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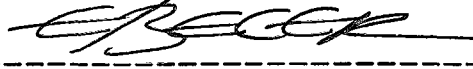
THE IMPULSIVE EFFECTS CREATED BY THE USE OF COLOR ON FOOD
AND BEVERAGE PACKAGES: Their Relations with the
Symbolic Meanings of Foods and Beverages

A THESIS
SUBMITTED TO THE DEPARTMENT OF
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by
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February, 1994

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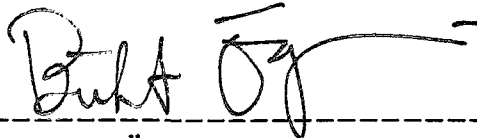
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ABSTRACT

THE IMPULSIVE EFFECTS CREATED BY THE USE OF COLOR ON FOOD AND BEVERAGE PACKAGES: Their Relations with the Symbolic Meanings of Foods and Beverages

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M. F. A. in Graphic Design
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February, 1994

The intention of this study is to analyze the role of symbolic meanings and physical attributes of foods and beverages reflected by the use of color on their packages in the creation process of impulsive effects.

Key Words: Food and beverage packages, color, symbolic meanings, impulsive impact.

ÖZET

RENGİN YİYECEK VE İÇECEK AMBALAJLARI ÜZERİNDEKİ KULLANIMI İLE YARATILAN TEPİSEL ETKİLER: Yiyecek ve İçeceklerin Sembolik Anlamları ile Olan İlişkileri

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Grafik Tasarım Bölümü

Yüksek Lisans

Tez Yöneticisi: Doç. Emre Becer

Şubat, 1994

Bu çalışmanın amacı yiyecek ve içeceklerin sembolik anlamları ve fiziksel özelliklerinin rengin kullanımı ile ambalajlarına yansıtılmasının, tepisel etkilerin yaratılma sürecindeki rollerini incelemektir.

Anahtar sözcükler: yiyecek ve içecek ambalajları, sembolik anlam, renk, tepisel etki.

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INTRODUCTION

Packaging is one of the most important aspects of the creation of a product. It can even be said that an unpacked product is an unfinished product. This is not valid only for man-made products; nature follows the same principle as well. There is no fruit without a peel or shell. From coconuts to pineapples, from peanuts to bananas, all have a particular kind of packaging.

And it is in nature that we find one of the best examples of the modern concept of package design; the orange. It has a peel that is hard on the outside and padded on the inside, which protects it from external knocks and the damage that might be done to the fruit inside (Aurelio,1990).

There is another aspect which is the guarantee of 'virginity' because once the peel has been removed, it can never be replaced. It is like a seal for the guarantee of origin.

When the design elements which will help the peel -package- to reflect the characteristics of its fruit -product- are analyzed, it is obviously seen that the most important design element, because of its impulsive impact is the color of the peel which is orange: the best of all colors for its visibility and attention attractiveness (Danger,1987). Apart from creating impact color also reflects the characteristics (symbolic meanings and physical attributes) of the fruit.

For example the color orange reflects the characteristics like being lively,

energetic and gaudy which can be associated with the symbolic meanings of its fruit.

As pointed out above every food or drink has its own symbolic meaning. These symbolic meanings are the results of the accumulation of regional, religious and social characteristics augmented by the physical attributes of the foods or beverages. The symbolic meaning of a product can be reflected in the most immediate way by the use of color.

In this context color is the major element of design which is able to communicate immediately to be used on food and beverage packages. Immediacy is an important factor especially for food and drink packages because these packages have to stimulate the appetite which is defined as a sudden want and hunger for what is seen whether needed or not (Dichter, 1964) As can be understood from the previous statement our sense of vision is the most important stimulation tool for appetite.

Apart from stimulating appetite, the use of symbolic meanings and physical attributes can create curiosity, feeling of closeness, trust, qualification and impression of usefulness, which are also significant stimuli for the purchase of the food stuff.

All those stimuli including appetite appeal are created by the psychological impacts which are provided by the appropriate use of color in coordination with the other design elements to convey the symbolic meanings (psychological characteristics and nationality) and physical qualities of foods and beverages.

Using the ways of creating psychological impacts packages can be categorized in four groups: integrative packaging, interruptive packaging, stimulating

packaging and restrictive packaging.

By the help of these packages a communication takes place in which offering the food is accepted as an act of communication, purchasing or eating the product is a success of the communication and the appetite for it which can be stimulated by the appeal of the product is partly the desire to communicate.

This process of communication helps the creation of the impulsive impact of a certain product. Subsequently impulsive impact can be created by the appropriate use of color in coordination with the other design elements -3-D form, material and 2-D form- which will motivate impulse buying:
The winning step of the competition!



1. SYMBOLIC MEANINGS OF FOODS AND BEVERAGES

From the beginning of life, one of the most important biological needs of men has been feeding. According to Toussaint-Samat, feeding is done after, the awareness of a chain of sensations: the stimulus of hunger, the excitement of gathering food, the satisfaction of appetite.

Feeding, which is composed of eating and drinking, at first, was a purely visceral pleasure but, became an intellectual process when the eyes, which had been laterally placed, moved towards the base of the forehead. Finally, man with its new possibilities of vision, together with the prehensile skill of its specialized hands, encouraged it to explore its environment more thoroughly in search of food.

Actually, his memory had registered a wide potential choice, but certain items turned out to look and taste better than others and give more pleasure. The pleasure was enjoyed and remembered. He wanted to experience it again. That unforgettable sensation, stimulated curiosity and courage, impelled him to make further experiments and eventually developed its intelligence, which itself was constantly being fed with new information. Increasingly, he developed his skills in order to acquire more and more such foods, using methods which would help him to evolve towards civilization: weapons, tools, industry, social organization. As his diet became more varied, his intellectual capacity increased. Those civilizations prepared their foods in a traditional manner. Traditions derived both from local factors of climate, soil and fauna and from religious taboos

conveying ideas of cleanliness or of safeguarding the social structure (Toussaint-Samat, 1992).

As Toussaint-Samat states:

As civilizations became more sophisticated all over the world, commercial and cultural exchanges increased, the diet became ever more varied and complex. Eventually, civilization occurs when something we never missed before becomes a necessity (Toussaint-Samat, 1992: 2).

Although, it was stated above that, traditions were derived from regional, social and religious characteristics, it would be complementary to take in sight, the general likings of a group for certain basic foods or certain aromatics. For instance: there are regions famous for wine, beer, pasta, rice, coffee, chocolate, etc. (Dichter,1964).

Toussaint-Samat considers the diet as a social signal. Since cannibalistic times, it has been associated with identification magic. The food of the strongest-like his religion, his spiritual food- is always regarded as the best. The strongest person is he who imposes his diet on others. "Going native" in diet has usually been regarded as a lapse in a colonial-though sometimes as intellectual snobbery.

As a result of the accumulation of all those regional, religious and social characteristics, foods and drinks are full of symbolic meanings but, those symbolic meanings are generally augmented by the physical characteristics (color, thickness, smell, texture, etc.) carried by the food or drink itself. When the real inventor of the foodstuff is taken in consideration, this seems immoral, it is not so important whether the symbolic meaning leads to the origin or not but,

the important thing is the formation of a common symbolic meaning in which the quantity of the people, who are consciously or unconsciously loaded with the same symbolic meanings for the same food stuff.

The reason, why the "common" symbolic meanings are important is that, they are the ones who serve as mediators for mass communication. Even if the common symbolic meanings of foods and beverages are not faithful to their origin, they can not be changed as they are stabilized in the minds of the consumers. Such an attempt can only cause a state of contradiction and discomfort for the consumers. Consequently, the symbolic meanings of the products to be reflected on the packages, should be analyzed properly to fit the existing image formed by those common symbolic meanings in the mind of the targeted consumer group.

The symbolic meanings of foods and beverages, will be revealed one by one, after presenting the categories of the food stuffs, prepared by, Ernest Dichter and Maguelonne Toussaint-Samat.

FOODS :

- a. CHOCOLATES AND CANDIES.
- b. CAKES, PASTRIES AND GRAINS.
- c. CONDIMENTS.
- d. DAIRY PRODUCTS.
- e. MEAT.
- f. POULTRY.
- g. FISH AND OTHER SEA FOODS.
- h. VEGETABLES.
- i. FRUITS.
- j. FROZEN FOODS.
- k. BABY FOODS.

BEVERAGES :

- a. MILK
- b. COFFEE.
- c. TEA.
- d. MIXERS.
- e. LIQUORS.
- f. SOFT DRINKS.

1. CONFECTIONERY.

a. CHOCOLATES AND CANDIES :

Chocolates: Originally, we owe chocolate to the Aztecs of Mexico but, the invention of milk chocolate - a big distinction in taste - to Switzerland. Today Switzerland is one of the world's greatest shrines to chocolate (Toussaint-Samat, 1992).

In almost all civilized countries, chocolate is remembered from childhood days, as a reward for good behavior. It is considered a product of self indulgence, connected with the feeling of abundance. People do not want skimpy-looking chocolates. When you eat chocolate you feel psychologically, that it should run down your chin, you ought to really drown yourself in it. There are considerable elements of reward, guilt and pleasure connected with chocolates. They are impulse items, there is relatively little planning done in their purchase. They can calm one down and can even become a symbol of love (Dichter, 1964: 331).

Chocolate is recalled by most of the people as a brown, dense, sweet, deep, dark and warm product (Dichter, 1964).

Candies: According to Dichter's studies, candies symbolize gustatory and emotional pleasure; tenderness and affection; mean energy and power. They have multiple sexual connotations and they symbolize adult love. Candy is considered as an escape from the tensions of modern life and as

a reward. It is in need of an atmosphere of leisure, luxury and romance.

Dichter states that, candy represents three major types of oral pleasure: it can be chewed, squashed and crunched. He adds that it has different symbolic meanings for a child and for an adult.

To the child , the candy is a symbol of either reward or rejection. When parents give candy to their children, they are making a dramatic offering of their love which, at the same time, is a positive reward for the children's behavior. For the adult the symbolic meaning of the candy still has not changed. He resembles the joys and pleasures of candy eating or the unhappiness experienced when parents withheld the confection (Dichter, 1964: 328).

b. CAKES, PASTRIES AND GRAINS :

Cakes: In fairy tales, cakes are often magical or enchanted objects and they convey a message. For example, the cake in Little Riding Hood's basket, like the butter, shows her respect and love for her grandmother better than any words can do (Toussaint-Samat, 1992).

Ernest Dichter describes the cake, as an inventive elaboration of bread, in which ingenious cooks added honey, raisins, nuts and other more flavorful ingredients as tasteful variations to bread. Cake, therefore means affection. It is related to occasions of social ostentation or the dispensing of hospitality- to parties, festivities, desserts and special meals.

Cake, like so many other types of food represents fertility. As a physical

characteristic, the height of the cake is very important. In theory, the higher the cake, the better its taste. Cakes also carry very strong regional characteristics (Dichter, 1964).

Cookies: Dichter describes the cookies as a symbol of reward, and goes on like this "In childhood there is always the association: if you are a good boy or girl, you will get a cookie."

Cookies possess a familial and traditional aura. They are feminine in their psychology and identified with a loving and generous mother. They symbolically represent a feeling of plenty, therefore, cookies should always be portrayed in abundance (Toussaint-Samat, 1992).

Crackers: As Dichter claims, crackers are psychologically a sort of quick, lazy bread and are consumed as snacks or informally at social gatherings. A good part of their appeal comes from their tactile variety and taste. This implies the rhythmic sound and the sensation they have for the tongue and palate. Together with other products, crackers signify the importance of emotional elements in the food field other than taste (Dichter, 1964).

Desserts: Dessert can be revealed as, a sweet finish to a good meal.

The shapes of the desserts and their prettiness, colorfulness and playfulness embody symbols of femininity. Desserts can be projected as gifts of the woman to the man in her family, special creations which only she as a woman can make. In the preparation of desserts she derives some of the same sense of womanhood that she does from using jewelry, lingerie and perfume (Dichter, 1992: 37).

Bread: Bread has become the prime symbol of nourishment. We speak of “earning our bread”; we fear having “the bread taken out of our mouths (Toussaint-Samat, 1992).

Although little bread has been baked at home in the past generation or so, most of us still have a mysterious nostalgic feeling about the aroma of bread. Dichter states that, people want a bread which satisfies the hidden hunger for sensory satisfactions, individuality, family associations and home made connotations.

It is interesting that bread is also very definitely associated with changing taste and with social status. Originally, white bread or light colored bread was often the symbol of purity and moral cleanliness. In many countries black bread has become a nourishment of sophisticated people.
(Dichter,1964: 24).

Rice: “The multitude of it’s grains symbolizes happiness and abundance, that is why handfuls of rice are thrown at weddings.” said Toussaint-Samat.

From Dichter’s point of view, it typically suggests a strong female, young, healthy and blessed with great fertility. It also represents unlimited growth, and it is pointed out to be less fattening. That is the main reason why rice is a reliable food. From the innocent white sauce to the dark and spicy Spanish sauce, it is prepared in many forms. It falls in with every mood of the woman (Dichter, 1964).

Barley: It is traditionally accepted as a giver of strength (Toussaint-Samat, 1992).

The name of Demeter, goddess of the fruitful soil, means in literal translation "barley mother." Today barley is also used in the preparation of alcoholic beverages (Dichter, 1964).

Beans: Beans have been a symbol of the embryo and of growth in most societies. (Toussaint-Samat, 1992) As Dichter indicates their symbolism of fertility derives from the ability of one bean to produce a whole bean plant with many, many bean pods and countless individual beans. They actually represent a good return (Dichter, 1964).

Flour: Dichter claims that there is no need to talk about the link between flour and women, as it is accepted to be a common knowledge. The important thing is the criteria, used by women to judge the quality of the flour. The consistency of the flour is very important, related with the smoothness of the dough, sauce or gravy. The color-the whiteness-of it is usually considered the prime virtue, although this varies according to the region. Also the texture is an important factor. There is a marked preference for silky flour. The weight is important but, in a sense, it is more the feeling of lightness than the actual light weight of the flour that is considered important. Then comes the purity, which is always considered as freedom from any foreign ingredients, a flour which is natural and untouched. The last criterion is the uniformity of the stuff , which is an assurance to reduce the hazards of baking.

Soup: Dichter explains soup, to be endowed with magic power in the folklore of many countries. It protects, heals and gives strength, courage and the feeling of belonging. Magic arises from the brewing together of special ingredients.

Soup is an emotion-charged food which become identified with the positive

symbols of abundance, security, warmth, comfort and friendliness. It is closely related with family ties especially mother's love. It evokes images of the warmth of the family dining room, the familiar sights and smells of the kitchen. Also, soup is mostly associated with cold weather (Dichter, 1964).

Pasta: Although pasta has been regarded as a traditional meal of the Italians, it may have been brought back from China by Marco Polo in the 13th century (Toussaint-Samat, 1992).

Depending on the motivational researches of Dichter on pasta, it can be said that: It suggests family fun and conviviality. Most mothers and wives interviewed dwell on the relaxed and sociable mood which the pasta dinner generates. For example, there is a "motor excitement" in eating spaghetti. Gestures like twirling, digging and twisting may be used to describe the fun of eating it (Dichter, 1964).

Dichter suggests that upgrading of pasta as a modern dish remains to be accomplished by means of highly individual sauces, special table settings, and association with appropriate wines (Dichter, 1964).

Wheat: *"The farmer puts the wheat grain into the ground, as if burying the dead, and it is reborn as a plant which itself bears grain. To the ancient world this process represented both the mysteries of life and the permanent cycle of the seasons"* (Toussaint-Samat, 1992: 128).

The symbolism of wheat goes beyond the natural sphere. It signifies a passing from darkness underground into sunlight, or vice versa and this is equivalent to the passage from the non-manifest to the manifest, from

ignorance to revelation.

Maize: Maize is known to be discovered by the Zuni Indians of New Mexico. It is symbolically accepted as a gift of heaven, it shows the care of gods for mankind. Although it is a treasure of Indians and Mexicans, we owe popcorn to Iraquois, who heated sand in a receptacle and then mixing the maize with the hot sand, put it to cook slowly until the kernels burst. This bursting process resembles the vivacity and abundance of life (Toussaint-Samat, 1992).

Cereals: Cereals generally have a natural platform in the breakfast psychology since they largely are consumed for breakfast. Cereals, to a large extent, fulfill our tactile curiosity. They are suitable to be played with orally. They have interesting shapes that can be cracked with a snap, crackle, and pop (Dichter, 1964).

Dichter claims that:

There is an increasing resentment against the rushed, tense, unhealthy atmosphere of the modern breakfast. People would like to take more time to enjoy themselves. There is a growing desire to make the breakfast meal a family gathering again (Dichter, 1964: 29).

Dry cereal symbolizes our hurried, tense, modern times. The old cereals and the old family breakfasts that people dream nostalgically are the symbols of "good old days". Cereals may also represent either challenge and fun or warmth, affection and protection as Dichter certifies.

c. CONDIMENTS:

Salt: People have always known that salt is indispensable to life. It is added to food in cooking, for its qualities as a condiment-it enhances flavor-and for its value as a preservative (Toussaint-Samat, 1992).

Toussaint-Samat described salt as "the noblest of foods, the finest condiment of all", and he stated that, salt is a delicacy, in the sense that we take no pleasure or satisfaction in eating food which contains only the small amount of salt occurring in it naturally (Toussaint-Samat, 1992: 457).

