resistant trays and microwaveable containers for frozen meals. Pouches for boil-in-bag foods and pouches for sterilisable medical applications. Stretch film, grocery bags and heavy duty shipping sack.
Polystyrene /Crystal polystyrene PS/GPPS	Used to make CD jewel cases, bottles for pills, tablets and capsules, and thin walled cups.
High-impact polystyrene PS-HI	Used for thermoformed containers for dairy products.
Foamed polystyrene PS-E	Used for Heat-insulating cups and clamshell containers (e.g. for hamburgers), meat trays and egg cartons. Loose-fill and moulded protective packaging for shipping electronic goods and other fragile items.
Poly vinyl chloride PVC	Used in the production of bottles for food products such as dairy products and edible oil, bottles and tubes for toiletries, cosmetics and shampoo. Film for butter, meat, fish, poultry and fresh produce. Bags for blood and intravenous solutions. Blister packs for medical devices, pharmaceutical products, hardware and toys.
Polycarbonate PC	Used to make re-usable bottles and sterilisable medical packaging. PC films are used for pre-baked bread, biscuits, confectionary, meat and processed cheese.

Ethylene/vinyl alcohol E/VAL	Used in multi-layered flexible and rigid packaging to provide an oxygen barrier, also referred as EVOH.

Table 3.2
Varieties of polymers

An important property of plastics is their ability to be converted into an exceptionally wide range of shapes such as, a mesh bag containing fruit, a film wrapping over a meat package, a foamed plastic tray, a range of plastic bags, soft drinks bottles, crates, pallets. Also some of the plastics are recyclable.

The plastic raw material, usually in the form of granules, is melted and the resultant viscous fluid is then shaped by means of pressure. The main transforming methods are:

- Extrusion
- Extrusion blow moulding
- Injection moulding
- Injection blow moulding
- Calendering.

- Stretch blow moulding
- Compression moulding
- Thermoforming
- Cast film

Plastic packages are printed, labeled, sleeved after or during production process to become eye catching products that use in our everyday life. (APME, 2007)

3.4.1.1.5. Wood

Wood is one of the most important raw materials in transport packaging. Used for pallets, crates, boxes and various other types of packaging in, significantly, developing countries will continue to play an important role for many decades. Types of packages made out of wooden material can be classified into following categories wooden pallets, wooden crates, nailed boxes, wirebound boxes, plywood barrels, drums and tubs, light wooden packages.

There are environmental and disposal problems related to the use of wooden packaging in transport. Technically and economically, it is still not feasible to recuperate used wooden

boxes, they take up a large volume in the waste disposal system, they are impossible to recycle, and very difficult to dispose of. It is particularly true for the retail system, however tailor made packages for heavy industrial products, use of wood is still very common and practical. Wirebound boxes and light weight wooden packages are still commonly used for transportation and distribution of fresh fruits, vegetables and other similar products. Wood will also remain an important packaging material for domestic use in developing countries, providing, for example, an interesting and economic alternative to returnable plastic crates.

Although many alternative materials are currently on the market for pallets, the main raw material is still wood. Because of its weight and volume, wood is seldom used in packaging for air transport, whereas many applications are still found in packaging for shipping by sea, particularly as break bulk cargoes with old-fashioned ships.

Wooden boxes are also used for package construction since many years and even today, in nations such as Japan, many packages are sold which are designed regarding the traditional lines of Japanese wood art.

3.4.1.2. Shape (form) and size

Packaging plays many functional roles from protecting contents, to helping the user employ the product, but perhaps its main job is still seen as one to help sell the product at the point of purchase. Most products are meaningless or at least undifferentiated without their packaging.

In a competitive market, branding and packaging are important and have become an integral part of the product. We instantly recognize products by the size, shape and color of packaging. Size of the packaging depends on the aspects of the product to be packed and varies regarding the amount to be used.

As we mentioned in previous chapters consumers react immediately to package shapes, and are influenced by them by making buying decisions and memorize packages regarding on previous experiences. To exemplify the fact we can state some worldwide known packages as the French soft drink Orangina with its never changing orange textured bottle,

designed to echo a droplet of water the millennium edition of Evian water bottle and with its neck design the cleaning product Toilet Duck. These packages are the classics in structural design and are always recognized by their characteristic form.

Figure 3.13.
Orangina
Orange textured bottle

Figure 3.14.
Millenium edition of
Evian bottle

Figure 3.15.
Neck design of
Duck toilet cleaner

As a result of it consumers react immediately to package shapes, these shapes influence them for making the final buying decision. Characteristic forms and aspects of the packages ease the recognition of products in different categories such as cleaning and toilet products, milk cartons and chocolate boxes. On the other hand, a manufacturer of an exclusive product, such as jewelery or perfume, may consciously choose an unusual, eye-catching form.

As Denison claims in his book when structural design is applied effectively, it will often exceed the various other methods of winning customer loyalty, like advertising, branding and graphic imagery and as the way it offers improvements in performance it will also develop competitiveness in the marketplace.

3.4.2. Graphic design

Throughout our daily lives, we are surrounded by graphic messages. These graphic messages become a part of our daily life from breakfast cereals packages and advertisements to company identities. Graphic designers are looking forward to grab the attention of the viewer by shaping communication that is not only visually interesting, also intellectually contesting.

To attain the visual and creative thinking, and to communicate with people via design products, we have to comprehend the relation between form and content. In basic terms, to define form we can state all visual elements like color, shape, composition…In short, the look of things. But the content is the subject matter: the information, topic or message. So we can easily imply that is the content that communicates.

With this approach we can assume that every visual element of a graphic design product has an impact on the viewer. This means that any designer has to notice the relationship between form and content in order to communicate, provoke, inform an impress as Robin Landa implied in his book Thinking Creatively.

All designers start with the same basic elements: Typography, color, and so on. To communicate visually graphic designers have to work with typography, color, symbolism, illustration and photography. To create an effective graphic work, designers must use a combination of these techniques. It is obvious that graphic design is the intersection point between art and communication.

> "Packaging imagery is vital: it enhances sales, it differentiates, it helps in the creation of a brand and in developing the personality of a pack. Consumers 'see' a shape, a combination of colors, or recognize a particular font style." (Denison&Cawthray, 1999: 7)

On the other hand, graphics are extremely important for packaging designers. In some cases, when the structural design is inadequate, to provide the differentiation, most effective weapon that a designer can use is the graphic design. For this reason, designing

an innovative, different and attractive graphic work allows the product to be distinguished amongst its fierce competitors and grabs the attention of the customer on crowded shelves, as a result of it realizing the sale. (Mono Design, 2002)

Figure 3.16.

Cigarette boxes: successful use of typography and color

Peters (1995) point this situation very clearly as designers have given shape to identities of corporations, organizations, locations, events, products and services that surround us. Information, ideas, and communication are the new currency in today's virtual world. And in this age of ideas, graphic designers play an increasingly vital role in creating economic success, shaping communities, and forming culture.

3.4.2.1. Color

Color as one of the most significant elements of graphic design, has many diverse applications in packaging design:

- To define visually a brand, color can be used as part of the brand identity, such as very well known example of "Ferrari Red", "Kodak Yellow" or "Garanti Bank Green".
- To differentiate a product in its competitive set color can be used. Color therefore becomes an important visual discriminator that assumes different

levels of importance dependent upon the amount of differentiation being achieved by other elements of the packaging. For designers, first step to interact with the customer's emotions is also color. If color is applied appropriately to the design, in combination with the overall concept, it is possible to attract the consumer, and achieve on-shelf distinctiveness and stand-out.

- To differentiate products in range, color is commonly used. Structural packaging will help consumers identify products to a degree, but color can play an important role at the sub range level in distinguishing one product from another. With color, it is possible to classify one company's products in range by giving color codes in front of the packages, such as different flavors of the same product. (Calver, 2004)

"Color is unquestionably the most potent tool for emotional expression in packaging. Studies of involuntary physical reactions- eye movement, neutral activity, heart rate- show that color is the element of a package that triggers the fastest and largest response. It communicates at a level that is nonverbal and unconscious, and it is also beyond the law. Words can be regulated, and so can pictures, but color cannot." (Hine, 1995:215)

Figure 3.17.
Benbits chewing-gum product range

Figure 3.18.
Coding taste with color on oil bottles

Regarding Hine people experience color in packaging at three different levels:

      1-The psychological

      2-The cultural

      3-The associational

The first is universal and involuntary, because all human are affected physiologically and psychologically by color. For example some colors make people hungry and some other make them feel relaxed like the color blue. For this reason, orange is used widely in restaurants for its appetite increasing properties.

The second arise from visual conventions that have grown up in various societies over long periods some colors have special meanings for people from different groups of society or religion such as green is the sacred color in Islam for Muslims.

The third relates to color expectations on packages that have become associated with a particular product category through the marketing process. We can state some examples like: milk is always in bottles or boxes with white background, water is widely preserved in bottles colored pale blue or white tones.

Figure 3.19.
Lucozade energy drink bottle
The form and color reflects energy

Figure 3.20.
Suntory vitamin C drink
Yellow color is related with lemon taste

"Colors are either good or bad in themselves, but they do have a positive or negative, conscious or unconscious psychological effect on the viewer, depending on his or her subjective experience and moods." (Götz,1998:16)

Different cultures have contrasting attitudes toward colors. One familiar example is that black is the color used to denote evil and/or death in Western societies, however the Eastern societies embrace the color black as the symbol of luck and prosperity, while death is colored white in many Asian countries, in opposite sense white is the symbol of purity and peace is also worn by the brides. (Uçar, 2002)

There is no other country where packages that are pale and tinged with gray are so common as they are in Japan, a country whose national identity is tied to the appreciation of extremely subtle distinctions. The Nippon Institute of Color and Design Research Charts color choices on a three dimensional matrix of cold and hot, soft and hard, and gray and pure, and a very interesting pattern emerges.

"Japanese designers use soft, gray shades for products like tea and seaweed that are viewed as having a distinctively Japanese character, while they do not hesitate to use brighter, purer hues for products such as coffee and soft drinks, which, while widely used, are nevertheless perceived as foreign."(Hine,1995:219)

3.4.2.2. Typography

Typography is a craft, which has been practiced since Gutenberg's invention of the movable type. According to the latest Encyclopedia Britannica core definition of typography is that 'typography is concerned with the determination of the appearance of the printed page'. Other dictionaries, such as Collins English Dictionary from 2004 define the typography as 'the art, craft or process of composing type and printing from it'.

We can identify words as the building blocks of modern communication. A typeface is selected to visually enhance or to ease the transference of each word's significance, the medium that these groups of letter are presented does not matter. Typography is a vital link

between the design and communication of a specific message and any graphic design project that employs type will face the crucial decision of font selection. (Mills, 1999)

> "The typographer's one essential task is to interpret and communicate the text. Its tone, its tempo, its logical structure, its physical size, all determines the possibilities of its typographic form. The typographer is to text as the theatrical director to the script, or the musician to the score. (Bringhurst, 2004:20)

Typographic clarity comes in two different concepts: legibility and readability. It is possible to define legibility as a function of typeface design which might be described as the informal measurement of ease for distinguishing one letter from another in a specific typeface. In contrast, readability relies on the manner that the specific typeface is used. In short terms readability is about typography. It is a measurement of how straightforwardly words, phrases and blocks of copy can be read. (Haley, 2007)

The major function of textual messages and graphic elements is communication. The graphic/text combination can evoke emotional responses or convey information for purposes as varied as motivating a sale to furthering a cause. According to Rousseau (1998), four steps of interaction between the viewer and the design must be successfully completed for a design to effectively convey its meaning. Rousseau (1998) states that successful messages are,

1. noticed
2. encoded [decoded]
3. comprehended
4. complied with by the viewer

Failure at any of these steps diminishes the design's ability to effectively communicate, and therefore, achieve its intended goal. (Bix, 2002)

Within this perspective, it is possible to point out that typography is in the core of packaging design for its essential mission of information transmission. On any product's packaging there must be names, ingredients, instructions, safety warnings, ownership details and customer care information. All of these details have to be displayed on the

pack, allows the consumer to read and comprehend the information they look into, in a legible manner.

The selection of typeface matching with functions is the point to show all skills by designers. Mentioned selection must be done under the concern of pack size, information amount and printing methodology.

A good packaging typography depends on the visual contrast between one font and another and between text blocks, headlines and matching colors. Because nothing can attract the eye and the brain of the consumer as much as a strong contrast in fonts and color and distinctive patterns do.

Typeface selection is also influenced by other factors. Such as brand differentiation and demographic trends like considering elderly people and children. After a certain age along with a loss of physical strength, elderly people have trouble focusing their vision. Lockhart's researches pointed out that the use of contrasting colors affects package legibility. Such as black on red and yellow on red, some colors don't work well together, but some are really effective like yellow on black. Consideration of these topics will lead designers to a successful design. (Swientek, 1996, 2004)

3.4.2.3. Symbols and icons

As we consider packages as communication objects, one of the many functional roles of it is information transmission. No matter the type of product is its package has to possess some information about ingredients, instructions, safety warnings, ownership details etc. To give all these information on a limited space the use of symbols and icons is absolutely necessary. Iconography is used to express valuable information in a simple way. Their universality and powerfulness increase the use of them. Icons help to communicate large amount of information more quickly, for this reason, they are used widespread in packaging.

We mentioned universality about icons; just as an image can powerfully convey a brand proposition so can a symbol or icon. Brands are also known and remembered by their symbols and icons. Wherever we are in the world, worldwide known brands like Nike,

Adidas, and McDonald's are presented in the same way. We do not have to speak the specific country's language to recognize them. Because what they mean, is always the same in all languages.

> "Alternatively, symbols and icons can be used to reveal and explain a product's features and benefits, enabling consumers to evaluate whether it serves their particular needs or desires. Symbols and icons have also now become universally accepted means of communicating environmental, suitability, and warning information."(Calver, 2004:150)

There are many types of symbols in package labeling. These types are standardized nationally and internationally. They become universally accepted for communication in fields as environment, suitability and warnings. For consumer packages some requirements and symbols exists to communicate for the consumer's safety and suitability.

Nowadays, most pack carries environmental information for its materials or usage. Product certifications, trademarks and recycling directions claim to have special codes and symbols. Standard warning symbols are used to alert consumers in the need of handling, internationally recognizable recycling symbols reminds the consumer about potential recycling properties of the packaging, for identification of different types of plastics, packaging materials of companies that are participating in the integrated management systems scheme which finances local entities the corresponding part .

| Figure 3.21 | Figure 3.22. | Figure 3.23. |
| Highly flammable | International Recycling symbols | Identification for PETE |

In shipment and transportation of goods, special information and standardized symbols are also used. Transportation packages carry the suitable condition's information on it such as for products made of glass are fragile, paper based products could be damaged in case of contact with water, some others need to be handled with care.