Dichter supports this statement by emphasizing the use of even in candy making which helps to bring out the sweet flavor. Symbolically like so many other food items it is related to fertility and it implies purity and unchangeability (Dichter, 1964).

Sugar: Sugar is an emotional object which is associated with psychological pleasures like gustatory delight and emotionally rewarding feelings of love and security (Dichter, 1964).

As Dichter pointed out, sugar is a conflict product because we need it and want it and at the same time we are afraid of it.

It symbolizes tenderness and affection, energy and power. It is sexualized and finally symbolizes adult love. "Sweetie", "sugar", "honey" are terms used very often in an erotic sense.

Spice: Spices have varieties, made from herbs, minerals and all kinds of natural sources. Dichter indicates that spice is used more frequently, as

diet and menus become more sophisticated. Special recipes and unusual regional dishes often have as their main secret the spices added in their preparation. They are mostly used in tropical climates and poor countries to make the flavor of the foods more interesting (Toussaint-Samat, 1992). According to the Oxford English Dictionary spice is something used because of its fragrance dominantly and flavor weakly to stimulate the appetite.

The most popular spices together with their symbolic meanings as Dichter points out are as follows:

Cinnamon: exoticism, sweetness, legendary, mysticism.

Pepper: power, virility, assassination, sharpness.

Ginger: mystery, exoticism, spreading.

Cloves: dominance, exoticism, legendary, strength.

Nutmeg: sweetness, submissiveness, harmony, smoothness.

Chillies: fights, intrigues, aggressive, hot, sharp pointed.

Paprika: exoticism, virility, mysticism.

Aromatics: It is something that adds a sweet, distinctive smell and taste when used in the preparation of a foodstuff (Toussaint-Samat, 1992). The sweet distinctive smell indicated, is similar to the perfume which symbolizes memory (Prigent, 1973). This statement supports Toussaint-Samat's thoughts about the potential performance of aromatics on the convenience of distinction of foods.

There are two favorite aromatics. One of them is saffron, which symbolizes brilliancy, deepness, gold, enlightenment, wisdom and illumination. The other one is vanilla, which symbolizes tropical climate, smoothness, delicacy and sparkling crystals (Toussaint-Samat, 1992).

Herbs: *They stimulate the palate, and their scent instantly puts*

one into the right frame of mind to enjoy food, but they also carry messages from the beginning of time, messages which convey one to a state of grace (Toussaint-Samat, 1992: 530).

Herbs respect food, complement it and bring out its flavor. Basil, chervil, chives, coriander, dill, fennel, mint, parsley, rosemary, sage, tarragon, thyme are some of the herbs used frequently as condiments.

Mustard: *It is a typical condiment in the sense in which we understand the word today: Its piquant, aromatic flavor has made it popular for thousands of years (Toussaint-Samat, 1992: 526).*

Mustard gives body and flavor to foods. It symbolizes strength and intensity (Dichter, 1964).

Olive oil: The ancient peoples of Mediterranean claimed the discovery of the olive tree and its uses for their own gods. Olive itself had general connotations of good things which are carried in its oil as well. These connotations can be revealed as follows: peace, fertility, strength, victory, glory purification and sanctity (Toussaint-Samat, 1992).

Other oils: Groundnut oil: This oil is also known as peanut oil and is of Mexican origin. It is very nourishing and rich in protein.

Sun-flower oil: It is made from the seeds of Van Gogh's favorite flowers. Generally, it comes from the Eastern European countries. Sun-flower oil has a pleasant hazelnut flavor and it is very popular with dieticians because, it represents lightness.

Corn oil: It is an oil which is extracted from maize germ. Like the sunflower oil, it is recommended in slimming diets.

Sesame oil: This oil has an excellent flavor, rather like roasted hazelnuts. It is associated with an oriental atmosphere (Toussaint-Samat, 1992).

Margarine: It is a condiment, guaranteed to be of all vegetable origin which is generally used as a substitution for butter (Toussaint-Samat, 1992).

The idea of using margarine is the proof of being modern and efficient. People are proud of the fact that the use of margarine puts them into a class of forward looking and progressive people, yet they still consider butter as the ideal food (Dichter, 1964: 51).

d. DAIRY PRODUCTS:

Butter: We owe butter to the nomadic peoples of the Euro-Asiatic plains (Toussaint-Samat, 1992).

Butter has nostalgic psychological associations. It recalls for many women their own childhood. It reminds them of homemade quality. It represents "plenty". Butter is natural and it has to be rich, golden, and sunny. Psychologically it seems to have a symbolic roundness (Dichter, 1964).

Buttermilk: "Buttermilk is much more sensuous than regular milk because of its tangy flavor. It is more intriguing than sweet milk. It has a special thick consistency which makes it like a non sweet ice-cream" (Dichter, 1964: 27).

Symbolically buttermilk is satisfying and provides a feeling of health. It is

like a green salad. It is fresh. It gives a greater feeling of cleanliness than regular milk (Dichter, 1964).

Cheese: Toussaint-Samat states that Frenchmen are known as experts on cheese. Cheese is a dairy product surrounded by mystery. Appreciation of cheese is close to the appreciation of art. The more subtle, the more delicate, or the more mysterious the manner in which a cheese has been prepared. The odor and consistency of the cheese are of great importance psychologically (Dichter, 1964).

Cream: Dichter thinks that cream is exciting because it is sensuous and rich. It generates a feeling of security and well being. It is equated with the best and with abundance for its richness is the principal characteristic of cream. Also the appeal of cream is very strong.

As a result it is a gourmet food, for its use connotes something special. Cream is associated with self-indulgence and self-pampering (Dichter, 1964).

Ice-cream: Ice cream is very much a social food, it is fun to share (Toussaint-Samat, 1992).

The attraction of ice cream stems from the fact that it is effortless food. It melts in your mouth, does not have to be chewed. It should be smooth and richly flavored (Dichter, 1964).

People refer to it as something they "love" to eat and they almost have the feeling that they want to drown themselves in ice-cream. It can be defined as an orgiastic kind of food. Ice-cream can satisfy immediately thus it should be presented as ready to be eaten (Dichter, 1964).

Yogurt: The Balkans, are proud of their remarkable number of people who live to be 100 and over. It appears that they owe their unusual longevity to yogurt (Toussaint-Samat, 1992).

In this respect it has a certain connotation of magic; people expect some miraculous effects or advantages from it. It is probably the special consistency and smoothness of yogurt which makes it so mysterious and interesting (Dichter,1964).

e. MEAT:

All over the world, the color red is connected with the symbolism of blood and animal fats which are directly associated with meat (Toussaint-Samat, 1992).

Meat is regarded as red rich and hot, and gives a feeling of wholesome muscular strength. It is the cheerful sign of wealth which is considered to reflect social success. Symbolically it opposes to purity and virtue (Dichter, 1964).

f. POULTRY:

Chicken: Chicken which is considered to be far less masculine than steak, symbolizes cowardice. It hides elements of lightness in it and is associated with fertility and warmth. The cock on the other hand symbolizes virility and resurrection (Dichter, 1964). It is associated with the solar body anywhere. It is also a symbol of vigilance (Toussaint-Samat, 1992).

Eggs: Eggs are the symbols of the stages in the great life cycle thus they strongly connote time intervals. They represent the mystery of growth and fertility (Dichter, 1964).

Eggs can not be separated from chickens intellectually. As the word certifies "the egg is in the chicken, and the chicken is in the egg". Eggs are also associated with delicacy and care (Toussaint-Samat, 1992).

Eggs should always convey freshness because people's desire for freshness in eggs is almost a fetish (Dichter, 1964).

g. FISH AND OTHER SEA FOODS:

Fish: Fish can not be evaluated apart from the water in which it lives, and the symbols of the two are often linked or interchangeable. It brings prosperity and passes on its own fertility. At times fish was considered a brain food. By the association with water, it is considered to be cold, white, lean fare, sober and soothing and in any case pure (Toussaint-Samat, 1992)

Other sea foods: Other sea foods like, salmon, crabs, sea urchins, crayfish, shrimps, oysters and mussels are generally rare, unusual or hardly obtainable products. Thereby, they are treated as luxuries. They are all accepted to be light and healthful food items. Symbolically, sea foods are relatively whiter, cooler and purer than meat.

A special sea food, which is a real luxury is caviare. "Once upon a time.... It seems appropriate to begin the story of caviare with that fairy-tale opening. Caviare is the last legendary food of modern times, and indeed is more than just a food. It represents a dream" (Toussaint-Samat, 1992: 375). It is

the most expensive food consequently, it is the stylish food of important people. The most famous caviare is Russian caviare, which is as old as Russia itself.

h. VEGETABLES:

Asparagus: Asparagus, because of its unusual shape, easily acquires a phallic significance. Even today in many countries it is believed that asparagus increases sexual potency (Dichter, 1964).

Dichter also pointed out that the manner of eating might also be significant. The asparagus is handled by hand without fork and knife, dipped into a sauce, and plunged into the mouth.

Cucumbers: In some cultures cucumbers are associated with poverty and represent a low and basic form of food. They are always in need of being complemented (Dichter, 1964).

Cucumbers connote coolness. Their coolness is their characteristic which derives from the special skin preventing them from getting hot even in the summer sun and heat (Toussaint-Samat, 1992).

Tomatoes: Tomatoes represent softness, roundness and fertility. Their brilliant color stimulates the appetite, reminding of the delicious sauces prepared by their use. As a result of the coordination of their shapes and colors, they signify cheerfulness and sunlight (Toussaint-Samat, 1992).

Nowadays, tomato is not treated only as an ingredient in a sauce but as a dish in itself, like a salad, a cooked vegetable, juice and even jam (Toussaint-

Samat, 1992).

Mushrooms: *Mushrooms have been described as a vegetable meat.*

Besides their pleasing taste, which makes them a popular flavoring, they do indeed provide the organism with elements which we expect to find in meat and eggs (Toussaint-Samat, 1992: 57).

Mushrooms are believed to increase sexual potency in popular culture. It symbolizes male reproduction organ because of its shape and it is strongly associated with exoticism and mystery (Dichter, 1964).

Potatoes: Potato is a vegetable that can not be killed by fashion. Everybody loves potatoes in at least one preparation style (Kafka, 1992).

Potatoes - when rough - appear to be unclean thus get a second name as "edible stone". The symbolic meanings of potatoes are changed as they get from phase to phase. These phases can be generalized in two sections: boiled potato which connotes warmth, smoothness, consistency and harmony; fried potato which connotes cheerfulness, activation, energy and variability (Dichter, 1964).

i. FRUITS:

Apples: *Apple folklore over thousands of years seems to have been associated with heroism, love death and immortality. The eating of an apple in Paradise, though symbolizing the beginning of all evil, apparently has not affected its favorable image (Dichter, 1964: 19).*

There has been a great value attributed to the power of apples and such beliefs as “an apple a day keeps the doctor away” can be accepted as an evidence for them (Dichter, 1964).

Oranges, Grapefruits and Tangerines: These three are supercharged with excitement. They are the juiciest fruits which offer a two way stimulation. They excite the senses of taste, smell, sight and touch and also activate the imagination more than the other fruits. They provide dramatic symbols of Shangri-La climate, unlimited sunshine, boundless abundance and carefree living under serene skies (Dichter, 1964).

Dichter claims that these fruits gratify the emotional need for palpation or examination by touch. Especially orange is claimed to be a perfect fruit which is shaped like the sun, radiant, gay, cheerful and exuding optimism (Dichter, 1964).

Plums: In the middle of the nineteenth century, the ideal of beauty was to have a heart-shaped mouth. Thus plums connoted beauty because of their shapes and depth in feelings because of their color (Toussaint-Samat, 1992).

Peaches: The peach tree is regarded as magical, and its blossom is the symbol of virginity. It is a sign and symbol of spring, the season of the renewal and growth. It also symbolizes fertility. It satisfies the tactile need of smoothness and it resembles a perfect woman skin (Toussaint-Samat, 1992).

Apricots: It is considered to be a royal fruit which is in appearance like the peach. This golden fruit however, is good for the intellect, since it is rich

in mineral salts including phosphorus and magnesium (Toussaint-Samat, 1992). It symbolizes softness, harmony and changeability (Dichter, 1964).

Cherries: These juicy, little, red fruits are the symbols of abundance, adornment, and fertility. Because of their delicate structure they resemble tenderness and affection. Cherries connote the feelings to share (Toussaint-Samat, 1992).

Strawberries: They are deliciously scented, miracle scrambling fruits. Perhaps because of their scent, strawberries had a reputation as a love potion. Strawberries have always accepted to take a role as a complementary food item (Toussaint-Samat, 1992).

A research prepared in France supports the statement above:

The average French person buys a little above one kilo of strawberries a year but eats about 1.8 kilos. The reason is that the strawberry is a very seasonal fruit (Toussaint-Samat, 1992: 655).

Melons: "Friend of the present day are like the melon. You must try 50 before you find a good one" said a versifying philosopher. As explored in the statement, melon is a difficult fruit.

Both the melon and its bigger sister water melon which are summer fruits come from Africa. They symbolize juicyfulness, secret and perfume of the nature (Toussaint-Samat, 1992).

Figs: *The symbolic meanings of figs preceded those of the fig tree: they have connotations of abundance and initiation. The many*

seeds in the fig signify unity and the universality of true understanding, knowledge and sometimes faith (Toussaint-Samat, 1992: 674).

Pineapples: It is the fruit that would take you to a tropical climate where you can better perceive its flavorful exotic taste. Actually it is a fruit from Hawaii (Dichter, 1964).

Apart from its exotic taste, many "slimming" diets praise it to the skies. It is claimed to make you thin (Toussaint-Samat, 1992).

Bananas: "The banana tree is not actually a tree at all but a herb, a giant herb and even more extraordinary than the pineapple" (Toussaint-Samat, 1992: 678).

In the banana tree no fertilization takes place, and the flowers are sterile that is why it is the symbol of futility of earthly possessions (Toussaint-Samat, 1992).

The natural aroma of the banana which is a symbol of the tropical countries is extremely volatile (Toussaint-Samat, 1992).

When the elongated shape of the banana is taken in consideration, it easily acquires a phallic significance (Dichter, 1964).

Avocados: *In American culinary tradition, from the southern United States to South America, the buttery pup is served as an appetizer with chili or spices. But the French traditionally serve it as a dessert with sugar and lemon (Toussaint-Samat, 1992: 681).*

j. FROZEN FOODS:

When frozen foods were first introduced, women had doubts about its quality and nourishing value. They were also afraid of being considered lazy housewives. But now they are the symbols of modernity. Besides they have an advantage of eternal freshness which confers a sense of security. The only problem is hidden under their appeal because the appeal should be sufficient to fulfill their emotional flavor expectations (Dichter, 1964).

k. BABY FOODS:

In the beginning baby food was considered a luxury but nowadays, it is an accepted part of baby's upbringing.

The modern mother is more concerned with making the task of feeding the baby a convenient and quick one rather than with the over romanticized portrayal of glamorous, beautiful babies (Dichter, 1964: 20).

We have become more frank, open, and sober in our approach to events like motherhood and even love. Thus a mother apparently wants to know what goes into baby food. As Dichter emphasizes "we call things by their right name and are less inclined to introduce a Hollywood type of emotionality" (Dichter, 1964:20).

l. CONFECTIONERY:

Jams and Jellies: The production of jams and jellies began as a marriage of

fruits and sugar basically (Toussaint-Samat, 1992).

They taste good and are neatly dressed up. They are symbols of self-indulgence, an almost sinful symbol of good living. They represent condensed energy, but there is a psychological barrier: the feeling that there is no novelty in jams and jellies (Dichter, 1964).

Honey: It is a food both miraculous and natural. It is like a treasure and has an element of reward about it. It is directly associated with energy and brilliance. The floral origin and the geographical provenance of honey determines its characteristics. It is the meeting place of the three worlds: man's daily life, animal kingdom, and vegetable kingdom (Toussaint-Samat, 1992).

BEVERAGES:

a. MILK:

Milk is nature's bounty which is a liquid food requiring no chewing and offering no resistances. It is considered a perfect food. Its perfection is a function of its psychological symbolism (Toussaint-Samat, 1992). Milk symbolizes motherhood. It comes to signify love, security, warmth, and effortless need satisfaction. People enjoy milk when they are sick, hot and tired, feeling low or lonely shortly in need of care. As a result it is directly associated with emotional security created by mother (Dichter, 1964).

b. COFFEE:

The first European to mention coffee is Prospero Alpino who describes it as:

The Turks have a brew, the color of which is black. It is drunk in long droughts, and not during the meal but afterwards.....as a delicacy and in moutfuls, while taking one's ease in the company of friends (Toussaint-Samat, 1992: 581).

As mentioned above coffee is a beverage of companionship. It is an intimate kind of beverage. It needs to be drunk in a mood of closeness and sociability. Coffee is something which heightens the enjoyment of life and is tune with modern living. Coffee is associated with virility depending on its strength (Dichter, 1964).

c. TEA:

"The tea ceremony, although a domestic affair, is more than just a matter of enjoying a cup of tea: it is an ethic, a philosophy, it expressed the art of living " (Toussaint-Samat, 1992: 596).

Tea drinking countries like China, Japan, and England have much more sophistication about the quality of tea.