Figure 3.24.
Fragile

Figure 3.25.
Keep away from rain

Figure 3.26.
Handle with care

As Calver claimed "Whatever use symbols or icons are put to, their strength lies in their intrinsic ability to communicate a message simply and universally. Good symbols and icons transcend interpretation-their meaning is obvious to all who look at them."

3.5. CULTURAL AND COMMUNICATIONAL DIMENSIONS OF PACKAGING DESIGN

3.5.1. Packaging dynamics from the communicational point of view

3.5.1.1. Branding and brand manifestation

As Wheeler implied in Designing Brand Identity; brand can be defined as the promise, the big idea and expectations that reside in each customer's mind about a product, service or company. Branding is about making an emotional connection. People fall in love with brands or they trust them, develop strong loyalties, buy them and believe in their superiority.

An essential element of branding is brand identity. According to Wheeler, while brand speaks to the mind and heart, brand identity is tangible and appeals to the senses. Brand identity is visual and verbal expression of a brand. Identity supports, expresses, communicates and visualize the brand. (Wheeler,2003)

A vital element of brand identity is the brands visual presentation, with the collection of logotypes and symbols representing the brand, named as the corporate identity. While creating the brand identity, the designer's most important mission is to design the brand logotype and/or symbol in an eye-catching manner as possible. Generally this mission can be accomplished simply by printing the branding as part of color set.

Of course, a brand's logotype or symbol is a key element in differentiation process, because their uniqueness can legally be protected, but they are not the only elements. These are fixed elements that reach across the brand to the whole identity of the company and its product range. Working out how they are used by the client, and so studying the corporate identity of the client, is very important. They are often strongest selling point a product has got, and the client has invested years in building the confidence of the market-place in the name.

3.5.1.2. Product differentiation

The field of packaging design in the modern age has become one of the most sophisticated and powerful examples of the designer's profession. According to various research findings, a package on a supermarket shelf has less than three seconds to grab the attention of the potential buyer. And there are thousand of different products on the shelves, competing for these potential buyers' attention in stores. Within this context as one of the many functional roles of packaging, packages must help to sell the product by differentiating the one from the others.

As Kunde says: "In such a crowded market there is no point in competing for shelf space or simply making more noise. You have to differentiate your offering. There is only one place in which you are (or should be) interested in being taken seriously, being heard, noticed, registered, remembered, used. That place is human mind. That is where you must strive to grab some space".

There are so many products on the market; many of them are identical to each other, as a result of it buyers have a great deal of alternative these days, in this case the decision to make a purchase can be a difficult process. So the packaging needs to standout to be

noticed. Without personal recommendation, people rely on product's packaging to make a buying decision.

> "Differentiation is one of the "holy grails" of brand owners and packaging design is one "tool" used to achieve it." (Calver, 2004:252)

The aim of product differentiation is to give essence, a distinctive image which will differentiate it from similar products. This process could be through imagery, color, language, shape or even the tactile quality of the packaging material to create distinctiveness. In today's highly competitive market, designers and marketers strive to make their product remarkable among their competitors. The challenge facing them is the question how to grab buyers' attention to realize the sale.

To exemplify the situation; an expensive perfume or aftershave might be sold in an elegantly designed bottle. This sort of packaging suggests quality and would be targeted at a person with taste. Even if the product itself was not very good, the packaging alone could give the impression that it was. For this reason we can easily understand that, package must be clear to the audience for which it is intended and also needs to communicate a difference to be understood and appreciated by buyers.

3.5.2. Packaging design and society from the cultural perspective

As we mentioned in previous chapters, there is a noticeable relation between culture and design. Packaging, as a design product is the proper medium to reflect the culture. Today packaging reflects and underpins our world's diversity of preferences and lifestyles.

Packaging is a cultural phenomenon; its reflections vary from one culture to another which means that it works differently in different cultures. It is also a part of human behaviour, which points out that, it is a very powerful tool for communication and understanding.

Since it was first settled United States has been a good field for packages and regarding innovations in packaging technologies and culture, it keeps progressing day by day. The aim of American packaging is to appeal to large number of diverse people and to sell its products, because it is a part of an international culture of modernity and consumption.

Thanks to inevitable consumption and globalization, it spreads all over the world. Though, we cannot agree that there is a global understanding of packaging.

However, the similar appearance of supermarkets throughout the world should not be interpreted as the evidence of a single, global consumer culture. In fact, most companies that do business internationally redesign their packages for each market. This is done partly to satisfy local regulations and adapt to available products and technologies. But the principal reason is that people in different places have different expectations and make different uses of packaging.

The United States and Japan, the world's two leading industrial power, have almost opposite approaches to packaging. Japan's approach is much more sophisticated than the one that America has. In Japan there is a centuries old tradition of wrapping, gift giving and presentation and it is shaped by rituals and respect.

> "Packaging is explicitly recognized as an expression of culture in Japan and largely ignored in America. Japanese packaging is designed to be appreciated; American packaging is calculated to be unthinkingly accepted." (Hine, 1997: 7)

One of the Japanese culture's essential properties, avoiding time-wasting, is also manifested in Japanese packaging in a number of ways. The norm in Japan is the brilliant graphics, vibrant images of products express value and appeal for the customers. For customers, looking on packages to find out the descriptions is unacceptable. Retail packages in Japan communicate the purpose and benefits of a product quickly, clearly and with strong and direct messages. (Kozarsky&Romanik, 2006)

> "Foods that only Japanese eat- Even relatively humble ones like refrigerated prepared fish cakes- have wrappings that resemble handmade paper or leaves. Even modestly priced refrigerated fish cakes have beautiful wrappings in which traditional design accommodates a scannable bar code. Such products look Japanese and are unambiguously intended to do so." (Hine, 1997: 8)

Japanese consumers look at packages as the way a doctor examines his patient. All the details are extremely important, any hint of mark, dirt, registration error or print quality problem is a valid reason for the consumer to reject the product. Regarding these conditions we can admit that, expectations for packaging graphics in Japan is significantly higher than what US consumer might find acceptable. (Kozarsky&Romanik, 2006)

As Hine implied, American and European companies use their foreignness as part of their selling power for some products, such as coffee which is not a Japanese traditional product. In such case they do not have to redesign their packages even if they have Roman lettering on it not Japanese. However, the situation is not the same for Japanese companies, the exporters must hire a design team to redesign their packages according the market they are going in. Because it is not possible to sell Japanese lettered packages in countries that no one speaks the language and incase with Americans – whose culture is defined nor by definement and distinctions but inclusiveness- want to think about the product itself, not its cultural origins.

4. RELATING PACKAGING DESIGN AND CONCEPTS OF COMMUNICATION AND CULTURE: JAPANESE CULTURE AND TRADITIONAL JAPANESE PACKAGING DESIGN PRODUCTS

4.1 General information about Japanese culture and its components

In terms of their geographical location and aesthetic tendencies, throughout their history, Japanese community was able to demonstrate incredible talent to adapt and unite foreign doctrines, without sacrificing their traditions and ancestral beliefs. Since the original Jomon culture till today's contemporary hybrid culture, the culture of Japan evolved over the years. This culture is combined from different influences from Asia, Europe and America. Till the beginning of Meiji Era, Japan experienced a long period of isolation from the outside world under the Shoguns rule. As a result of it, contemporary Japan developed from a culture distinctively different from other Asian cultures. (Fisher,1996).

In parallel with the research topic, Japanese community express themselves in many different ways. The Japanese language has always played a significant role in Japanese culture. This Chinese writing system called *Kanji* was brought to Japan during the 5th century. Kanji's characters are ideographs and each of them has its meaning deriving from their shape.

Figure 4.1.
Japanese lettering Kanji

Another reflection of the culture is the Japanese performing arts which made some unique contributions to world culture such as, *Kabuki* theatre a popular form of stage entertainment which originates in the performances of dancing and light drama. *Noh*

theatre one of the classical art forms is a drama which developed out of the popular entertainment since the Heian period and *Bunraku* is a kind of puppet theatre. (Anon,1987)

Figure 4.2.
Traditional Noh theatre masks

Figure 4.3.
A scene from Kabuki theatre

Besides, more contemplative arts have developed world wide as *Sado* the tea ceremony, *Ikebana* flower arranging, *Bonsai* creation of miniature trees and *Origami* the art of paper folding.

Figure 4.4.
Students and teacher in Ikebana class

Figure 4.5.
Traditional elements of Sado
The Tea Ceremony

Japanese costume design is also unique, differing greatly even from those of other Asian cultures like the traditional Japanese *Kimono*. These design products are known world wide for the beauty of their patterns, of which are abstractions of natural phenomena through the four seasons.

Japanese culture is shaped by rituals of respect and centuries-old traditions; one of which is gift giving. Considered as a Japanese art, it is very important to give a gift in a package. Because of the very old gift giving tradition which was a real institution, Japan was familiar with packaging materials. In historical times, the package was created in terms of the buyer's identity, personality, quality of the gift, time, date and the season. With carefully chosen boxes, wrapping papers and matching string, the package of the gift becomes an art object. (Güvenç, 1980)

Figure 4.6.

Gift boxes wrapped with
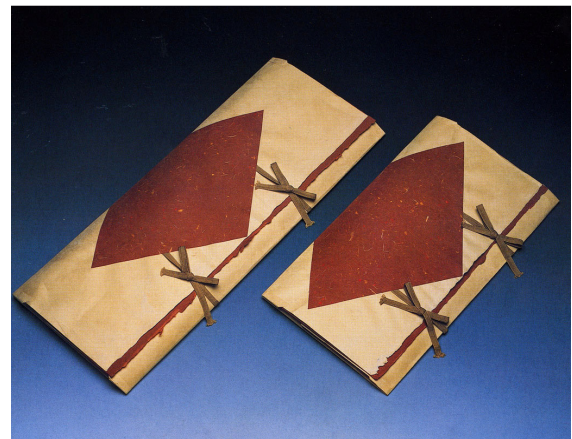Traditional wrapping paper

Figure 4.7

Traditional paper envelopes for
 Kimono and Obi

4.2 Characteristics of Japanese culture reflected on packaging design:

The genuine characteristics discovered about Japanese packaging design in parallel with Japanese culture are given below:

1. Coexistence of modern and traditional design elements:

Izumi pointed out that there is probably not any other country where the existence of both traditional and modern design elements to be found on such a large scale or where they are both so vigorously supported by the general public as in Japan. Along with works that utilize traditional Japanese design elements, there are also numerous items which incorporate such Westernized designs that they appear to have been imported directly from Europe or America.

As being the most important characteristic of the culture, coexistence can be defined as an outgrowth of the sociocultural conditions of the Japanese Empire, where traditional and modern models of existence abide alongside each other. Virtually everything connected with tradition in Japan enjoys extensive protection. In the process, members of the society want not only to conserve their traditions, they also wish to develop them further. Their mutually experienced history and handed-down ways of life form the basis of Japanese perception and sentiment.

Over the last century the infiltration of English and Western culture into that of Japan has been extensive-a trend that has become all the more pervasive since the Second World War. Though many aspects of this foreign culture have embedded themselves deeply in Japan's own, there remains a strong awareness of their foreign nature. (Vartanian, 2003)

Japanese aesthetics is characterized by focusing on aesthetic concepts and phenomena that are "unique to" Japan and "different from" non-Japanese aesthetic traditions, the Western aesthetic tradition in particular, which also is a proof for the approach of coexistence. Coexistence is also referred as the concept of symbiosis, which involves at least two-way of the contradictory elements and this creates a dynamic stability. (Kurokawa, 1993) So it becomes possible to both symbolize the past cultures and also reflect the future. The design

products show the flexibility to transform regarding the constant changes in nature and society, which also suits to co-existence concept.

Figure 4.8.
Sake bottle and its packaging

It is also indicated that, the presence of both the traditional and modern aspects in the work of a single designer is one of the unique characteristics of Japanese designers. Thus the same designer sometimes creates designs that are extremely traditional and at other times produces highly modern, Western style designs. No Japanese designer, however, feels the slightest sense of contradiction in this phenomenon.

2. Refinement of geometry and use of basic forms:

Geometry is the most significant design principle. The use of basic geometric forms as design parameters is, of course, also familiar in the West. Another central principle is refinement. Refining form and material among the Japanese' is most prominent aptitudes.

Their love for simplicity of form, as has been evident for decades in their domestic arts and crafts, which have made their appearance as "Japanism" in Western cultural circles.

"Lightness" and "rigidity" are often presented as distinctive features of Japanese culture. But these comprise only aspect of the design of Japan, which also possesses the seemingly contradictory attributes of "simplicity" and "splendor". These four concepts are reflected with the use of basic and refined forms, through abstraction and representation. Abstraction

is based on reason and transparent concepts, while representation is related with the historic, cultural, climatic, topographic, etc… and as a result, "existential" means.

Figure 4.9
Wooden boxes for letters, decorated with abstract birds

In any case, to the Japanese any physical object is more than simple matter as it contains the presence of some "being". Thus for the Japanese, packaging is not made merely to cover a piece of physical matter, but is meant to house the "being" present there as well. This depth psychology of the Japanese results in the anthropomorphism of all objects and gives rise to ideas such as those things are attempting to escape from the constraints of their packaging so forth.

3. Use of natural materials:

As Izumi suggests, Japanese are particularly skilled at bringing out the unique qualities of natural materials. And it is evident in the field of package design too. There are numerous practical examples that could be mentioned, such as baskets made of straw, dishes made of clam shells, and packaging from the leaves of the cherry tree or bamboo grass.

Japanese crafts are transmitted generation after generation, firmly rooted in respect for the materials, methods, tools, and traditions of each craft. Jack Lenor Larsen writes:

"Craft makers working within Japan's ancient traditions respond to the generations of passed-on knowledge. This collective memory includes a deep respect for material and process, and respect too for the intended user."

Packaging and food can be used to illustrate these principles. Traditional Japanese packaging is well known for its aesthetic and functional use of materials. Various packaging materials are designed not only for protecting the content, but also for emphasizing their innate characteristics. The design is suggested by the qualities of the material itself. (Saito, 2007)

Figure 4.10.

Japanese tea cake packed with natural bamboo leaf

Figure 4.11.

Bamboo lunch-boxes

As Hertzog implied the use of natural materials in a way both truthful and yet recreated: the penetration of the importance of the visual into every day life, an elevation and transformation of the ordinary into the extraordinary; an integration of form and function which, while not solely the property of Japanese art, is developed by the Japanese to a degree perhaps unsurpassed by any other artistic tradition.