Tea can be served hot or cold. Hot tea has to be portrayed as hot, steaming and strong where as iced tea has to be portrayed as cool, refreshing and light. It should quench physical thirst as well as psychical thirst (Dichter, 1964).

d: MIXERS:

They are exclusively party or bar associated drinks. They hide women presence in themselves reflecting the delicate female taste and decision. They are the symbols of abundance, boundless variations, energy, activity and colorfulness. They are under the hegemony of their flavors (Dichter, 1964).

e. LIQUORS:

Beer: It is a sensuous beverage considered by many people as a liquid food. Beer is an active, alive, clear, cool, foamy, and sparkling beverage associated with overflowing stein, he-man masculinity and the feeling of joviality and friendship (Dichter, 1964).

Rum: It is associated with masculinity. It is the drink of the sailor, the soldier, the pirate, the miner and others who explore the true male image. Thus rum was always particularly noted for its strength and harshness. It is primarily associated with the tropics (Dichter, 1964).

Whisky: It is an authentic drink representing quality, status and prestige. It is symbolically mellow and smooth with a smoky flavor. It is in need of an atmosphere of luxury and sophistication (Dichter, 1964).

Vodka: It represents the desire for new experiences and individualism (Toussaint-Samat, 1992).

Vodka has a romantic background, a certain amount of glamour and mystery. It is a very satile drink which lends itself to a variety of uses in

mixed drinks (Dichter, 1964).

Wine: It is one of the oldest beverages of mankind. Wine requires knowledge to enjoy it. It is an important fact to learn what wine goes best with. It symbolizes intellectuality, taste, delicacy and mystery. France because of its cultural accumulation is characterized as the most popular wine-drinking country (Dichter, 1964).

Brandy: It is an alcoholic beverage distilled from wine or a fermented fruit mash. Brandies are usually aged. Aging in wooden containers deepens its color to amber. Its age represents its product quality.

Brandy -an after dinner drink- is made in most of the wine producing countries. The finest of all brandies is the outstanding French Brandy Cognac. Metaxa is a sweetened brandy from Greek and Sherry is a brandy from Spain (Toussaint-Samat, 1992).

Gin: It is a flavored, distilled liquor made from purified spirits having the juniper berry as its principal flavoring ingredient. There are two types of gins and they are characterized as full-bodied and dry.

English and American gins are dry, which may be combined with other beverages. Whereas, Dutch gins are full-bodied and therefore, they are too distinctive in taste to combine well with other beverages. Gin is an inexpensive liquor of popular culture symbolizing strength (Toussaint-Samat, 1992).

Champagne: It is a white sparkling wine originated in Northeastern France. It is the liquor of a celebration. It symbolizes the extraordinary and joviality. The bubbles create an activity which portrays the will of celebration in the

beverage (Toussaint-Samat, 1992).

Rakı: Rakı is a traditional Turkish liquor which is consumed on the flow of dinner accompanied by various kinds of savoury-foods. It is a male centered alcoholic beverage associated with virility, strength, honesty, friendship and masculinity. It lives in the hands of the people and serves as an entertainer in a uniting manner.

f. SOFT DRINKS:

They do not have a psychologically firmly established place in the daily life of most adults. They remain as an occasional drink and impulse purchase. The most adult of soft drinks is the cola drinks, rootbeer, and gingerale at present. Orange is the best for children but other fruit flavors are the ones best liked by the children (Dichter, 1964).

Dichter explores the symbolic meanings of soft drinks as: lightness, modernity, sophistication, sociability, joy, activity glamour coolness and freshness.

These symbolic meanings together with the physical attributes of the products will indisputably dominate the creation of the package, to reflect the soul of the product adequately.

2. THE USE OF COLOR IN THE CREATION OF A PSYCHOLOGICAL IMPACT

The package of a food or beverage plays the role of a host to offer the product which can be considered as an act of communication. Thereby, purchasing and/or eating the product is a success of the communication and the appetite for it, which can be stimulated by the appeal of the product is partly the desire to communicate. In other words 'appetite' is the key for communication.

By definition, communication is an exchange of emotions and ideas between the sender and the receiver (Favre and November, 1979). Symbols, which have always been used in every form of self expression play an important role in communication. Words, shapes, colors, designs and forms are the basic materials with which the consumer associates and to which he/she attaches meanings and that, he uses for communication as symbols (Dichter, 1975).

Alan F. Harrison stresses the fact that, the symbolic meanings of foods and beverages merge with the stimulation of appetite (Harrison, 1986). Therefore, the symbols (that express the symbolic meanings of foods and drinks) are needed to motivate the desire to communicate (that is the stimulation of appetite).

Dichter defined appetite as, a want and hunger for what is seen whether needed or not. Taking in consideration the word seen, it can be easily claimed that our eyes play a major role in the area of stimulation of

appetite. This process can be enforced by using the visual elements on the packages. The visual elements can not share their dominancy with the text in the area of stimulation. As Charles Biando states: "Statistically a package has only two seconds to prove itself in the average market place - the same two seconds by which package design is measured" (Biando, 1993: 107).

This time corresponds to a spontaneous visual shock which stamps an impression on the retina with the speed of lightning, almost without one being aware of it. Therefore, it is necessary for a brand to make itself noticed even against our will (Favre and November, 1979:39).

The impression created by the visual shock is under the control of the right hemisphere of the consumer's brain. The reason is that, the right hemisphere thinks primarily in images rather than words and in an intuitive rather than logical manner. It responds wholistically (that is, to wholes rather than by analyzing details). It evaluates simultaneously rather than sequentially. It is the more emotional half of the brain and has special importance in dreaming and imagery (Tybout, 1989).

The impact created by the ideas and emotions that are reflected by visual elements can be held in short-term memory and even be passed into long-term memory without the need for rehearsal that applies to verbal material (Tybout, 1989). In this context, the saying that "a picture is worth a thousand words" in fact contains some truth.

The perception of a pictorial message is easier, and faster than those of an alphabetical message. It is perceived at a glance and has a first significance at the very moment it is seen (Favre and November, 1979).

The pictorial message is created by elements which are called plastic variables, including color, material, 2-D form and 3-D form. Out of these variables, color gives life to visual message, it animates it, accentuates it, and makes it perceptible and of easy identification. (Saint-Martin, 1990)

The psychologists speak of immediacy with reference to the human experience of color. "The reason is that the sensation of color is of a primitive order. Reaction of it, appreciation of it requires very little effort of intellect or imagination "(Birren, 1961:162).

Saint-Martin noted that, color can not be considered as a property itself. In order to prove its existence it must be reflected by an object. Thereby, each color can be recognized both in the imaginary and realistic medium of visualization, with the help of an object to be reflected by, and an environmental context to be reflected in.

Arnheim stated that: "a form is quite visible because its color differs from the color of its environment" (Arnheim, 1956: 22). Supporting Arnheim's statement, in all perceptual experiences, the common fact was that, it is impossible to see a color that is not juxtaposed with or surrounded by another color (Albers, 1963). If color A is surrounded by color B, and if the area occupied by color A is expanded, again color A would lose its effectiveness. As Saint-Martin indicates:

During a prolonged stare, a nuance will lose its saturation little by little, as a result of simultaneous contrasts or other interferences. This explains how, for example, the larger the dimension of a red area in a work is, the less there is of red in that work as perception is prolonged (Saint-Martin, 1990: 23).

Therefore, color by itself can not be evaluated objectively or subjectively because it is not able to act alone and it needs to be associated. This need of association can be clearly observed from the accompaniment of names to colors. Also early theorists have considered color names as red, green and maroon unconnected to objects therefore abstract, each of these words comes from the name of an object through in a language other than English (Sloane, 1989). As can be understood from the above statement color can not act alone even in the naming process for its own.

Finally, color, together with its associations is ready to create impressions by appealing to emotions, to the subconscious psychological factors and also to the senses.

Subconscious is a figurative way of designating the least clear or peripheral aspects of awareness. Mental life may be thought of resembling a series of concentric circles, the innermost and smallest circle representing that which is most vivid in awareness at all. This is a vague, dim penumbra known as the subconscious mind (Harriman, 1975: 816).

Subconscious mind is formed of unnoticed phases of present experiences, traces of former experiences and those directions to mental life which supply continuity and unity (Harriman, 1975).

Color acts on the subconsciousness and, leads to create sensations -action of senses- which are then transferred to the consciousness to create feelings. There of these feelings generate reactions which are expected to end up in purchasing behavior (Favre and November, 1979).

The above process may be exemplified by analyzing the effects of a specific

color like orange. If orange seems to be brighter than red, this is purely a sensory manifestation. If orange however, suggests a feeling of energy and joviality, we are speaking in terms of psychology.

Two spheres of the subconsciousness take an active part in the affective perception of colors. These are the collective subconsciousness and the individual subconsciousness. The former is detached from the personal area whereby the meaning and associations arising from the colors are the result of sedimentations accumulated by human experience through the years. The second one is quite individual and depend on the nature of the person and the experiences which he has consciously or unconsciously had with the colors concerned in the course of his life (Favre and November, 1979: 20).

Collective subconsciousness should be taken as a reference, to provide commercial communication which tries to produce a reaction or response on the part of the consumer to induce him or her to act, in other words to purchase. Because, all the consumers belonging to the same culture seem to react in a similar way when exposed to the same color. In this category, the psychological impact of each color is determined. Colors have objective and spontaneous impressions which can not be underestimated and have general acceptance. They evoke associations that create feelings and bring back memories (Favre and November, 1979).

Thereby, each color has a psychological impact entirely of its own as will be indicated below.

Red is accepted as an all purpose color (Neubauer, 1973). It focuses at a point behind the retina of the eye and pulls the image forward. Therefore,

it increases autonomic response (Danger, 1987).

In its general appearance, it is a brilliant, intense, opaque, dry and hard color which conveys a feeling of durability. It carries vivacity, virility, masculinity, dynamism, excitement, urgency, warmth and fertility. "Red is brutal, exalting or even unnerving imposing itself without discretion. It also gives an impression of severity and dignity as well as of benevolence and charm" (Favre and November, 1979: 22).

Red is a real warm color overrunning with ardent and vivacious life. However, it does not carry a dissipating character which wastes itself by radiating in all directions like yellow. It always displays a huge and irresistible power but it is always conscious of its goal. It attracts our glance, for we automatically look at it whether we want it or not. It is attractive because it is stimulating, aggressive, disturbing, defiant, active, passionate and competitive. It evokes mental associations like hot, fire, heat, blood and human (Birren, 1978).

Apart from their general characteristics, all the shades of red have their own psychological character.

A medium red incarnates, strength, activity, movement, joy, triumph and passionate desires. These are the shades used to indicate primitive strength, warmth and efficiency. They are also used to reveal the stimulating and supporting properties of a product (Favre and November, 1979).

Vermilion has the highest visibility of all the shades of red. It appeals to both men and women all around the world. It is associated with flame, power and happiness (Danger, 1987).

Scarlet is severe, traditional and rich; it recalls great dignity.

Carmen has a more sensual and loving character when compared to the category of medium red including vermilion.

Thereby, it is obvious that red becomes more serious, deeper and problematic the darker it is and conveys a happier and more imaginative mood.

Orange is the best of all colors for its visibility and attention attractiveness (Danger, 1987) Consequently it expresses radiation and communication even more than red. "It is the color of an action which is undertaken wholeheartedly and for its own sake" (Favre and November, 1979: 24)

Orange has a friendly, jovial, sociable, intrusive, gaudy, lively, energetic, forceful and blustering character (Neubauer, 1973). It has a dynamic, dramatic and overpowering emphasis (Danger, 1987).

It's general appearance is bright luminous and glowing and it is highly associated with autumn, winter and warmth (Danger, 1987).

Orange is a hard and dry color like red with a disregardable impulse (Danger, 1987).

Yellow is the most luminous, loudest and brightest color of all. Thereby it is young, vivacious and extrovert (Danger, 1987).

It carries psychological characteristics like being cheerful, expectant, optimistic, expansive, radiant, sunny, glaring, imperious, bilious, egocentric, vital and celestial (Birren, 1961).

It is associated with energy, novelty, sunlight, summer and autumn. It is a hard and warm color therefore, it is inviting to the consumer and always dominates soft colors. It does not have an impression of depth (Danger, 1987).

Greenish yellow reflects a sickly effect whereas golden yellow is active and reddish yellow pleases visually, warms the heart and confers the feelings of gaiety and satisfaction we experience seeing the golden harvest (Favre and November, 1979).

Green is the quietest color of all. It is far from expressing joy, sadness or passion, likewise it is an undemanding color. "Pure green has the same place in the society of colors as the middle-class in that of mankind: an immobile satisfied world which calculates its efforts and counts its money" (Favre and November, 1979: 21).

Green is the color of hope of wide appeal; cool, fresh and comforting in its beauty. It refers to balance and normality (Neubauer, 1973).

It is restful and kind to the eye but can not provide enough contrast and tends to retire; it can not be sharply focused. Green is considered to be a big color because of its frequency in nature and can dominate the eye without disturbing it (Danger, 1987).

In its general appearance green is clear and moist and associated with nature, water and coolness.

It is psychologically quieting, refreshing, peaceful, nascent, tranquil, consoling, comfortable, commonplace and tiresome (Birren, 1978).

Pastel and muted greens are subduing whereas dark greens are depressive. Green in general sense is a soft color which is neither inviting nor unfriendly. Yellowish green has strength and a sunny character while the bluish green is serious and pensive. Light green is more noticeable but dark green is stronger in the feeling of calmness (Danger, 1987).

Blue is a deep color which rests in a relaxed atmosphere. It expresses a certain maturity therefore it is mostly preferred by adults. Blue is linked with the inner spiritual life (Favre and November, 1979).

In its general appearance blue is transparent and wet which is associated with cold, water, ice, sky, sea, navy, steel, winter and summer. It stands for refinement and conservatism, sensitivity, cleanliness and quietness (Neubauer, 1973).

"Blue is certainly quiet, but not like green which gives more an impression of terrestrial repose and complacency. The deepness of blue is one of solemn celestial gravity where rational considerations are ignored" (Favre and November, 1979:24). Thereby, as blue gets darker, it draws us more towards infinity. Lighter blue is not striking and has an indifferent, emptier character that induces dreams. Because of its visual appearance, it conveys a feeling of freshness, purity, cleanness, softness, coolness and outdoors (Danger, 1987).

Psychological researches showed that, blue slows down the metabolism and relaxes the muscles (Russel, 1991). Blue which is dominantly a color of the male can make us feel calm, comfortable, secure, serene, depressed, melancholic, lonely, sober and contemplative (Birren, 1978). It has little impact when compared with the other colors because it focuses at a point in front of the retina of the eye. Consequently, it is a retiring and dignified

color which is difficult for the eye to focus therefore it does not lend itself to sharpness and detail (Danger, 1987).

Violet is the most mysterious color of all. Nevertheless, it is considerably weak in motivation and does not create any favorable impulse. In addition to that, the eye is pressed instantly to focus violet shades but, as an advantage, it is restful and modifies other colors (Danger, 1987).

Violet, in general appearance is deep, soft and atmospheric. It is strongly associated with coolness, mist, darkness, shadow, sadness, melancholy, dignity, royalty, excellence and funeral (Birren, 1978).

Violet is regal, exclusive, esthetic, conceited, esoteric, pompous, mournful and mystic in impression. It creates an enigmatic and dramatic mood (Danger, 1987).

When violet approaches lilac it becomes shallower and more magical than mystical, more sickly than serious. As violet gets paler, it loses its assertiveness. "It evokes memories of a forgotten childhood, its dreams and its world of fantasy" (Favre and November, 1979: 24).

Blue- Green mostly appeals to the young and to woman, and has more impact than blue with a higher fashion image. Its general appearance is soft, cool and fresh (Danger, 1987). It reminds us of the freshness of mountain lakes in summer.

Blue green consists of great strength and expression of a cold and inner fire (Favre and November, 1979). There of creates a mood of coolness, freshness and cleanliness.

It conveys associations like being tasteful, sensitive, fastidious, self

possessed, vain, egotistical, self centered and snobbish (Birren, 1978). It is a color able to flatter the human complexion (Danger, 1987).

Pink is shy and expresses a sweet, romantic softness (Favre and November, 1979). It is a harmonious, restful and relaxing color which is easy on the eyes there of, allows the image to filter through gently (Russel, 1991). It is strongly a feminine and affectionate color lacking of vitality consequently, which can be associated with effeminacy (Danger, 1987). It reflects psychological characteristics like sweetness, gentleness, tenderness and intimacy. Also, it is strongly associated with delicate beauty and taste like fashion, flowers and sweetness. It is a subtle and childlike color that implies cleanliness, purity, lightness, simplicity and the gentle aspects of nature spring countryside (Russel, 1991). In its general appearance, pink is warm, soft and pretty (Birren, 1978).

Luminous tones of pink are provocative and create strong impulse whereas the pale tones show their effect in a more sensitive manner.

Brown is the most realistic and natural color of all. Its effect is neither brutal nor vulgar but it embodies a healthy life and everyday work. It creates an impression of compactness and utility (Favre and November, 1979).

It is a soothing and restful 'country' color and is easily harmonized. The general appearance of brown is warm, hard and consistent. It is associated with autumn, mellowness, firelight, refinement, quality and earth. Brown is dependable, steady, reliable, clumsy, boring, stingy, obstinate and dour (Birren, 1978).