4. Concerned approach for the moral values of the design aesthetics:

Japanese aesthetics suggests several ways for cultivating moral sensibilities. Saito implies the two principles of design:

    (i)   Respecting the innate characteristics of objects and,

    (ii) Honoring and responding to human needs, in which this is also noted for its sensitivity to, respect for, and appreciation of the typical character of an object.

Moral values gain importance connected with the spiritual roots of Buddhism. Japanese design philosophy, which acquires inspiration from Buddhism, favors the principle of "truth to the materials" that is also supported by the arts and crafts movement. Humans are sensory, as well as conceptual creatures and designing and creating objects and environments that respect the users and inhabitants would necessarily have to respond to their bodily experiences, as also taught in Zen teaching.

Figure 4.12.
Traditional confiserie aesthetic and respect to the consumer

Moral attitude also demonstrates itself for affirmation of the importance of others' experiences through the aesthetic value of designed objects and built environments. As referred in the previous chapter, gift giving tradition and gift wrapping becomes,

………"a way of expressing care for the object inside and therefore care for the recipient of the object."…… (Hendry, 1995)

4.3 Analysis of selected Japanese traditional alimentary product packages
4.3.1. Information about selected products

- **Sake**

The Japanese Liquor Law defines Sake as, "made from rice, rice koji and water using fermentation and filtration processes". This is a definition in principle and refers to the traditional type of Sake peculiar to Japan.

Made primarily from rice, "Sake" is an alcoholic beverage peculiar to Japan. Sake is a fermented beverage brewed using a microorganism called koji and yeast. It has an alcohol

content of from 13% to 16%. The quality of water used in brewing sake is also important. Brewers take advantage of the various kinds of natural water available in Japan to make excellent sake. There are many different varieties of sake, and it can be enjoyed either warm or chilled, depending on the season.

Sake has played a central role in Japanese life and culture for the past 2,000 years. It was approximately in the 3rd century B.C. (late period of the Jomon Era) when a method of rice planting was introduced to Japan. It is believed that Sake making in Japan started around the same time. In fact, sake is such an integral part of the Japanese diet that having some knowledge of it can add to one's understanding of Japanese history, culture, and society, as well as of the social environment in Japan today.

- **Green tea**

Green tea is believed to have its origins from China. Green tea, for its medicinal effects, was introduced to Japan around 800 A.D.. A Buddhist monk brought back some tea seeds from China and cultivated a tea garden in southern Japan. During the Kamakura Era, green tea became a popular beverage in Japan, and widely consumed. He sparked popularity by writing books about its numerous health benefits. (Yamamotoyama, 2007)

> "The tea ceremony is, an artistic accomplishment that distills the beauty of life in its multi-faceted forms, and demands the utmost mental attitude and manners. The spirit underlying the tea ceremony is that of discovering beauty in the commonplace things of everyday life, taking the plain and simple as a principle." (Anon, 1987:58)

The making and serving tea as an art form *(sado,* the way of tea) was introduced in Japan during the eleventh century. A brick of tea was ground to a powder, mixed in a kettle with hot water, and ladled into ceramic bowls. The ritual was performed in Buddhist temples origins go back to China's Tang dynasty (618-907).

- **Sushi**

Japan is an archipelago surrounded by the oceans filled with plentiful of aquatic life and seafood. Consumption of seafood plays a major role in Japanese diet. There are plenty of taboos on meat eating caused by the Buddhist influence. However, Buddhist monks ignored the consumption of aquatic life products and as a result of it consumption of seafood developed in a large scale within the traditional Japanese diet.

"Eat it raw first if at all, then grill it, and boil it at the last resort". (Cambridge World History of Food). This is proverb describing various methods of seafood preparation. The taste and texture of fresh raw fish is preferred. Popular raw fish include sashimi and nigiri-sushi. (Fuselier, 2006)

The main component of nigiri-sushi is vinegared rice which is moulded into bite-sized, mounded pads then overlaid with a thin slice of raw fis. Rolled up in a sheet of toasted, dried nori (seaweed), the flavour and texture contrast to the vinegared rice is provided by a central core of 'gu'- a selection of pickled radish, dried gourd, pickled lotus root, seasoned carrot, cucumber, grated ginger and wasabi in any number of combinations, with or without the addition of seafood. This sushi is known under the broad category of nori-maki or maki-zushi. Today, one of the the main sources of protein in the traditional Japanese diet is seafood. (Solomon, 1998)

The Japanese have many traditional aesthetic concerns with food that unique to Japan. Generally food is served in small and individual portions in separate dishes. Every piece served is already cut into one bite small pieces to ease the handling with chopsticks. There are even specific rules of presentation for the way Japanese food looks.

- **Noodles**

Rice is certainly among the first foods that one can think of within Japanese cuisine. Japanese began to cultivate rice over 2000 years ago. Rice cultivation was introduced from China and is argued to have started between the third century BC and the late Jomon era (1000 BC). Rice could not be cultivated in certain areas of Japan because of unsuitable climates until the Meiji era (1868-1912) when modern technology was implemented to combat this problem. (Fuselier, 2006)

Japanese rice is a national institution. Rice not only play an important role in Japanese daily eating, but contribute to rituals and marking other special occasions. Shinto ceremonies and Japanese festivals involve rice growing and rice products. Kome (raw rice), and mochi (rice cakes) are typical offerings in shrines.

With the advent of grain mills around the first century BC, when large-scale wheat grinding became available, provide flour to make noodle and China has long been given credit for their invention. Japan is the most noodle-or *menrui*-consuming nation on earth. There are a multitude of noodle varieties. Not only are there differences in shape, but flavour and texture, the result of different starch bases. Japanese noodles include wheat-based noodles found in Osaka or southern Japan, and buckwheat-based noodles associated with old Edo, now Tokyo, and the north country. (Solomon, 1998)

Noodles are extremely popular in Japanese daily diet for their easy cooking and variability properties.

- **Japanese soy sauce**

Over the centuries, soy sauce has gained international recognition as a versatile seasoning. Historians believe that a similar kind of soy sauce we use today was first developed during the Kamakura Period (1192-1333). However, the roots of soy sauce can be traced back much further. The process of making a liquid seasoning by fermenting grain malt, meat and alcohol was recorded in ancient China as early as the 12th century BC. Later records indicate the use of soybeans to make a fermented food product during in the Hokugi Period (386-534 AD). The process described is very similar to the way miso and soy sauce are made today. (Yamasa, 2007)

Shoyu is the name for Japanese soy sauce dating back to Muromachi Period. We can assume that soy sauce's use as a liquid seasoning at these days has begun. There are three main ingredients to produce soy sauce, these are soybeans, wheat and salt. Soy sauce is brewed in several steps, first the wheat is roasted and crushed and than soybeans are steamed until softened. Salt is dissolved in water. The koji is combined with the salt and water solution to form moromi, which is then fermented in tanks until full flavor is

achieved. Moromi is poured onto cloths, folded and pressed, and the raw soy sauce is squeezed out. Soy sauce press cake and oil are the by products. The cake is fed to livestock and oil is used for machines. The raw soy sauce is then refined and pasteurized. (Kikkoman, 2007)

Japanese shoyu is described as the best with at least 300 different flavour components. It can be used in all stages of cooking. In Japan shoyu is a table-top seasoning just as salt and pepper are used in the west.

4.3.2 Study of the selected products according to the characteristic of Japanese culture in the frame of packaging design components

In this chapter of our thesis, the selected alimentary products will be studied in the frame of two major components of packaging design; structural design and graphic design. And their relation with the characteristics of Japanese culture mentioned in the previous chapter.

4.3.2.1. Analysis of Sake Packaging

Figure 4.13.
Sake example 1

In the frame of structural design, the package we examine is an exemplar of **Refinement of Geometry and Use of Basic Forms** with its very plain and clean design. The look of the bottle is totally modern and in relation with the pureness of sake, transparency is used to emphasize the fact.

In the frame of graphic design, there is not any unnecessary instruction or information beside the brand written in black Japanese Kanji and the traditional red seal to reflect the traditional characteristic of Japanese culture. Combining the use of very clean and contemporary design of the bottle and the traditional label reflects the **Coexistence of Modern and Traditional Design Elements.**

Figure 4.14.
Sake example 2

In the frame of structural design, the package we examine is related to the **Concerned Approach for the Moral Values,** since the 1.8 liter bottle was designed in the shape of a beer bottle imported at the beginning of Meiji Era and a thousand brands of sake are still packed in the same shape (Izumi, 1993) with the respect to historical facts and innate characteristic of the product. This traditional look is emphasized with the **Use of Natural Materials** to produce the bottle with the creative utilization of twisted and tied straw.

In the frame of graphic design, the natural color and the characteristic of the straw is used as background, on which, the printed brand in black Japanese Kanji and the traditional red seal is accompanied with the use of a floral motif is also a reflection of **Concerned Approach for the Moral Values.**

Figure 4.15.
Sake example 3

In the frame of structural design, exemplified bottle of sake reflects **Refinement of Geometry and Use of Basic Forms,** with its simple and modern design, similar to a usual bottle of wine. To remind the character of rice and the pureness of sake transparent white color is used in the structure.

In the frame of graphic design, **Concerned Approach for the Moral Values** can be seen in relation with the use of large red disks on white background as reminiscent of Japanese flag representing the Sun without rays, as generally called for Japan "the land of the rising sun". The main relation between sake and Sun is that, sake is often presented to the rising Sun on the New Year with prayers, which reflects the respect to ancient traditions. It is also possible to distinguish the stylization of black Kanji and the traditional red seal in a very modern and simple way.

Figure 4.16.
Sake example 4

In the frame of structural design, **Refinement of Geometry and Use of Basic Forms** can be distinguished. The modern prismatic bottle of sake is the signifier of the fact that every age has had its own type of vessel containing sake. The diversification of living style has brought considerable changes in the packaging of sake, which makes possible to see various kinds of packages as this one we examine. The structure created in a modern way with its screw cap and dark gray semi-transparent glass bottle, could be referred as a consequence of the modern lifestyle. So, **Coexistence of Modern and Traditional Design Elements** is represented through the use of modern packaging components for a traditional product.

In the frame of graphic design, the typography used on the label signifies **Coexistence of Modern and Traditional Design Elements** with the synchronized use of both Roman lettering as the Westernized part, and the Kanji lettering in a stylized form as the traditional part of the design on a gray background .

Figure 4.17.
Sake example 5

In the frame of structural design, the classic 1.8 liter bottle keeps its traditional shape with respect to the historical characteristics of sake, implies the **Concerned Approach for the Moral Values.** To emphasize the old tradition **Use of Natural Materials** is chosen to reflect the characteristic look of the bottle with the utilization of woven straw supported by natural ropes.

In the frame of graphic design, we can recognize the **Coexistence of Modern and Traditional Design Elements** because the traditional structure of the bottle is combined with a very modern, plain and abstract graphic design. Instead of using the natural color of the material the body is painted in white as background and is decorated simply with three red disks and a few black Japanese Kanji letters that point out the **Refinement of Geometry and Use of Basic Forms.**

4.3.2.2. Analysis of Green Tea Packaging

Figure 4.18.
Green Tea example 1

In the frame of structural design, the package we examine is a plain rectangular prismatic form and contains one of the major design principles, **Refinement of Geometry and Use of Basic Forms**, which is also a characteristic of the Japanese culture. In addition, the grounded powdered green tea is packed due to the typical characteristic of the product and the traditional Sado ceremony as a gift box, and covered by the traditional wrapping paper. This forms an exemplar of the **Concerned Approach for the Moral Values.**

In the frame of graphic design, both the usage of green background color concerning the innate characteristics of the product, and the usage of black Japanese Kanji and red traditional seal on white background color on the label are all indicators of the **Concerned Approach for the Moral Values.**

Figure 4.19.
Green Tea example 2

In the frame of structural design, the package we examine is related to the **Concerned Approach for the Moral Values,** since the bamboo design motif is the reminiscent of the fact that green tea was traditionally served in bamboo containers. (Lürzer, 1998)
 In addition, the package is designed depending on both the color of the tea and the shape of the bamboo. The plain cylinder shaped Can which contains the product is an indicator of **Refinement of Geometry and Use of Basic Forms.**

In the frame of graphic design, the application of a bamboo pattern on the can, and instead of a label, the usage of black Japanese Kanji and red traditional seal over this bamboo pattern background are all indicators of the **Concerned Approach for the Moral Values.** However, implying the traditional values on a can container, a product of the modern world, makes the product an exemplar of **Coexistence of Modern and Traditional Design Elements.**

Figure 4.20.
Green Tea example 3

In the frame of structural design, the grounded powdered green tea is placed in a very plain prismatic container. This is an indicator of the **Refinement of Geometry and Use of Basic Forms.** The traditional Japanese wrapping paper which is used to pack the product is a reflection of the **Concerned Approach for the Moral Values**.

In the frame of graphic design, the traditional tea-house illustration on the wrapping paper and the black Japanese Kanji, and the traditional red sealing are also the indicators of **Concerned Approach for the Moral Values** since they all respect the essence of the tea ceremony.

Figure 4.21.
Green Tea example 4

In the frame of structural design, the package is an exemplar of the **Concerned Approach for the Moral Values** since it respects the innate characteristic of the product by the formation of bamboo cups, which have been the traditional containers. On the other hand, by using PET bottle, a container which is frequently used today, the package assembles the product with modern times, and becomes an indicator of **Coexistence of Modern and Traditional Design Elements.**

In the frame of graphic design, the typical white Japanese Kanji used on green background of the label, and the brand name written in Roman Letters together, also represent the **Coexistence of Modern and Traditional Design Elements.**

Figure 4.22.
Green Tea example 5

In the frame of structural design, the grounded powdered green tea is offered in a new Flexible Packaging which is an invention of new materials and production methods. By serving the product not as the traditional grounded powdered version but in tea bags, the package allows this very long-established ceremony become involved in the daily habits of the modern world, and emphasizes the **Coexistence of Modern and Traditional Design Elements**.

In the frame of graphic design, the two green strips which point to the image of traditional bamboo serving cups and the green tea leaves are used on white background color with the stylized black Japanese Kanji with the traditional red sealing are all the indicators of the **Concerned Approach for the Moral Values of Design Aesthetics.**

4.3.2.3. Analysis of Sushi Nori Packaging

Sushi is an important product in Japanese diet, and among all traditional Japanese alimentary products is the most effected one from globalization. Regarding to its physical properties, sushi is made of rice, raw fish and the seaweed used to keep these ingredients together. Sushi has to be eaten fresh and instantly. For this reason, we could not find this food product ready to be consumed, so we have selected the seaweed (nori) as the subject of our examination.