Brown is not a sufficient attention getter. The yellowish browns create an

intense mood and appeal to men whereas, lighter shades like tan are psychologically soft, warm and influential appealing more to women. As brown gets darker, it assumes more of the attributes of black (Danger, 1987).

Black is the least visible, the most dark and compact of all colors. There of, it has no impact independently (Danger,1987).

On one hand, it is associated with despair, death, funeral, night, claustrophobia in darkness, emptiness, the evocation of witches, covens and magic but on the other hand, it epitomizes sophistication, high fashion and overtones of sexuality (Russel, 1991). It creates an impression of distinction, mobility and elegance especially when it is shiny (Birren, 1978).

Black is a cool color conveying spatial-darkness in general appearance and creates a deep tone. It is a depressing, fatal color which is accused of being ominous (Birren, 1961).

"Its character is impenetrable. It is void without any possibilities, an eternal silence with no future, without even any hope of future" (Favre and November, 1979: 21). It conveys the least resonance of all the colors. Consequently, it expresses the rigid unity without any eccentricity of its own.

White is weak in visual interest because of its lack in chromaticity but it can be seen from a considerable distance.

In its general appearance white is a neutral color, which is neither warm nor cold. It is spatial-light associated with snow, coolness, cleanliness, simplicity, virginity and wedding (Danger, 1987). "It suggests purity, the

inaccessible and the inexplicable. By its absence of character, it creates an impression of emptiness and infinity" (Favre and November, 1979: 21).

White creates various moods like: innocent, hopeful, celestial, spiritual, sterile, glaring, unemotional and bleak (Birren, 1978). It is clean, frank and youthful (Birren, 1961)

White conveys a complete silence on our souls. However, this silence is not a deathly one but one, that is full of living possibilities (Favre and November, 1979).

Grey has no independent characteristic. It is not passive like black and also not full of possibilities like white. Grey is a soft and cool color by its general appearance. It puts over a refined and dignified image and creates a historical effect (Danger, 1987).

In some context, dark shades of grey may reveal sophistication and may be pleasing to the eye but, in some other context they may increase the evocation of fear, monotony and depression because, it is a conservative color which reduces emotional response and is noncommittal. In addition, dark grey may be accepted as the color of dirt. Pale grey conveys old age and approaching death as a disadvantage but security, peace and protection as an advantage depending on the context in which it is used (Favre and November, 1979).

Grey in general, reflects common sense, calmness, good taste and quality on one hand, but lack of energy, being tedious, passive, negative, colorless and vague on the other hand (Birren, 1978).

The psychological impacts created by the autonomous characteristics of colors are closely related with the stimulation of appetite. Appetite should

be stimulated by an element of orosensory (sight, smell, taste, touch) better than taste which would be perceived before the food or drink enters the mouth. Consequently, there are four choices left out of five senses, which are sound, smell, touch and sight. Thus, if we consider the importance of distinctiveness for foods and beverages, we can undoubtedly eliminate the sense of sound, for it is inadequate to inform us about each product distinctively. Although, the sense of smell and touch are also insufficient for a proper identification, they are influential enough on the stimulation process, to take in consideration. Therefore, we need our eyes, in other words our sense of vision in order to stimulate our appetite in a more reliable manner (Capaldi and Powley, 1990).

The importance of sight and smell for the stimulation of appetite can be demonstrated in the following way: Take a piece of apple, onion and potato (foods similar in tangible qualities). Close your eyes, plug your nose and take a bite out of each of them. Notice how the tastes for all three of them are remarkably similar. So if you are deprived of your senses of sight and smell, there are no important characteristics to distinguish among them which would be helpful for the stimulation of your appetite.

Appetite appeal can be created by the appropriate use of color in association with the symbolic meanings and the physical qualities of foods and beverages which are capable of creating spontaneous emotional participation, identification, and finally stimulation (Birren, 1961).

Apart from the symbolic meanings which are revealed in the first chapter, the physical qualities of foods and beverages also have a significant impact on hedonic judgements that involve, judgements of pleasantness and unpleasantness which are central in our perceptual responses to foods

and beverages. For example, suppose you have just lifted your spoon to your mouth to consume the first bite of maple-pecan-fudge-ripple ice cream and you can not detect the maple, which may be partly masked by the fudge sauce, there of your subsequent spoonfuls might be perceived as less sweet (Matlin, 1988). In this case, it can be easily seen that your sense of vision misled your sense of taste.

Color, which acts as the most important stimulus for our sense of vision can also serve as a representor for the senses of touch, smell and taste by reflecting the psychological characteristics that are created by the use of those senses (Birren, 1961).

A research conducted has confirmed the specific relationships between colors and taste acquired by the use of their similarities between their psychological characteristics as follows:

Acid - yellowish green to greenish yellow

Sweet - orange yellow to red

Sweetish - pink

Bitter - navy blue, brown, olive green, violet

Salted - grey with pale green or with pale blue (Favre and November, 1979).

The same research is conducted to indicate the connections between smell and color. In their general sense smells are categorized in two groups: Fragrances, which are generally associated with light, pure, and delicate colors and bad smells with dark and cloudy colors.

If categorized in a more specific way, smells are divided into four together with the colors with which they are associated:

Peppery, spicy - orange, red, brown

Slightly spicy - green, yellow ochre

Perfumed - violet, light lilac, pale yellow, pink

Fresh - Blue green, blue (Favre and November, 1979).

Another categorization is prepared to reflect the connections between the colors and the sense of touch: Colors tend to appear warm or cool, dry or wet, soft or hard when associated with the sense of touch. These reactions of human beings are necessarily built upon the association of warm, dry and hard things - the sun, fire, earth - with red, orange and yellow colors; and of cool, wet and soft things - water and sky - with blue, blue green and green colors (Birren, 1961).

In a more specific study which will be pointed out below, another categorization is prepared based upon the psychological associations of colors with tactile senses neglecting the property of warmth (Favre and November, 1979).

Solid and compact contents..... dark brown, reddish brown or ultramarine, sombre colors in general.

Liquid contents..... cold green or bluish green.

Thick, creamy liquids..... pink, cream.

Powdery aspect..... brown tending towards ochre, yellow or beige.

The irrefutable effects of color as a stimulant for appetite can be observed in the following anecdote from Johannes Itten -One of the greatest teachers of the art of color of modern times- who has devoted his many years to instruction into the visual, psychological and esthetic mysteries of color:

A businessman was entertaining a party at dinner. The arriving guests were greeted by delicious smell issuing from the kitchen, and all were eagerly anticipating the meal. As the happy company assembled about the table laden with good things, the most flooded the apartment with red light. The meat looked rare and appetizing enough, but the spinach turned black and the potatoes were bright red. Before the guests had recovered from their astonishment the red light changed to blue, the roast assumed an aspect of putrefaction, the potatoes looked moldy. All the diners lost their appetite at once; but when the yellow light turned on, transforming the claret into castor oil and the company into living cadavers, some of the more delicate ladies hastily rose and left the room. No one could think of eating, though all present knew it was only a change in the color of lighting (Itten, 1970: 83).

Not only the physical qualities of foods and beverages, which are reflected by the use of color stimulate the appetite, but also their symbolic meanings are adequate for the stimulation of appetite when reflected appropriately.

Apart from stimulating the appetite, the use of symbolic meanings and physical attributes may create curiosity, feeling of closeness, trust, qualification and impression of usefulness which are also significant stimuli for the purchase of the food stuff.

3. CATEGORIZATION OF PACKAGES DUE TO THEIR PSYCHOLOGICAL IMPACTS CREATED BY THE USE OF COLOR

When we talk about the act of purchasing we definitely talk about the three elements of the process and their interrelationship. These three elements are the consumer, the product (subjects that are mentioned all through the two chapters), and finally the package which acts as a mediator between them. Package as a physical and psychological barrier between the food stuff and the consumer should emphasize the physical and psychological attributes of the products in such a way that it turns the barrier into a bridge. In order to stimulate the appetite of the consumer it should reflect the psychological flavor of the product.

An example for the reflection of the psychological flavor of the product can be drawn from a research conducted by Ernest Dichter Associates International Ltd. It was found that coffee symbolizes a whole series of meanings such as warmth of one's intimacy, friendship, sociability and company. And it carries physical attributes like being hot and aromatic, with substance and body. If the package portrays just the brand name or a cup of coffee it does not come close to the soul of the product and does not create the adequate mood to pull the consumer in. Consequently, it recedes from the consumer (Dichter, 1975).

The psychological characteristics, physical attributes and the nationality, in other words the soul of a product can be reflected in the most immediate and reliable way by color. Color is the design element that creates the first

impression. To capture the consumer, the image of the product should be trustable, eye and emotion pleasing and finally, original.

If the product to be packaged (food or drink) is analyzed sensitively, it can clearly be observed how the concept of eye and emotion pleasantness and reliability are combined as will be revealed below.

We would all agree that, a food or beverage has always been expected to be a domestic product. This association between the foodstuff and home at first was intuitive but now, it is accepted as an accumulation of the human culture.

All through the history of man, there had always been someone, who cared for the other members, living in the same cave or in the same house. One of the signs of this care is, the preparation of the food or drink for the other members. Other members always trusted this care ruling the process of preparation of food. Consequently, they do not care at all about the appearance of the food as they are sure about the origin, ingredients and the process of its preparation. Therefore, all the members for example, would be able to eat with great delight a plate of spaghetti with all of its brownish sauce smashed around the plate, some of its strings hanging down loosely and staining the table cloth.

The image drawn in this example, when used on a package for spaghetti would absolutely end up in a failure. The reason is that the food or drink from that moment, is perceived to be in the state of a product which is far from the associations of home, like care and human touch and closer to the inhumanized, technological media.

Subsequently, the food as 'product' starts to compete with the food as

'home-made'. Being home-made is a lofty property for a food or beverage as a 'product' because it connotes the warmth and care of human touch. They have to be really appealing to the eye to stimulate our appetite in a trustable atmosphere and neutralize the negative associations brought in by technology.

As we can all realize, all the packages for food and drink products are trying to impose the concept of care by using the design elements to create eye and emotion pleasantness.

Color is the most active design element able to create an irresistible pleasure when used in an appropriate and creative way. It creates an impression which appears more promising because, "it can make products resemble very closely what they look like in real life" (Favre and November, 1979: 100).

If it is to be selected on the sole basis of the product nature, all packages of tomato preparations would be in shades of red, all milk cans white and tea would always be presented in dark brown tins. Although, for example, chocolate is easily recognized in a dark brown package, this color will never be adequate to emphasize the psychological characteristics like: pleasure, self-indulgence, abundance, reward, sweetness and impulse item.

Thereby, all the packages of a group although designed for different products, will create very similar impressions and will not be able to attract the attention of the consumers as they can not be distinguished from each other.

The consumers can only notice a small proportion of the impressions which are gained by the help of their senses. Consequently, as Favre and

November noted, a package must be clearly visible and excite the retina of the individual likewise, it must carry some novelty and originality in it (Favre and November, 1979).

Responsivity to novelty and originality is an important human characteristic. Platt points out that a beautiful pattern should contain unfamiliarity and surprise (Fiske and Maddi, 1961).

Thereby, imitations and similarities among several brands have disturbing and confusing effects into the consumer's psychological foundations of trust. The consumer never buys the difference of the product but the difference of the package in appearance (Dichter, 1975).

Since the buyer makes his choice by the help of the package, there should be affinity between them.

Another aspect that should be emphasized either by color or design is, the nationality of the product. Although, sometimes not too strongly, every product is associated by a country. The country with which the product associates does not always have to be the country from which the product originates but it has to be the country by which the product is demonstrated.

Therefore, the package should reflect the widespread characteristics of the country which are generally embedded in the mind of the consumers, that would be able to represent it without putting the consumer in a state of contradiction.

The use of the link between the food or beverage and its country is to create an impression of offering the food from its original (a relative concept) cultural setting, from a different point of view offering the best of a certain kind of food (Dichter, 1964).

But, as every food stuff does not have strong and widespread associations with a certain country, the emphasis of nationality is not of fatal importance.

To conclude in short, food and beverage packages should be designed to create different psychological impacts by the use or not-use of the psychological characteristics, the physical attributes and the nationality of the product reflected by the help of the design elements, especially the color. Consequently, these design elements should be used to convey appetite appeal (eye and emotion pleasing), reliability and originality. Depending on the criteria used to create a psychological impact, packages can be categorized in four groups namely: integrative packaging, interruptive packaging, stimulating packaging and restrictive packaging (Dichter, 1975).

3.1. INTEGRATIVE PACKAGING:

"Integrative packaging is achieved when package and product complement each other in order to present a single stimulus" (Dichter, 1975:27). This process of complementation can be achieved in two ways: the symbolic way and the physical way.

In the symbolic way of complementation the product which exists in the third dimension is reduced to two dimensional expression. During the reduction process, the aim is to display all the visual characteristics of the product by expressing it without changing its origin but with little embellishment. This embellishment consists of sometimes little changes in the shades of the colors to beautify the product, depictions of particular details in an effective way, exaggerations in expressing the size of the product and the appearance of the product after demonstration. But color

plays the major role dramatizing the product by stressing its intrinsic values and therefore, arouse the interest and desire of the consumer.

In the symbolic way of complementation the package must act as reliable as a window cut out, through which the real product can be seen. Consequently, the shades of the colors must be used in such a tricky way that it would be enough to beautify the product and not too much exaggerated to put the consumer in a state of hesitation.

In the physical way of complementation the product in the package can be seen by the use of window cutouts and transparency. Thereby, the design elements, especially the color is used to show off the real product by displaying it in an appealing way either by creating contrasts to activate the dynamism of the package and product unity or harmony to emphasize the softness or delicateness of the product. The unprocessed images of the product or the demonstrated images of the products may be shown to serve as a back up and to strengthen the real appearance of the product.

In this way of complementation the package serves only as a supporter which will help the product to be distinguished more easily. As the real product can be seen from the window cutout or by the use of transparency boldly no trick can be applied on the real appearance of the product. Therefore, window cutouts or transparency will not be equally effective

As a result, both the physical way of complementation and the symbolic way of complementation do not try to please the emotions but, they try to please the eye by emphasizing trust, qualification and usefulness by the help of the physical attributes but not the psychological and national characteristics.

The package designed for Looza pure fruit juices by Design Board Behaeghel & Partners is an example for the physical way of complementation which acts in the integrative packaging category (Fig. 1).

The transparent glass bottle displays the product honestly by showing the natural colors of them. In a situation like this, it is not of fatal importance whether the product in reality is artificially colored or not, but the important thing is, whether the colors that are perceived fit into the expectations for the natural color of the product or not. The texture used on the lower part of the bottle conveys a readily chilled impact which would help to stimulate the consumer's feeling of thirst.

Depending on the guaranteed effectiveness of the impression of purity provided by the use of transparency, the labels are designed to attract the attention of the young consumers who are selected as the target group. The dynamic use of colors and the paste up effect used for the creation of the images emphasizing the source of the product makes the Looza pure fruit juice, a symbol of freedom which would undoubtedly motivate the young consumers.

The white logo which is reflected on a red background is emphasized clearly enough for the package to be distinguished from a considerable distance.



LOOZA PURE FRUIT JUICES

have an integrative packaging achieved by a physical way of complementation (Fig. 1).

The torn out effect used as a background for the logo, the paste up style used on the illustrations and the arc form used as a reference for the placement of the information about the kind of each product, all serve to create a corporate image for Looza pure fruit juices.

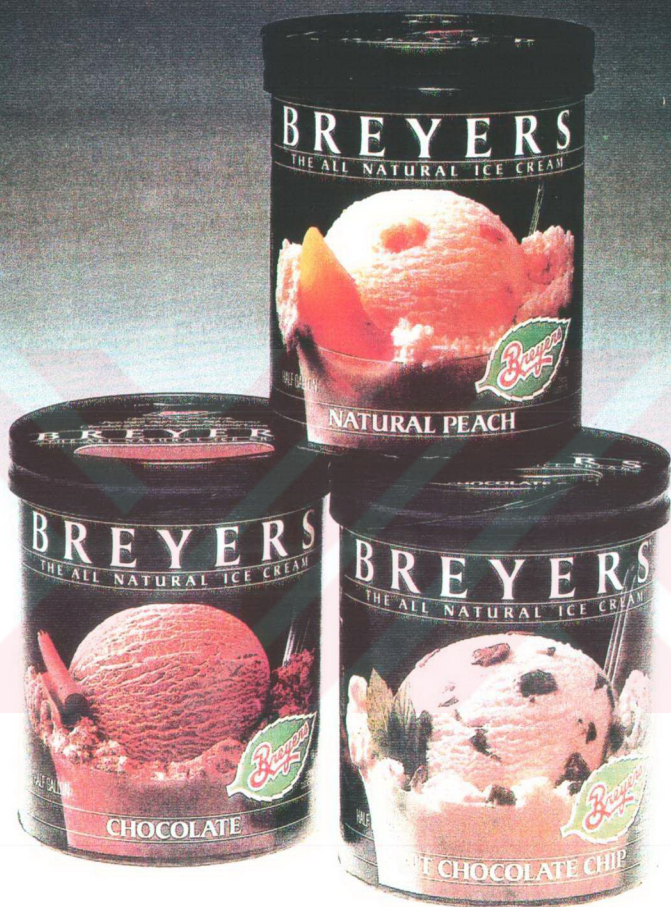
As can be observed from the design of three packages for three different kinds of juices, the psychological characteristics or the nationality of the product origins are not taken in consideration but, the design is completely dependent upon the physical attributes of the raw material of each product.