Within this research concerning sushi, we found out that traditionally bamboo leaf wrappers were also used to pack sushi (Saito, 1997); however, nowadays as sushi becomes an instant consumed food, we could not reach any packaging example of this type of material usage.

Eventough, sushi is a product special to Japanese culture, Nori packages found in supermarkets are far from reflecting the traditional aspects of the product, and this feature makes Nori to become a commercial daily consumed food product. As the selected examples share similarities in both structural and graphic design aspects, we find it suitable to examine four of them together.

Figure 4.23.
Sushi Nori example 1

Figure 4.24
Sushi Nori example 2

Figure 4.25.
Sushi Nori example 3

Figure 4.26
Sushi Nori example 4   .

It is understood that polyethylene bag is used to pack Nori, to cope with its production methods, food and packaging regulations. The properties and the production process of the material do not allow any creativity in the frame of structural design of the packaging.

Besides, it is possible to say that graphic design is the only differentiating design element for the packages amongst their competitors. The evaluation of the packages also reveals that, the graphics are far from reflecting the characteristics of Japanese culture defined in previous chapters. The use of colors, pictures and typography are also verifying our claim.

We can conclude by pointing out that, it is not possible to mention any of the defined characteristics of Japanese culture, being reflected on Nori packages:

- As the product is packed with polyethylene, the **Use of Natural Materials** does not exist.
- Regarding the nature of the material, the package can not make use of **Refinement of Geometry and Use of Basic Forms.**
- There is not any relation with the innate characteristics of the product and the packaging, **Concerned Approach for the Moral Values of Design Aesthetics** does not exist.

- So likewise, **Coexistence of Modern and Traditional Design Elements** can not be recognized on the packages that are examined because Nori packages are totally globalized.

Figure 4.27.
Sushi Nori example 5

In the frame of structural design, the only different example found for Nori packaging is packed in glass jar, which is not also reflecting the characteristics of Japanese culture.

However, the only reflecting element of Japanese culture is the graphic design on the Nori jar. Floral pattern used on black background is the reminiscent or traditional wrapping papers, and a combination of stylized green kanji with white Roman letters are the typographic elements. Within this concern the package could be an example of **Coexistence of Modern and Traditional Design Elements**.

4.3.2.4. Analysis of Noodle packaging

Figure 4.28.
Noodle example 1

In the frame of structural design, buckwheat noodles are packed with twisted and tied straw, to keep the product together, as an example of the **Use of Natural Materials.**

In the frame of graphic design, a paper label wrapped all over the noodles has a green background and picture of a grounding mill is used to represent the production process of the noodles and black kanji and red seal is also used to complete the graphic design. Within the respect of innate characteristics of the product, this is an exemplar of the **Concerned Approach for the Moral Values of Design Aesthetics.**

Figure 4.29.
Noodle example 2

In the frame of structural design, it is not possible to mention any definite structure or shape for the noodle packaging. However, the noodles are kept together with a very simple paper band. This feature gives the noodles a modern and plain look which is an indicator of **Refinement of Geometry and Use of Basic Forms.**

In the frame of graphic design, the noodles selected to examine are the same as product, although each of them has a different label indicating the brand. The colors used for labels are the traditional and mostly applied colors such as, red background and black kanji on it, black background and white kanji on it and the last one natural background and black kanji with the traditional red seal on it. Matching with the look of the product, these labels are modern and in parallel with it reflect the traditional Japanese look. To conclude, we can imply that **Concerned Approach for the Moral Values of Design Aesthetics** and **Refinement of Geometry and Use of Basic Forms** are reflected on the products as the characteristics of Japanese culture.
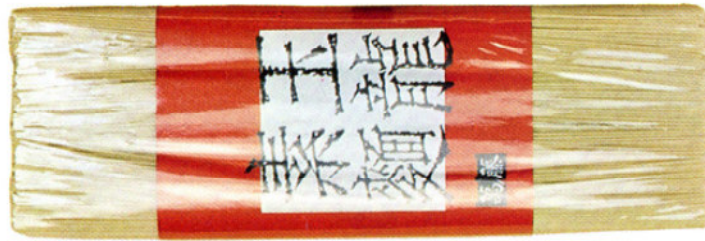
Figure 4.30.
Noodle example 3

Figure 4.31.
Noodle example 4

In the frame of structural design, examples given above share the same use of material and for this reason will be examined together. Noodles are packed with transparent plastic film which enables consumers to see the content of the packaging. Regarding to the solid nature of the product to be packed, plastic films are taking the shape of the noodles. However, noodle example 3 has a prismatic shape than the following one.

In the frame of graphic design, the label on the noodle example 3 is printed on the plastic film. This is again in parallel with the shape of the packaging; very geometric and plain. A rectangular red background is used with a white square on it which is decorated with black kanji indicating the brand. Within this concern **Refinement of Geometry and Use of Basic Forms** could be mentioned as the characteristic of the design. Noodle example 4 is wrapped diagonally with a white paper band, black kanji and a red border to emphasize the typography. Both of the packages share the same use of color in different applications.
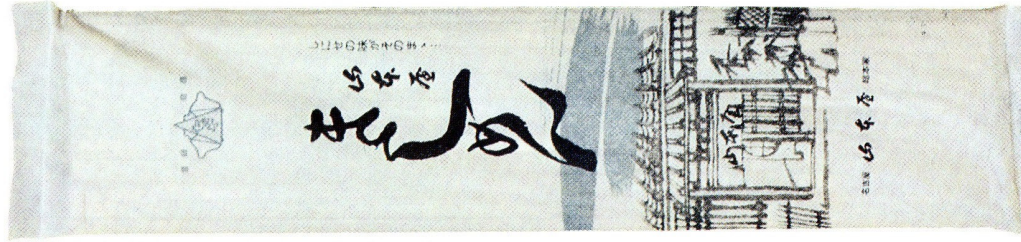
Figure 4.32.
Noodle example 5

In the frame of structural design, our last example is different for some reasons than the previous ones. Noodles are preserved in a white polyethylene bag similar in shape to the usual Italian pasta, also as the material is not transparent consumers does not have a chance to see the content of the packaging, which is a major concern for Japanese buyers to save time during shopping. The shape and the material of the packaging do not reflect any of characteristics defined for Japanese culture.

In the frame of graphic design, a very elegant look is created with the use of a hand drawn Japanese house on white background and embellished with a touch of light grey symbolizing the sky. The brand also is indicated with traditional calligraphy to emphasize the effect of the graphic design. In general means, the package has a Japanese graphic design combined with the use of modern material which signifies the **Coexistence of Modern and Traditional Design Elements.**

4.3.2.5. Analysis of Soy Sauce packaging

Figure 4.33.
Soy Sauce example 1

For being compact and disposable this bottle of soy sauce has become the symbol of its content. Designed to replace the small table-top bottles which always have to be refilled from a bigger one, this bottle created in 1961 by Kikkoman preserved its shape. The form of the bottle is inspired from the traditional bottles used to serve sake, another essential accompaniment of Japanese meal.(Fisher, Hiesinger, 1996) Within this definition the package becomes an example of the **Concerned Approach for the Moral Values,** in the frame of structural design.

In the frame of graphic design, with its anti-drop cap in red plastic and its logo, the design is colored and discrete enough to be placed on table from the market shelf, which makes this traditional bottle a good exemplar of **Refinement of Geometry and Use of Basic Forms.**

Even if the shape of the bottle is preserved since its creation, various graphic designs was adapted to the bottle such as an American icon Mickey Mouse, colored labels to improve sales and marketing is the **Coexistence of Modern and Traditional Design Elements.**

Figure 4.34.
Soy Sauce example 2

In the frame of structural design, light soy sauce is served in a glass bottle with wavy relief and a yellow plastic cap. The design of the bottle does not have a characteristic shape, however has a modern look.