The ice cream packages for Breyers designed by Gerstman + Meyers Inc. are also included in the integrative packaging category which are examples for the symbolic way of complementation (Fig. 2).

Consequently, as it was mentioned above the three dimensional product is reduced to two dimensional expression by the use of photography as a tool. Subsequently, a really detailed, undeniable, appetizing image of the product which intends to make the consumer feel closer is presented in an undeniable, appetizing therefore inviting manner.

This effect is created by the help of the black background which reflects qualification and displays the product in a sophisticated atmosphere revealing the speciality of each product. The physical characteristics of each product is reflected especially by the delicate use of light and dark shades on a black background which creates a provocative and inducing appeal.

The image used on the packages conveys an attribute of being ready to eat but, in such an appealing way that it can not be rejected as reflected on the package.



BREYERS ICE CREAM packages have an integrative packaging achieved by a symbolic way of complementation (Fig. 2).

In this example the product is ice-cream with natural peach or with chocolate or with mint chocolate chip likewise, the portrayed image is really the ice-cream with natural peach or with chocolate or with mint chocolate chip but displayed in an undeniable, appetizing way reflecting quality and care. On these packages not the logo of the company and the information about for example being chocolate flavored, influences the distinctiveness of the package but the general appearance plays the major role in the distinction of the products.

3.2. INTERRUPTIVE PACKAGING:

"Interruptive packaging is present when product and package do not blend, each fits into a different unit of perception" (Dichter, 1975: 29). In this type the package acts like a barrier rather than a bridge to the product because the package and the product do not complement each other. The package acts independent of the physical attributes of the product.

Consequently, the design elements will not be suggestive of the product so there will be no reduction of the product in the third dimension into a two dimensional expression to be used on the package. Likewise the color of the product does not have to be indicated on its package. Therefore, a blue package can be used for a tomato juice as well as a shade of grey for a candy box in the policy of interruptive packaging.

Thus, from a different point of view with all of its disadvantages, interruptive packaging may sometimes be successful in drawing the attention of the consumer because of its unexpected and unusual approach. This unusualness may create curiosity in the consumer consciously or unconsciously as the product with a package like this will undoubtedly yell out on the shelf through the other packages of different brands designed

for the same kind of product.

As a conclusion, although an interruptive package is designed independent of the physical attributes of the product it may effect the consumer positively, if the attributes reflected on the package are able to convey agreeable associations with the product.

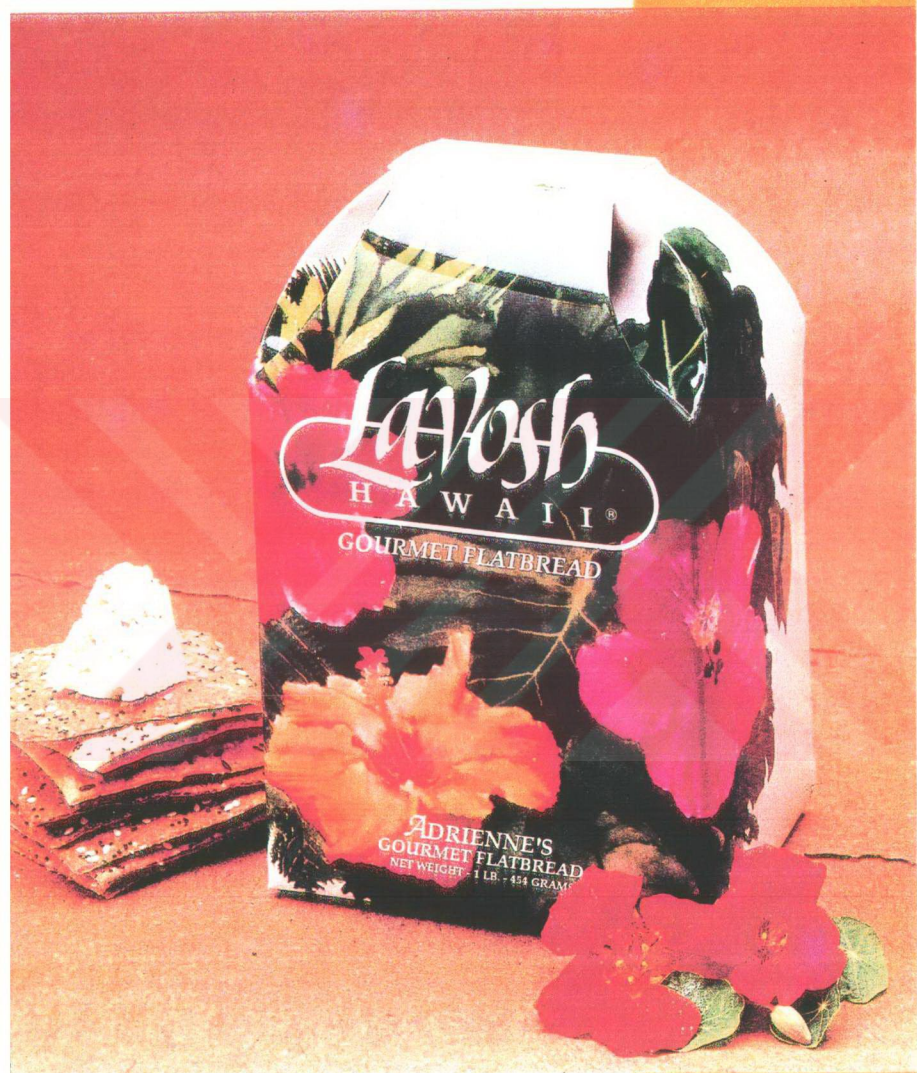
The package designed for Adrienne's Lavosh Hawaii Flatbread is a good fitting example for the interruptive packaging category (Fig. 3)

When the physical attributes of flatbread as the product, and the visual impact of its package is taken in consideration, it would be obvious to see that the package and the product repels each other willy-nilly.

Flatbread is a hard, crispy and salty food stuff with no effective amount of smell and visual richness (varieties in color and forms); but on the contrary, the package designed for it creates an impression of softness, sweetness, and fragrance, by the use of the tropical flowers. The bright colors of the flowers against green background that are totally surrounded by white, reflect joviality, asymmetry and dynamism whereas the rectangular shaped, brownish products reflect a monotonous harmony.

The logo which is placed on a colorful image surrounded by white background, reflects cleanliness by its color and subsequently care and sophistication by its style.

Another interruptive design element is, the form of the package which creates an impression of a beauty product which definitely conflicts with the nature of the real product - the flatbread.



ADRIENNE'S LAVOSH
HAWAII FLATBREAD has an
interruptive packaging (Fig. 3).

As a conclusion, the appealing package of the product in reality does not stand for the product. It is a barrier which conflicts in all the aspects of the physical attributes of the flatbread.

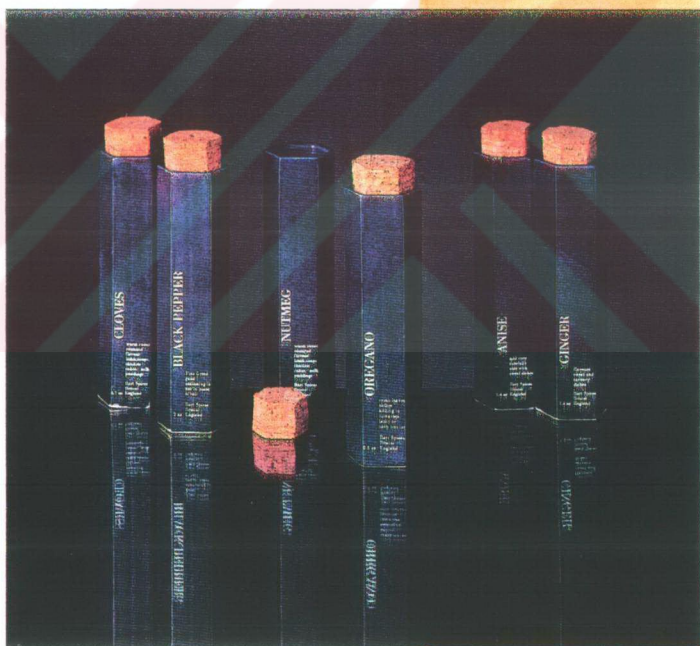
The ceramic containers designed for Bart Spices are also examples for interruptive packaging (Fig 4). When the spices are analyzed by the help of their physical attributes, the most distinctive property of each spice will undoubtedly be its smell. However, their colors, which are usually earthy colors and their textures, which are usually granulated or powdered can be used to differentiate the spices from each other.

In this example, although the package and product do not complement each other and although the package is a barrier to the product it brings some advantages when evaluated from a different point of view.

If we take a general look at the packages after revealing the physical attributes of the products it will be plain to see that the attributes of the products are not reflected on their packages.

The form of the package reflects an angular, hard and clear-cut image which is completely in contradiction with the product it contains. However, because of its material and color it creates a sophisticated, very elegant (usually associated with cosmetics) and contemporary image which are positive values for the effectiveness of the product. Also, the contemporary design created by the use of typography supports the image created by the form of the package.

In short, the overall combination is the presentation of a traditional and authentic product in a contemporary medium.



BART SPICES have an interruptive packaging (Fig.4).

3.3. STIMULATING PACKAGING

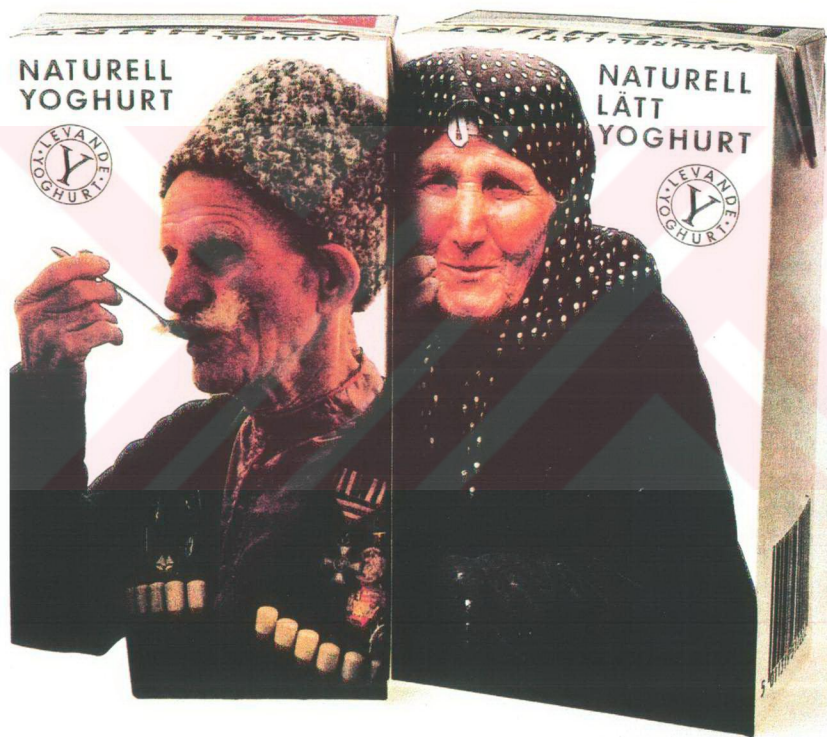
Stimulating packaging is achieved when the package does not reflect the physical attributes of the product but the psychological characteristics and the nationality of the product. This kind of packaging does not try to provide reliability but appetite appeal and originality (Dichter, 1975)

A stimulating package uses the design elements (2-D form, 3-D form, material, color) as suggestive variables depending on the associations they have to reveal. By this way, it tries to create the novel in other words the original. It arouses the imagination of the consumer, elicits associations and finally functions as a stimulus to provide participation. It is possible for the viewer to participate in the task of shaping and modeling the final visual image consciously or unconsciously which will effect him/her psychologically (Dichter, 1975).

This kind of packaging does not show the two dimensional expression which is a reduction of the three dimensional product. Instead, it tries to stimulate the appetite by appealing to both eye and emotions. Consequently, for appealing emotions it should create a mood by the use of design elements especially the color to reflect the symbolic meanings of products.

In short, stimulating packaging is interested more in imagination and emotions rather than absolutely in eye pleasing or informative visual aspects. This result shows us that integrative packaging is concerned more about the product whereas, the stimulating packaging cares more about the consumer.

The package design for Naturell Yoghurt by Tom Hedquist is an example for stimulating packaging. (Fig. 5)



NATURELL YOGHURT, winner of 1986 Outstanding Award has a stimulating packaging (Fig. 5).

It is easy to state that this package will surely stand out when displayed together with the packages of other brands (originality).

In the first sight, it will effect the consumer by its outstanding therefore, eye-catching visual impact. This is because of the strong dark photographs of vibrant elders reflected by a strong contrast created by the use of the white background. Whereas, the colors that are used on most of the other yogurt packages are the combinations of different shades of white, blue and green with no strong contrasts, all trying to emphasize the cleanliness and naturalness of the product which are the most commonly used associations created by the physical attributes of yogurt. Thus, these colors are used without the awareness of the use of contrast.

When we take a general look on the packages of yogurts we will immediately witness the belief "The whiter the package is, the purer and cleaner the product is". This belief constitutes the reason of the existence of white yogurt packages with a little blue and/or green added without disturbing the overall whiteness of the package. However, white being the lightest color, needs to be accompanied by a dark color like indigo blue or black to be perceived whiter therefore, cleaner and purer as mentioned previously.

In short, this dark spot on white background stimulates the eye of the consumer to perceive the photograph and associate it with the psychological characteristics of the product. In this context, the photograph of the vibrant elders which creates an impression of health and long life, is combined with again, health and long life; which are the psychological characteristics of yogurt. Thereby, the package appears to reflect that, the vibrant elders owe their longevity to the product.

An example for a stimulating package, designed for a high nutrient and low-fat milk is Vital 15. (Fig 6).

From a different point of view it has a property of being a diet product which is not indicated strongly in an interruptive manner, by showing figures like a slim woman drinking Vital 15 and a fat woman drinking plain milk for example, but it is presented in a delicate, appetizing and thereby, inviting manner. It imposes its property of being diet in an initiative manner giving opportunity to the consumer to participate with the package.

The most important visual element of the package is the condensed glass filled with milk. It is off -white in color and displayed on a white background intentionally to reflect the associations of milk, like mother love and security.

Milk is a liquid food requiring no chewing and offering no resistances which is reflected in the atmosphere of the package by the exposure of off-white on white not to create a contrast that will refer to a resistance and disturb the atmosphere of silence, security and lightness. Showing not the whole, but only a part of the glass reflects a slender image.

The yellow rose on the lower part of the package reflects psychological characteristics like being delicate and fine. It also creates, a high quality image which emphasizes care in the preparation of the product.

Finally, the red logo on white background conveys an impression of health and the blue text supports the nutritional information.



VITAL 15 High Nutrient and Low Fat Milk has a stimulating packaging (Fig. 5).

2.4. RESTRICTIVE PACKAGING

Restrictive packaging can be achieved by the use of the characteristics of the product, without showing an image of the real product on the package. This kind of package at first stimulates the imagination because of the use of associations but, spontaneously restricts it by the explicit use of design elements.

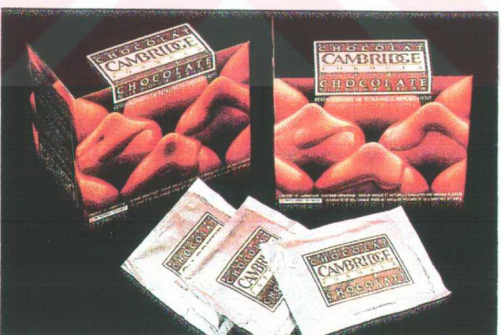
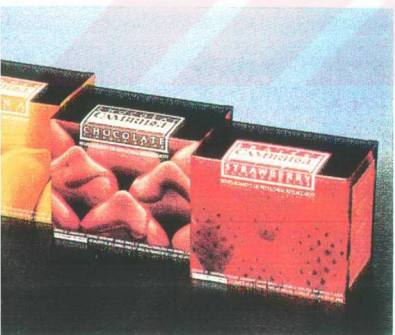
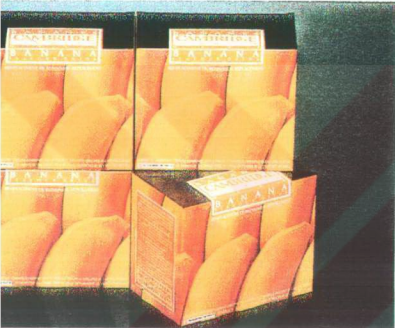
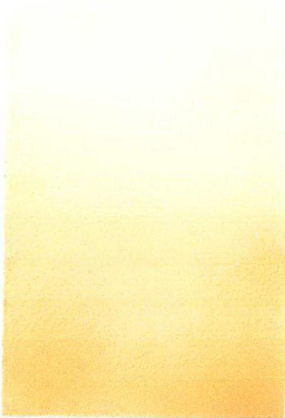
It presents a well defined, clear-cut image by its color, form, material and finally its design. There is nothing that the viewer can add or ignore. The various design elements are rigidly bound together to convey one definite impact. The package reflects a strong personality of its own but, not of the product it contains. Consequently, the consumer relates passively to the package (Dichter, 1975).

The associations which are used by a restrictive package are the symbolic meanings or the physical attributes of the product. To conclude in short, a restrictive package is not informative or effective on the basis of the product but on the basis of the associations related with the products.

Restrictive packaging can be exemplified by a package designed for variously flavored drinks under the name of Cambridge Formula. (Fig. 7)

Cambridge Formula does not exist as a liquid content but, as a powdered content in its package although it is included in the category of beverages which are always present in liquid form.

On these packages we can see large illustrations which are used to facilitate the recognition of the flavors of the products yet, these illustrations do not emphasize the content's flavor but, the content (product) itself. This emphasis is a result of the size and juxtaposition of the images and their



CAMBRIDGE FORMULA
Flavored Drinks have a restrictive
packaging (Fig. 7).

dominancy on the package, when compared with other elements of design, used on the package.

Also, the label on which the logo and the information about the flavor of the product are exposed, is restricted by using the shades of the same color with the illustrations. The black background used on the top and bottom of the boxes increase the quality of the product by creating a contrast which emphasizes the courage of the product.

As a conclusion, by the cooperation of all the design elements the attention of the consumer is drawn towards a really appetite appealing image which will prevent the consumer from asking him/herself "to which kind of product, these appetizing images belong to".

Thereby, it (appetite appeal) leaves the consumer with only an idea of consuming the product which is the targeted result.

4. IMPULSIVE EFFECTS

The packaging types that are determined according to their psychological impacts should act like impulse items and direct the consumers towards purchasing behavior. In other words the package should create an impulsive impact that would lead the consumer on the way to impulse buying.

After the impulsive impact is created , it is either stressed more strongly; or supported by originality and/or by reliability to end up in impulse buying.

As a conclusion, the whole process is called the impulsive effect of the package achieved by the help of the design elements that serve as mediators.

4.1. THE ESSENCE OF IMPULSIVE IMPACT

Benjamin Wolman states that an impulse is not consciously planned, but arises immediately when confronted with a certain stimulus (Wolman, 1973). Respectively, impulsive impact can be created by displaying the product as an impulse item, provoking the consumer by such a presentation of appetite appeal that would nearly be impossible to resist.

Simply, an impulse item is an object which is able to create impulsive impact where, all impulsive impacts are the result, and not the cause, of attractiveness . Likewise, all attractiveness is the result and not the cause,

of desire (Ferguson, 1992).

Desire spontaneously moves outward. An image of the self is projected into the world and renders some aspects of it attractive; all possess in themselves the original of that beauty which they look for externally. It endows the world of objects with their psychological tone or tension, it makes them desirable. We then seek, in consuming such objects, to incorporate an idealized self, to make the self more real, and to end the inner despair of not having a self (Ferguson, 1992: 28).

However, we are not usually conscious of our desires, until some stimulus like the package of the product, facilitates recall or activities the desire. We may actually desire something, that we do not consciously believe we desire. Likewise, we may desire something we do not need (O'Shaughnessy, 1987).

All those contradictions are dependent upon man's nature, who is a wanting animal. The human being rarely reaches a state of complete satisfaction except for a short time. When one desire is satisfied, another pops up to take its place. This going creates the flow of the life stream of a human being (Maslow, 1987).

Relying on this characteristic of man, continuously new products are being produced, to be endowed by psychological values and become desirable objects-impulse items. Thus, the variation of products is actually limited and, as mentioned above symbolically infinite.

The reason why the products are actually limited is that, they are being

produced within the boundaries of the limited kinds of food and drink stuffs. Therefore, the new products are not actually new, but they are only new phases of the pre-existing stuffs or combinations of various and again, pre-existing stuffs.

To be obvious, after a rational evaluation, consumers do know, that the new products are actually combinations or different presentations of the same stuffs. Nevertheless, they perceive them as a whole with different symbolic values and therefore, as new products after an evaluation, dominating at the moment of the creation of an impulsive impact. Therefore, a product by the help of its package becomes an impulse item emotionally and not rationally (Ferguson, 1992).

Why we talked about novelty apart from the satisfaction process is that new products are usually thought to be more exciting than old ones. "Novelty can be associated with glamour in the sensibility of the consumer, it makes sense to keep up with changing fashions" (1992: 36). So that, even if the symbolic value or the appetite appeal of the product can not be predicted from its package, its newness can be relished.

An obviously opposed strategy is to create impulsive impact by packages which look genuinely old and which can be associated with old days and childhood memories (nostalgic reflections). Whereas, underlying every want is the desire of and for the self thereby, there is a wish to recover the vanished sensuousness of childhood (Ferguson, 1992).

As mentioned above there are many criteria for a product to be presented as an impulse item and to create impulsive impact. But, nakedly not all of the foods and drinks are impulse items. By a generalization, the two groups can be differentiated in the sense of being ready-to-consume or

not.

Mostly, ready-to-consume products like ice cream, chocolate, yogurt, soda, crackers, bread, candies, fruits, jams, etc. are accepted as impulse items. Being ready to consume facilitates the occurrence of an impulse because, impulse -a fast experience- occurs suddenly and spontaneously by the help of a stimulus- the appetite-appeal. It is created on the emotional basis.

In this context, the formation of an impulse does not accept a plan or procedure requiring rationality which can be possessed by a slower experience (Rook, 1987). In other words, at the same moment the consumer is confronted with the package, he/she must be stimulated by the appetite-appeal or the mood to create an impulsive impact.

The impulsive impact of food really plays a more important role than its nutritional value during purchasing, although, much food is advertised and sold on the basis of its nutritional value. Yet, Dichter claims that, "if this was the only reason almost all of us would eat Metrecal, a scientifically prepared type of food, easily digestible and devised to maintain appropriate weight" (Dichter, 1964: 10).

It is obvious that we consume foods and drinks for many other reasons other than nourishment. We eat three times a day to be happy, not our stomachs to be happy. Because, if we eat the kind of food we like we feel relieved, a tension has gone and as a result we are satisfied. Satisfaction comes to the whole individual, not just to a part of him/her.

In this context, the item should satisfy the individual both physiologically and psychologically (Maslow, 1987). In other words, the package should

create its impulsive impact, both on the basis of the physical attributes and the symbolic meanings of the product it contains.

The aim is, purely to stimulate the appetite where appetite is a hunger, a want for what is seen whether needed or not. Appetite can not be aroused by a simple stimulus. The state of physical health and the state of mental health (the emotions, the perceptions and the imagination) affects and changes appetite.

As Dichter points out, appetite flourishes in an atmosphere of love warmth, trust and security. Therefore, the package of a food should act like a loving mother and must neither demand nor insist but, rather gently offer its wares. This act intends to be displayed by the design elements especially by color the mood creator.

Thereof, it is appropriate to take in consideration that: "Appetite is influenced by the appearance of the food, mainly by the reflection in the color and form of the food of its inner life" (1964: 18).

The influence of impulsive impact on appetite mentioned above can be exemplified like this:

When a baby likes an object very much, he puts it into his mouth. He tries to eat it up. The child feels especially attracted to things which offer pleasures of what adults might call an artistic nature; the brilliant object, a beautiful color, shining material, an interesting shape - all qualities which are used in art to attract our attention and please us (1964: 11).

The revealed example also points out that impulsive impact can be created

without the use of the physical attributes and the symbolic meanings of foods and drinks because, it is obvious that a baby can not be aware of the physical attributes and the symbolic meanings of an item. He wants to eat it up as a result of the impulsive impact created on him but, the reason why he wants to eat the product up may not be only because it stimulates his appetite thus, may also be because he wants the product, and he does not know any other way to possess it.

This explanation will be helpful for us to understand why, for certain kind of products only an eye-pleasing and decorative approach can be used instead of an approach stimulating the appetite to create impulsive impact.

The products, for which the eye pleasing, decorative approach -apart from appetite appealing- may be used to create impulsive impact are, the ones that are consumed directly from their packages. The reason for such a facility is that, other packages are thrown away in a shorter time interval. Thereby, they should act nearly as pleasing as another item residing in its territory (Henry, 1986)

This approach can be observed in the following example.

Varda offers its chocolates in a dark grey dominating rectangular box (Fig. 8). The stylized geometric illustration of "V" for Varda which is in black when placed on the dark grey background, creates a sophisticated, elegant and distinctive appeal. This represents a good quality and high fashion. Also, these dark colors refer to a solid and compact content, which is nearly the only characteristic matching the product. The colors does not even emphasize the taste, namely the sweetness of the product. The placement of the white, condensed typographic element on the lower



A package designed for
VARDA chocolates (Fig.8).

part of the box is the reflection of a refinement without trying to show off itself.

The hegemony of coolness possessed by the colors white, gray and black is tickled a little for warmth by the use of the pale orange on the other typographic element: "chocolates".

As a conclusion, the chocolate box created its impulsive impact by a sophisticated elegant and distinctive appeal which is an eye pleasing pure decoration. This design does not reflect any of the symbolic meanings or the physical attributes of the product (except solidity). But, as the chocolates are generally eaten out of the box, this package can potentially compete with almost any other luxury product acting within the same place in which it is being consumed.

However, the package designed for Piyale Cake Mix obviously has not tried to create an elegant, refined and high fashion image to possess impulsive impact (Fig. 9). Because, such an attempt would not bring any advantage for a product like this which is used by a housewife in the privacy of her kitchen and the pack is thrown away.

Therefore, the package is designed by the use of the criteria which would be helpful to please the consumer at the very moment of purchasing by the help of the physical attributes and symbolic meanings of cake to possess impulsive impact. As the consumer would surely be aware of the condition in which she will use the product, a pure decorative appeal would not be a satisfactory reason for purchasing a package which will be thrown away without gratifying some hedonic expectations.

In the above example, the package of Piyale Cake Mix used the photograph



A package designed for PİVALE cake mixes (Fig.9).

of a cake which is the image of the product after process. The photograph comes close to the consumer making her feel every little detail of the cake like its softness, its texture, its volume etc. Totally the package stimulates and creates warm atmosphere reflecting love, respect, affection: feeling of care. The image also emphasizes the height of the cake which is a very important characteristic associated with taste to stimulate the appetite.

When the package is examined carefully the image of an egg and cake mix which is the real product can be realized. Whereas, in the creation of an impulsive impact no examination can take place. The designer did not use only the photograph of cake mix which is the real product because the cake mix would not create an appetite appeal as it is something which can not be consumed before being processed.

In this context, the cake mix which is identical in appearance with flour will not be able to create a unique association that would refer to cake. Thus, create various possible associations with products containing flour as the major ingredient, namely: referring to bread, cookies, spaghetti, biscuits etc.

Thereby, the products which are not ready-to-consume in other words, which are not impulse items, can be imposed as impulse items, using their packages to display them, either after they are processed or in coordination with other impulse items with which they are being used.

Eventually, all the products can be displayed to create impulsive impact by various methods applied on their packages, no matter if they are impulse items or not.

4.2. THE VISUAL ELEMENTS THAT CREATE IMPULSIVE IMPACT AND MOTIVATE IMPULSE BUYING IN COORDINATION WITH THE USE OF COLOR

The use of visual elements to apply the methods that are revealed previously, on the packages and, to support the created impulsive impacts by reflecting originality and reliability are the only ways to motivate impulse buying.

Much human activity is driven by impulses that are stimulated biochemically and psychologically. One authoritative and comprehensive definition of a psychological impulse describes it as: "a strong, sometimes irresistible urge; a sudden inclination to act without deliberation" (Goldenson, 1984: 37). Also, Freud states that impulses are difficult to resist, for they often involve anticipated pleasurable experiences (Freud, 1920/1949).

To achieve that kind of extraordinary, irresistible and urgent motivations, impulsive impact which is created by appetite appeal, decorative presentations, novelty and nostalgia may not be sufficiently effective.

Respectively, an extra stimulant is needed which will be enough to persuade the consumer emotionally, as a back up for the created impulsive impact to motivate the purchasing behavior. The process of emotional persuasion is necessary for keeping the consumer away from a state of hesitation at the during an impulse buying.

In this context, the onset of a psychological impulse occurs suddenly and spontaneously. "Once triggered an impulse encourages immediate action, and the urge may be powerful and persistent. Impulses sometimes prove

irresistible" (Rook, 1987: 189). Impulse buying is a reactive behavior and often involves an immediate action response to a stimulus which is generally the package of the product (Kroeber-Riel, 1980).

It is a distinctive type of purchasing that differs completely from the contemplative consumer choices. Although, it is also defined simply as, an unplanned purchase, it is partially but, not totally an unplanned purchase. Since, the product item may be on the planning list of the consumer but, the actual brand purchase can be made on impulse.

Impulse buying flourishes when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately. It is relatively extraordinary and exciting when compared with ordinary and tranquil contemplative buying (Weinberg and Gottwald, 1982).

Thereof, impulse buying is more spontaneous than cautious. The variety and high levels of excitement that are attributed to impulse buying, distinguish it from more calm and rational consumer decision making. It can easily disrupt the consumer's behavior stream, while a contemplative purchase is more likely to be a part of his/ her regular routine. Impulse buying is more emotional than rational. Additionally, there is absence of forethought in impulse buying. Eventually, it makes the consumer feel out of control (Rook, 1987).

Impulse buying is mostly triggered by a visual stimulation which makes the consumer feel compelled to a certain product. It creates tingling sensations, warm feelings, hot flashes and a surge of energy (Assael, 1985).

In this context, the package of the product in the state of a visual stimulus should be mouth-watering, should suck the consumer in, stand out from

its neighbors, stop the walk of the consumer, strike his/her head, give him/her goosebumps. It should hypnotize or mesmerize the consumer, stare at him, follow him and pull him back. It should make the consumer feel self-indulgent as though giving themselves a special treat or reward (Rook, 1987).

In the impulse buying level, either a strengthened appetite appeal or originality or sometimes reliability undertakes the job to turn the impact into effect without letting the consumer get into a rational decision making process (Rook, 1987).

Although very short, there is a time interval between the occurrence of an impulsive impact and impulse buying. And, this interval is used to make some emotional judgements on whether the product intends to satisfy palatal desires for example, or whether it is nutritionally a reliable item or, if it is that much different from the rest to be purchased etc.

Shortly, a pleasurable and/or original and/or reliable package will put the consumer in a situation of falling in love with the product, which is proven by an impulse buying. And, these features are created by the appropriate use of color.

As mentioned before, color acts on the subconscious therefore , it is not judged rationally requiring a long time interval. Consequently, color is again a determining factor in the process of emotional persuasion, as it is, in the creation of an impulsive impact. Since, color can not act alone (chapter 2) its use will be revealed in coordination with the design elements, respectively: 3-D form, material, 2-D form.

4.2.1. Color and 3-D Form

Color is a visual presentation tool. A three dimensional form can not be perceived by visual means without the escort of color. Even a transparent (colorless) object can not be perceived if it is not placed on a colored background (Swirnoff, 1988).

Thus, a three dimensional form is more real and therefore, closer to a human being. Since, he considers himself as a privileged object within a world of objects (Shields, 1992). They both can be perceived by visual and tactile senses. It should be emphasized that touch is an important human desire and can be exemplified by the fact that most museums have put up signs: Please Do Not Touch.

That is the most important reason why the package of a product is more closer and more effective than other promotional tools during an impulse buying. Although, in the process of impulse buying the package is not handled and examined, but just grasped, the existence of such a possibility creates a relieving prejudice in the consumer.

The consumer feels himself close to the package thereby, to the product because, they both can be characterized by their physicality, they both exist in real space, they are both tactile and are responsive to variations in light and point of view (Block and Leisure, 1987).

A package is made up of planes on which the consumer moves visually along their surface.

If the planes are longer than they are wide the movement is primarily along the length of the planes. If they are less

directional in shape we are more inclined to move about their surfaces randomly, coming to rest here and there and than jumping to another surface. Horizontal planes are more likely to function as pathways. They support our movement across their surfaces. When confronted with a plane placed at an angle to the ground, the eye is more inclined to slip off its surface. Vertical planes function most strongly as barriers, stopping our movement through and forcing us to go around (Block and Leisure, 1987: 47-48).

In addition to their orientation in space, planes also determine the effects that an object would create, by the movement which takes place from the beginning to the ending, in other words meeting point of the planes to form a 3-D object. These meeting points are called the edges of an object. Basically, edges can be divided into two: the angular edges and the rounded edges. Thus, rounded edges are sometimes too rounded that they are physically lost (Block and Leisure, 1987).

An object with angular edges is perceived as sharp, substantial, hard, dry and assertive whereas; an object with rounded edges is perceived as soft, flowing, vague, wet and nonassertive (Birren, 1961).

As mentioned in the second chapter, sensations which are experienced by the individual, correspond to the psychological characteristics of each color. Similarly forms can evoke sensations and produce feelings. Thereof, forms can also reflect their own psychological characteristics.

In this context, when the set of psychological characteristics of form, is combined with the set of psychological characteristics of color; the intersection set will show us, which form corresponds with which color.

According to Faber Birren, red suggests the cube. It is hot, dry and opaque in quality. "It holds strong attraction and appears solid and substantial. Because it is sharply focused by the eye, it lends itself to structural planes and sharp edges" (Birren, 1961: 170).

Orange suggests the rectangular prism. "It is less earthly than red and more tinged with incandescence. Optically it produces a sharp image, is clearly focused by the eye and lends itself to fine angles and details" (1961: 171).