In the frame of graphic design, a contemporary graphic is created with a combination of symbolic black letters, a red company logo on white background and the use of both Japanese and Roman lettering with some indications in English. The most attractive feature of the graphic design is the abstraction and stylization of letters and logo which reflects the **Coexistence of Modern and Traditional Design Elements.**

Figure 4.35.
Soy Sauce example 3

In the frame of structural design, PET bottle used as container for Soy Sauce is a frequently chosen material for liquid products. As in the previous example this design also dos not have a characteristic shape reflecting the traditional aspects and the innate properties of the product. For this reason, the bottle with its shape is far from reflecting cultural values.

In the frame of graphic design, Kanji lettering is the only element to declare a Japanese characteristic for the bottle. Otherwise, the bottle does not have a differentiating element reflecting the cultural aspects. The Mount Fuji is symbolized on the label with traditional red seal and black Kanji indicating the brand. For this reason it is possible to recognize the **Coexistence of Modern and Traditional Design Elements** with utilization of modern material and traditional graphic design..

Figure 4.36.
Soy Sauce example 4

In the frame of structural design, Soy sauce is served and sold in a glass bottle with a twist cap secured by paper etiquette to keep away unwanted test of consumers. The shape of the bottle is plain and simple but does not have a special feature to reflect Japanese culture's design aspects.

In the frame of graphic design, all the symbolic elements of Japanese culture are used on the large label. Bold red lines as the symbol of the rays of Sun, cherry blossoms, traditional red seal and the use of Kanji creates a design full of Japanese character which could be an example for the **Concerned Approach for the Moral Values.**

To conclude our examination of Soy Sauce packages, the evaluations revealed out that, besides Kikkoman's traditional bottle, Soy Sauce does not have a special structural design to reflect cultural values defined in previous chapters. As it is a worldwide known and consumed, every day table-top seasoning, like salt and pepper is in West, the only element to be a sign of Japanese character of the product is the graphic design used on the labels.

5. CONCLUSION

The aim of this study is to explore the communicational features of packaging design products in the frame of cultural values through their design, which involve cultural signs, codes and meanings. Therefore, traditional Japanese packaging is analyzed and the reflections of cultural aspects on the design are discussed, so as to bring out referential perspectives that might be a source of inspiration for our culture.

In parallel with our research, we can comprehend that there is a strong relationship between culture and design, where design is considered as a channel of communication, which involves the use of signs, symbols and meaning. Indeed, it is possible to imply that packaging design, as being a visual communication design product, acts as one of the proper instrument to reflect the culture of the society in which it is created.

As studied, packaging consists of two major design components as Structural Design and Graphic Design. Structural design subdivides into Material, Shape and Size, on the other hand Graphic Design subdivides into Color, Typography and the use of Symbols and Icons. There is also a diversity of used materials in packaging which are chosen regarding the physical state of the product to be packed, these materials can be named as; paper, glass, metal, plastics and wood, which is again in relation with our research topic. Our analysis of traditional Japanese packaging within this research will be based on these major components.

Packaging is a cultural phenomenon; its reflections vary from one culture to another which means that it works differently in different cultures. It is also a part of human behaviour, which points out that, it is a very powerful tool for communication and understanding.

In order to explore the relationship between communication, culture and design, Japanese traditional alimentary products are chosen to be analyzed, because among all cultures, Japanese culture keeps its authenticity for building bridges between its past and present, and also for synthesizing Eastern and Western cultural aspects in it and also owns the tradition of making up, creating packages since early times.

First of all, the genuine characteristics are discovered about Japanese packaging design in parallel with Japanese culture and are classified under four main topics:

- Coexistence of modern and traditional design elements
- Refinement of geometry and use of basic forms
- Use of natural materials
- Concerned Approach for the Moral Values of Design Aesthetics

Within this research the distinctive alimentary products of this Archipelago that had been produced by outcome of the climate and geographic features are analyzed. These alimentary products, to name as sake, green tea, sushi, noodle and soy sauce, have become well-known and are consumed by other nations as a result of globalization and international trade.

Thus, globalization of traditional Japanese alimentary products, can not be only seen as a matter of distribution of foods from Japan, but also as the global circulation of myths, imagination and properties that make those products "Japanese" in character.

The creation of a design is suggested by the qualities of the material itself. This analysis involves examples of Japanese packaging that creatively utilize the native characteristics of material including ceremonial envelopes made with layers of folded paper tied with paper cord, bamboo is used as container in lunchboxes, straw can be tied, woven or bound to create baskets. These designs are not only practical and economical; they also express an attitude of quiet respect and humility toward the material.

It is possible to point out refinement and the use of basic forms in the design of the examples that we have studied, as a reflection of Japanese lifestyle inspired from Buddhism and Zen teaching, simplicity and refinement in all means and in every aspect of the daily life. Their love for simplicity of form has been evident for decades in their domestic arts and crafts, which have created the "Japanism" from the cultural point of view.

More particularly, as studied examples illustrate, traditional serving methods of the products is used as reminiscent and guiding point in the creation of a packaging both in structural and graphic means. This attitude can be explained as the concerned approach for the moral values of the design aesthetics, by honoring and responding to human needs, sensitivity and respect for the innate characteristics of the object.

However, to adapt these products to our modern life circumstances, the end products are created by combination of new materials and production processes with traditional concepts and innate characteristics of the products which reflect the coexistence of traditional and modern values.

It is also recognized that among studied products, sushi seems to have the least qualities of showing the cultural values within the design of their packages. On the other hand green tea seems to have the most diverse use of material, form and graphic design on its packages. So we can declare that, products that are used and produced towards instant use tend to involve less cultural signs and symbols in their designs. It is found out that black kanji, white color and red seal are used on most designs, which confirm us that they use symbolic colors and typographical aspects for communication through cultural values.

To conclude, Turkey through its geographical and strategic position, devotion to its traditions and customs, at the same time embracing all the aspects of modern world, shares certain similarities with Japan. With the examination of Japan's traditional, however worldwide known and consumed products, we can comprehend that they develop methods, strategies and approaches to keep their Japanese identity in the route of globalization. The traditional way of explaining this association of authenticity and globalization is through the mediating category of culture and its characteristics elements.

As Turkey, is a country where the culture involves both Oriental and Western aspects, we believe that in order to reflect the authenticity of our culture and Turkish identity on our traditional products' packages, understanding Japanese packaging and the reflections of its cultural aspects on design, can be an inspiring source for Turkish packaging design in the journey of globalization.

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Figure 3.2.   Natural material woven basket……………………………………………..

Figure 3.3.   Uneeda biscuit box……………………………………………………........

Figure 3.4.   http://image.timepassagesnostalgia.com/squarethumbs/images02/0249ricekris.jpg

Figure 3.5.   Ancient glass bottles………………………………………………………….

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Figure 3.16.   Lürzer's Archive Special Packaging Design, p.70

Figure 3.17.   Lürzer's Archive Special Packaging Design, p.142

Figure 3.18.   Lürzer's Archive Special Packaging Design, p.170

Figure 3.19.   Lürzer's Archive Special Packaging Design, p.60

Figure 3.20.   Lürzer's Archive Special Packaging Design, p.65

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