Yellow, which radiates outwards in all directions best corresponds to triangle which also has eccentric movements. But when compared with red and orange it is relatively celestial and it lacks substance and weight (Favre and November, 1979).

Green, which is a cool, fresh and soft color, corresponds to the form of the icosahedron. It does not reflect much angularity as it is not sharply focused by the eye (Birren, 1961).

Blue creates an impression of disappearing from our sight in a concentric movement, which would best correspond to the sphere. It is cold, wet transparent and celestial and, creates a blurred image on the retina. Thereby from a certain distance they are never sharp to the eye (1961).

Purple which is a soft, flowing and hardly focused color, best corresponds to the oval but unlike blue it clings more closely to the earth (1961)

Finally, white corresponds to horizontally oriented forms and black corresponds to vertically oriented forms.

Now, it is more easy to say that, there are many colors whose character is underlined by many forms, and dulled by others (Gestner, 1986). Thereby, in the creation of a package, it is not always necessary to use the colors and forms that correspond with each other. Nevertheless, it is necessary to be aware of the psychological characteristics, that colors and forms carry, and to use them appropriately in reference with the image, that is wanted to be created for the product.

Although, corresponding forms and colors are used to strengthen the emphasis of a character carried by themselves; sometimes uncorresponding forms and colors are used, either to emphasize the individualistic characteristics carried both by the form and color, or to change the emphasis with the help of form which is created by the use of color or vice versa.

The use of these general and also the exceptional characteristics of forms and colors and their coordinations with each other will be revealed in the following examples.

The form of the package designed for LINERA cream cheese, has a horizontally dominated rectangular plane, which has a really narrow width and comparatively a longer length, that helps to portray a slim appearance indicating the effect of this low-calorie food item (Fig. 10).

The package is actually under the hegemony of white color, which forces us again (like its form) to move horizontally on its elongated surface. Although, its predominating surface is a rectangle the package as a whole is not in the form of a rectangular prism. It starts in a bigger rectangle and ends in a smaller one.

Since it is narrowed down to its bottom, it does not meet the ground

plane with a sense of great mass and touches down with delicacy. It is obvious to see that the form and color of the package are combined together to emphasize repeatedly the most important feature of the product which is its being a low-calorie food item.

The edges of the form is rounded actually and softened visually by the use of white color, to reflect the delicate, sensuous, special and self-indulgent psychological characteristics carried by the cream cheese.

The dominating white color also indicates the lightness of the product. Totally the package tries to create an impulsive effect by the indication of its lightness.

The tomato package designed for CAMPBELL'S company also has a lengthwise oriented rectangular form with rounded edges to persuade the eyes of the consumers to move horizontally on the package to show the appetizing appeal of the tomatoes (Fig. 11).

On the dominating surface of the package there are spherical juttings in which the tomatoes are placed. This unexpected irregularity on the surface of the package which is supported by red -the color of the tomatoes- stops the eyes of the consumers for the tomatoes to create an impulsive effect by reflecting their appetizing appeals.

The juttings, apart from emphasizing the roundness of the tomatoes one more tome indicates that: these tomatoes are not of a scale to be regarded as ingredients thus, they are of a quality to be accepted as a dish in themselves.



A package designed for LINERA low calorie, cream cheese (Fig. 10).



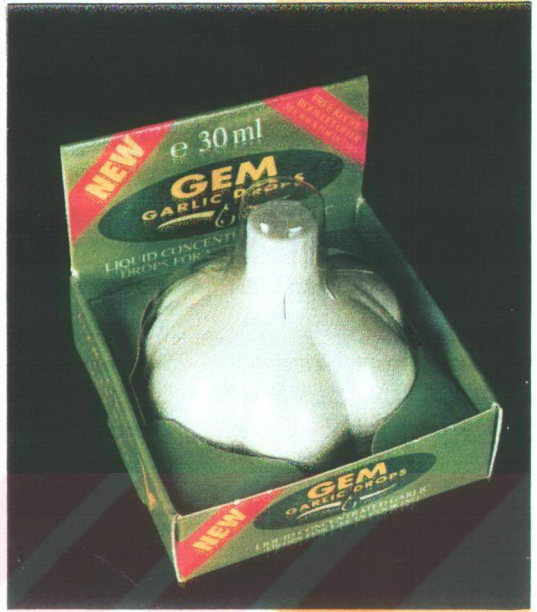
A package designed for CAMPBELL'S fresh tomatoes (Fig.11).

GEM the liquid concentrated garlic drops in fact has two packages (Fig. 12). The inner one which is the real package of the product, is in the form of an authentic garlic that is similar in size and also color to the origin of the product. This attempt is to motivate the consumer you feel closer to the product. Although the package is very small in size it brings an advantage for the product. Since, many researches have shown that the psychological power and condensation of a concentrated product is increased, as the package of it gets smaller.

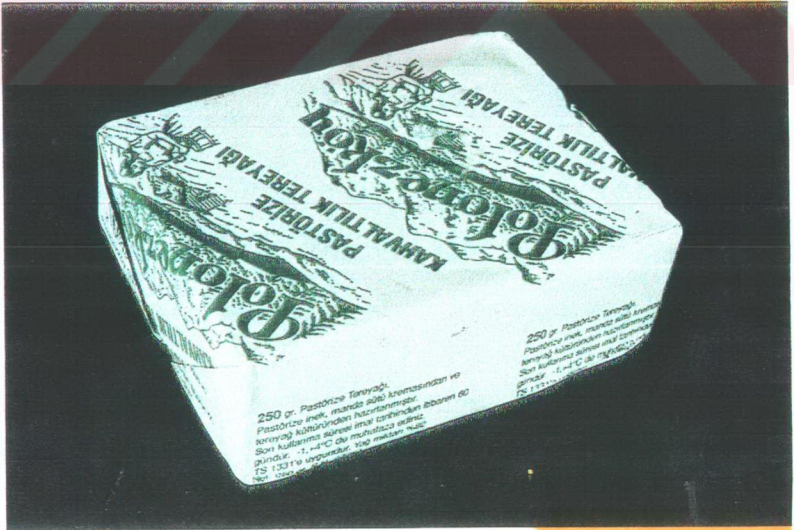
The outer package is dominantly green which refers to the naturalness of the product. Additionally this color increases the visibility of the product. The aim of this outer package is to save the inner package visually from an information pollution because the inner package will not be thrown away. It has to accompany the product until it is totally consumed. Thereby it has to be visually appealing or in fact in harmony with the nature of the kitchen. Consequently, the outer package is not a distracter but a displayer in the form of a square prism with sharp edges contrasting and therefore, displaying the rounded and natural form of the inner package.

POLONEZKÖY butter is one of the many types of butter packaged in a rectangular form (Fig. 13). But in food package research conducted for the Paraffined Carton Research Council it was found that butter is strongly associated with richness and roundness (Dichter, 1964).

Although, the white color used on the package, takes the eyes of the consumer from the edges to the surface of the product as an advantage; it conflicts with the richness of the product as a disadvantage. The green spots used on the white background are not to construct the effect of naturalness which is deconstructed by the angular form of the package.



A package designed for GEM liquid concentrated garlic drops (Fig. 12).



A package designed for POLONEZKÖY butter (Fig. 13).

The package designed for SPERLARI candies is not dependent upon a basic form like, cube or pyramid (Fig. 14). The planes of the form move in various directions. Therefore, it would have forced the eye to move all around and not to concentrate on the package, if the red color had not been used. Thus the red color in contrast to the shape of the product stops the eye by displaying a huge and irresistible power and dynamism.

Additionally, it reflects joy and happiness which are also associated with the symbolic meanings of candies. The two white spheres, acting as eyes which are used to tie up the package animates the product by displaying it in a joyful and playful manner. Thereby, it easily creates an impulsive effect on the young consumers.

WALDBAUM'S flavored puddings have a cylinder oriented form (Fig. 15). However, it does not meet the ground plane massively, in contrast it touches down softly like the product it contains. Since, the form gets smaller, as it gets closer to the base of the package. This shape represents the form of the cups, mothers use to serve the puddings in.

Pastel shades and orange tinted off-white color dominating on the package reflects sweet, pretty, soft and feminine attributes on the product; that are the expected associations of the consumers.

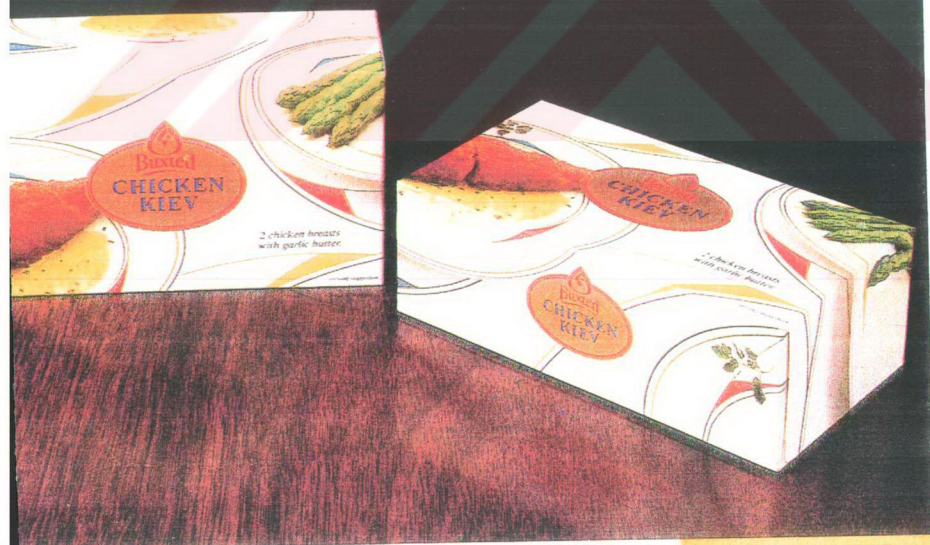
The package designed for CHICKEN KIEV frozen chicken breasts, is in the form of a rectangular prism (Fig. 16). This angularly shaped form with its sharp edges supports the property of the product to be frozen. The white color on the background also supports this property. By the coordination of form and color the package refers to a freezer case. Additionally, white color supports the lightness and the eternal freshness of chicken.



A package designed for SPERLARI candies (Fig. 14).



Packages designed for WALDBAUM'S flavored puddings (Fig.15).



A package designed for CHICKEN KIEV frozen chicken breasts (Fig.16).

4.2.2. Material and Color

Nothing would exist in the world of objects without the existence of material. Like the three-dimensional form material can be perceived by the use of both visual and tactile senses.

Rationally, material is also three-dimensional thus, psychologically it is associated with two dimensions. It is employed as surfaces in the making of the three dimensional forms.

Materials are defined in six basic categories, namely: textured, reflective, transparent, translucent, opaque and matte.

"Texture can enrich a surface or disguise material, break up light, create patterns of highlight or shadow or make surface tactilely inviting or repulsive. Texture can be actual or can be created illusionistically by means of color" (Block and Leisure, 1987: 97). In other words, texture can be used on the materials to reflect the soul of the product or to create an outstanding appeal.

A highly reflective surface -like foil, foil laminate, metallized material, plastic film- can make a package very reactive to its environment (Sonsinor, 1990) It will not only reflect its surroundings but its perceived surface will be sensitive to light and will change in response to movements of the consumer or of other elements in its environment (Block and Leisure, 1987).

Transparent and translucent materials are also highly responsive to their surroundings. They can be glass or plastic based. Transparency gains significance, where clarity is a distinct advantage when it is desirable to

see the contents. Additionally the sparkle of transparent materials can enhance the visual appeal of a product (Mosberg, 1989).

Translucent materials create mystical and more enticing atmosphere on a package. Since, they almost but not totally hide the product; likewise, they almost but not totally show the product they contain. Thereby, they stimulate the curiosity of the consumer to see the product.

Opaque materials do not act in harmony with their environments. They reflect their own statements. Thereof, they are relatively noticeable. They create a psychological mass especially when used by the accompaniment of transparency or translucency.

Matte surfaces in general, clarify the volume of the package. "It diminishes the influence of surface as a distraction to the overall qualities of form. A matte finish will unify the surface giving a greater feeling of solidity and mass" (Block and Leisure, 1989: 99).

On the contrary a polished surface will show every little dent, imperfection or wave on the surface. Therefore, it distracts the attention of the consumer.

Out of all these materials, the artificial ones have lost their prestige value to a large extent, and reverted to an almost contrary meaning. They represent a lower social level reducing at least psychologically the value of the product they display. Especially when applied on food and beverage packages, artificial materials connote the hegemony of technology over humanity (Dichter, 1975)

The psychological characteristics of materials can be underlined by many colors and dulled by others.

Textured materials are generally related with powdery and grainy products and therefore, correspond to the shades of brown tending towards ochre, yellow and beige. They are strongly associated by the naturalness of the product (Favre and November, 1979, Birren, 1961).

Reflective materials are strongly associated with liquid contents. Since, they both can easily fit the environment in which they are placed. Also, they are both cold materials. Thereby, they correspond to the shades of bluish green and blue (1979, 1961).

Transparent materials are also associated with liquid contents as a cause of the strong visual relationship between water and glass They correspond to the shades of bluish green, blue and additionally green and white (1979,1961).

Translucent materials generally reflect thick and creamy liquid contents as they both contain mysterious aspects in their associations. They both seem to pop out of dreams and they correspond to pink, cream and pastel shades of violet and orange (1979, 1961).

Opaque materials have a strong personality of their own. They are definite. They hide the product without any hesitation and they are associated with pure black and pure white.

Matte materials are associated with solid and compact contents. Thereby, they correspond to dark brown reddish brown, red, orange, ultramarine, hard colors in general (1979, 1961).

These psychological characteristics created by the use of material are not always used in correspondence with their associated colors. As will be

observed in the following examples, the reason is, to illustrate different images for different products.

The package designed for ROWENA'S almond pound cake has used a transparent material (Fig. 17).

The clear plastic wrapping, makes the pound cake look genuinely wonderful and freshly-baked. As an advantage of the material the height of the cake can be displayed in a trustworthy manner.

The carmine red bow tied around the plastic wrapping can be related to the dispensing of hospitality to parties. It creates a homemade quality and thereby reflects respect, love and affection in a warm and sensual atmosphere.

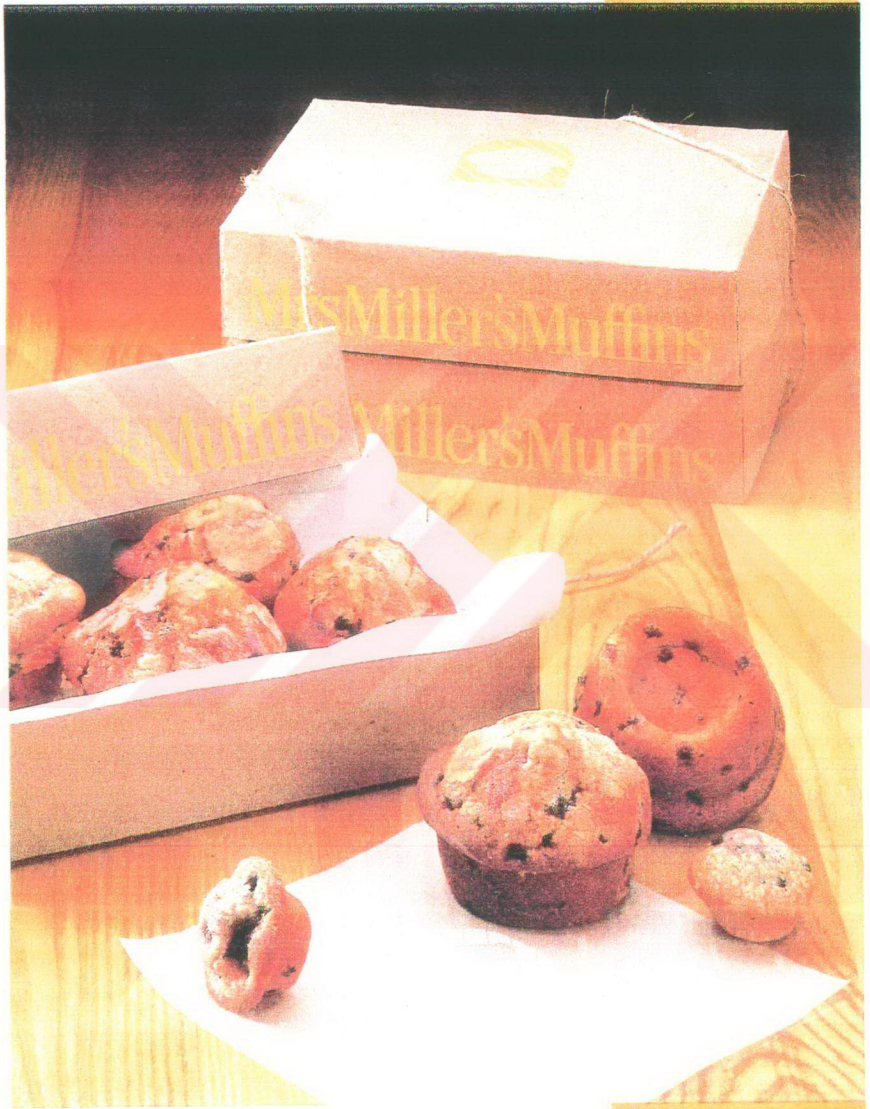
The textured material used for the package of MRS. MILLER'S muffins is closely associated with the irregular surfaced content (Fig. 18). The beige color when corresponds with the material creates a warm and humanized atmosphere which can be directly associated by a familial and traditional aura. The rope (rough in texture) that goes around the box together with the box itself, implies the quality of care and reward from a loving and generous mother to the product.

The package designed for HOME BRAND lentils has used a textured material namely a broadcloth which also reflects the grainy nature of the product (Fig. 19). This material together with its light beige color emphasizes the naturalness of the product. And it creates an authentic atmosphere of the harvest.

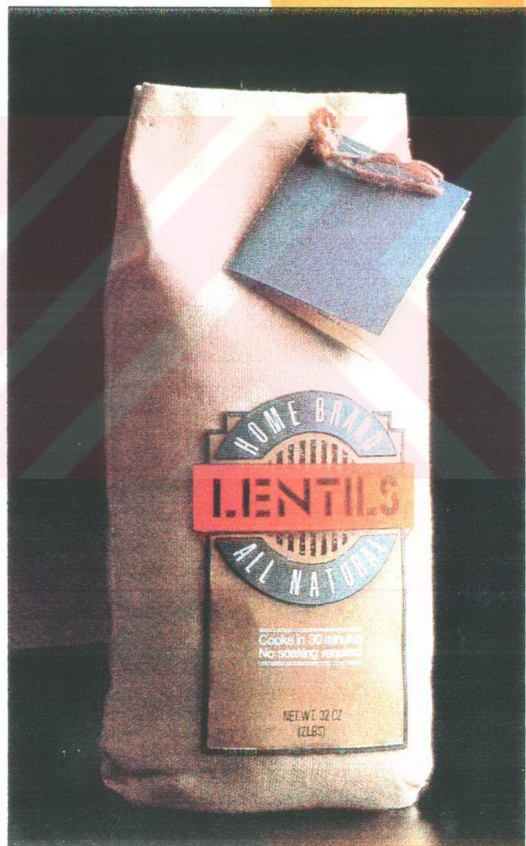
The bluish-gray color, used on the matte surfaced cartoon label hanging



A package designed for
ROWENA'S almond pound cake
(Fig.17).



A package designed for MRS.
MILLER'S muffins (Fig.18).



A package designed for HOME
BRAND lentils (Fig.19).

from the top of the packages used to reflect care, and create a sophisticated, high-quality image.

The package of FILIZ spinach flavored pasta has a plastic bag which uses transparent and opaque surfaces together (Fig. 20). As mentioned before transparency should be used to display a product which can create appetite appeal by itself. Whereas, the spinach flavored pasta, because of its color does not have any possibility to create appetite appeal. The glossy material is not even enough to illustrate a desirable appeal. The light and yellowish green used on the top and bottom part of the package creates strength and a convivial character which is associated with the symbolic meanings of pasta.

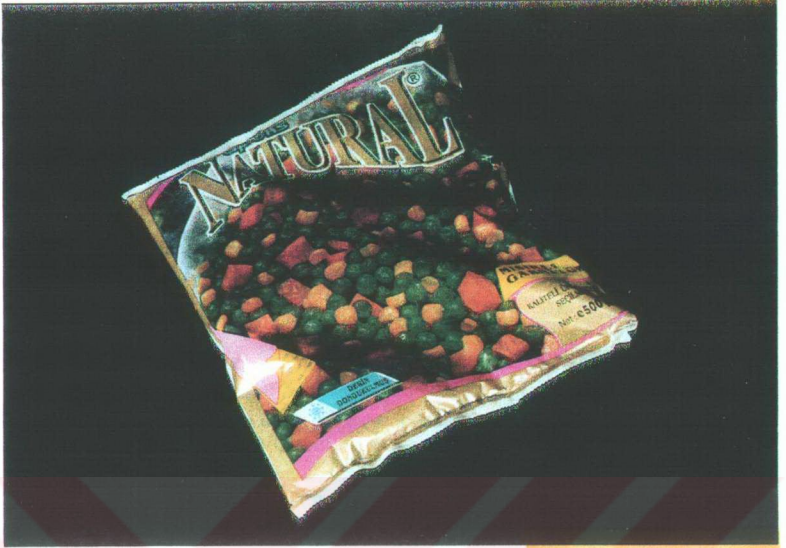
The use of opaque surfaces on the top and bottom parts of the package, calls the consumer for participation by hiding a certain amount of the product and it also gives an additional mass to the product.

NATURAL frozen vegetables have an opaque plastic package (Fig. 21). In the first sight, plastic bag conflicts with the targeted image of the product-naturalness. It is designed to be an opaque package to hide the unappetizing appeal reflected by the colors of a frozen food. Nevertheless the colors of the package is more unappetizing than the natural product. In this context, we can observe how, wrong color and material coordination can destroy the whole image of the product.

When we take a general look on the new and old packages of ETİ slice cakes with raisins, we will be faced with an undeniable backstep in the use of color and material (Fig. 22). The old package of this product is the one with an ochre circle subsequently, the new package is the one with a purplish pink circle.



A package designed for FILIZ spinach flavored pasta (Fig.20).



A package designed for
NATURAL frozen vegetables
(Fig. 21).



Two different packages designed
for ETİ slice cakes with raisins
(Fig.22).

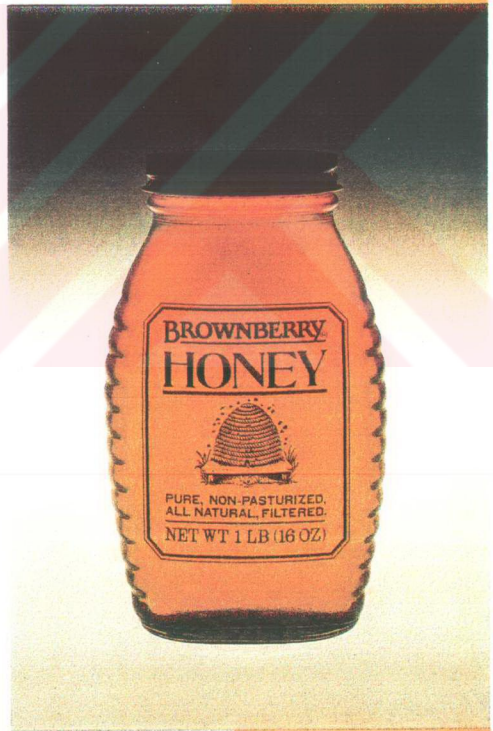
The packages have used transparent and opaque coordinated plastic bags as the material. Taking in consideration that the product itself is an impulse item then the approach of using transparency is appropriate.

Subsequently, if we also consider that, showing only apart of the product instead of the whole, would entice the consumers to participate with the product, the use of opaque with transparency will be appropriate. In the old package the color used on the opaque part of the package does not distract either symbolically or physically the appetizing image created by transparency.

Whereas, in the new package the purplish pink dominating on the opaque part of the package, does not only spoil the symbolic meaning and physical appearance of the product once; but by creating a contrast with the yellow spot it destroys the whole design second time. The purplish pink is highly associated with fashion, flowers and provocation whereas, the cake as the product is associated with respect, love, warmth, and affection.

For the package of BROWNBERRY pure and natural honey, glass (a transparent material) is used (Fig. 23). Glass, apart from being transparent is natural, which is similar to the distinctive characteristic of honey. Glass is used without any textural effects to emphasize the purity of the product. Additionally, as the glass is a clear material, the color of honey, easily reflects the brilliant and treasure like appeal of the product.

The packages designed for pure and sparkling HAWAIIAN WATER with different flavors have reflective materials (Fig. 24). The reflective material is used without being colored as a background and therefore creates pure, clear, light and cool associations which are similar to the characteristics of a soft drink.



A package designed for
BROWNBERRY pure, natural
honey (Fig.23).



A package designed for pure and sparkling HAWAIIAN WATER, with different flavors(Fig.24).

The secondary dominating color is blue which creates a modern, sophisticated, and fresh atmosphere. And other colors which are used to reflect the flavor of the products, bring joy and activity to the whole package.

4.3.3. 2-D Forms and Color

Two dimensional forms of a package can be defined as the image and the typography which takes place on the surface of a three dimensional form. Unlike the three dimensional forms and materials; the existence of two dimensional forms are completely dependent upon color. Since they can only be perceived by the sense of sight but not by the sense of touch. Dramatically 2-D forms owe their existence to color.

Basically, color serves the 2-D forms on a package as a unifier or an emphasize. In this context, if the shapes embodied within the package do not interrelate comfortably, then the consumer sees a mass of image, type and color and may pass the product by (Sonsino, 1990).

The strength of typography can be seen on packages that use different styles of lettering to imbue character or mood in display headings. For example, flowing text with long thin stems suggest a mood of sophistication and delicacy or solid strong faces -serif or sans serif- represent reliability; and there are much more typefaces that suggest smartness, strength, integrity, femininity, tradition, dignity, modernity, and physical attributes like creaminess, compactness, fluentness, and so on (Dichter, 1975). Although, typography is read and interpreted verbally, as can be observed from the above statements it can also be viewed, perceived visually, and interpreted emotionally (Carter, Day, and Meggs, 1985).

Even the logotype can suggest the form and function of a product. "Well-designed initials take on symbolic associations, so that they register in our minds as split-second images of the company name rather than as abbreviations" (Dichter, 1975: 119).

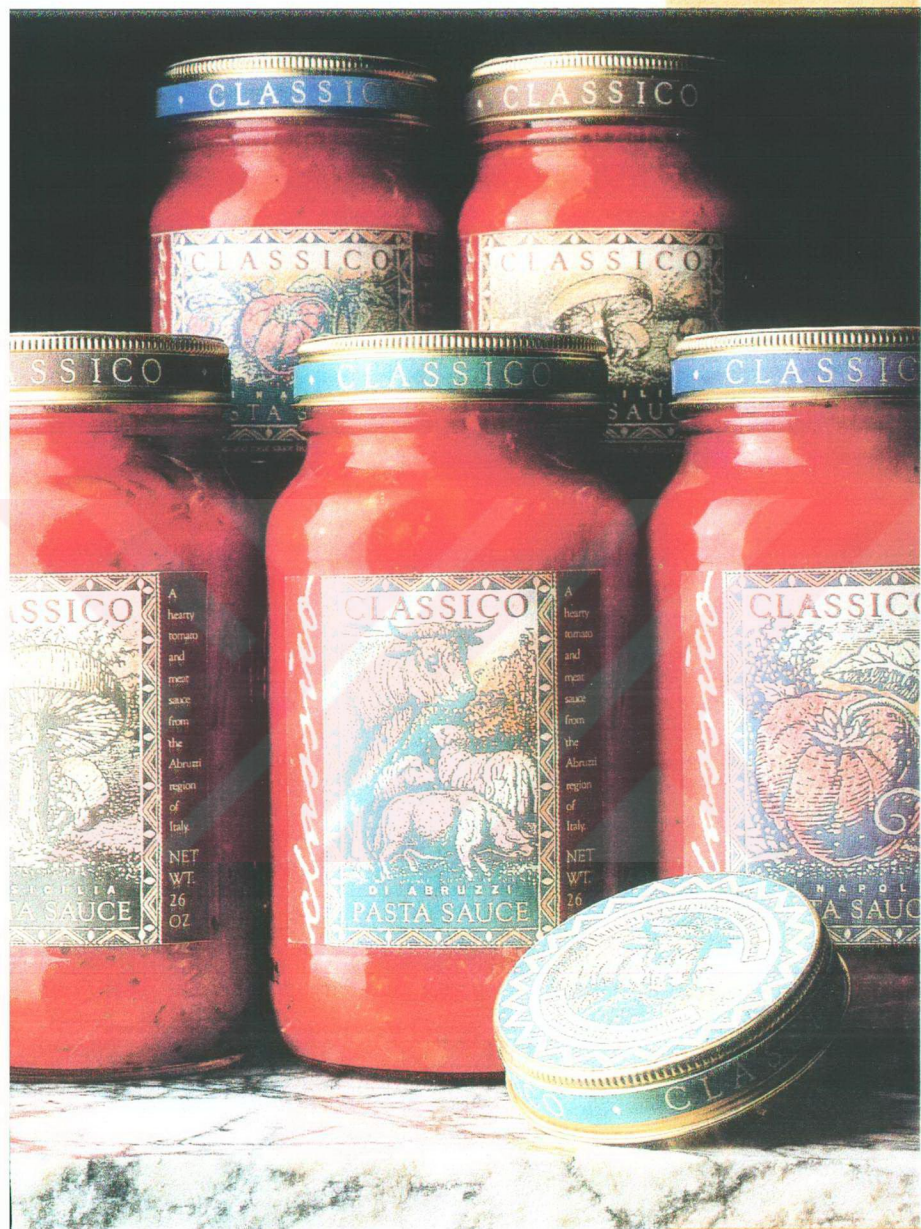
When the images that will be used on the packages, are taken in consideration, a conflict will take place stating "Illustration versus typography".

However, this problem is not so hard to be solved in food and beverage packages. It can definitely be indicated that photography should be used to create appetite appeal and reliability, illustration should be used to create nostalgia and decoration finally, both of them can be used to achieve novelty and originality.

Additionally, two dimensional forms in coordination with color can apply tricks on the packages so that, for example: the package would appear to be larger than it actually is, or to contain more of the product than it does, because it looks heavier than it actually is. The use of 2-D forms in coordination with color to create psychological impacts will be revealed in the following examples.

The packages designed for CLASSICO pasta sauce reflects a classic Italian look and a contemporary sensibility (Fig. 25). These retro packages project a nostalgic boutique sensibility.

Although, retro is not a dominant style for packaging, nostalgia is being used in marketing to lure a new, Postmodern, consumer, one who is genuinely concerned with returning



A package designed for CLASSICO pasta sauce, with different flavors (Fig.25).

to those homespun values and is interested in buying into a history that he or she never really experienced, or less cynically is truly drawn to the aesthetic (Heller and Lasky, 1993: 97).

This nostalgic sensibility is created by the technique and the receding tones of the colors used on the illustrations. Each type of sauce is indicated with a fitting illustration. The contemporary look is reflected by the design created with the typographic elements. Finally the sauces espouse their freshness with transparent jars.

The packages designed for SNAKEBITE SALSA and EL PASO sauces infer their spiciness first of all, by the fiery tones of red black and ochre (Fig. 26). The Snakebite Salsa sauce implies its hotness with the photograph of a burning desert and its illustrative typography with a snake.

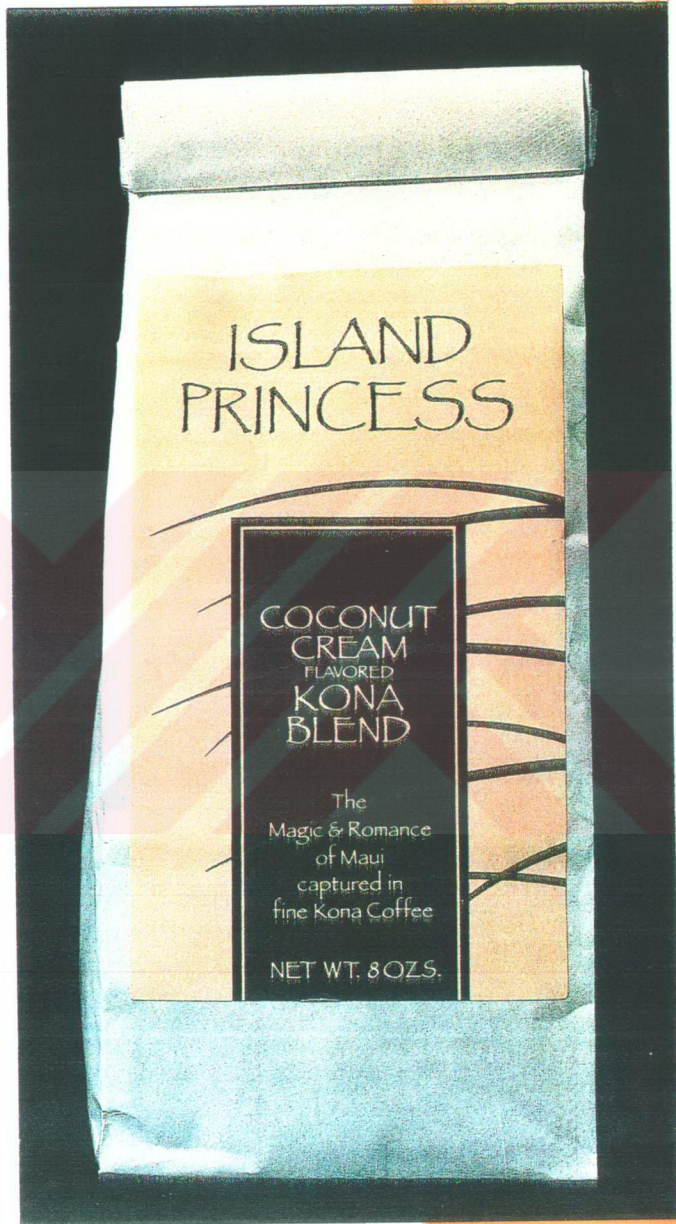
The ropes which are used on both of the packages creates a Western look that emphasize the origin of the products. Both of the packages reflect aggression and intrigue because of the colors and the use of all sorts of design elements together. The package of El Paso-Chile Con Queso suggests its contents with a pepper.

The package designed for ISLAND PRINCESS coconut cream flavored Kona blend coffee creates a mood of a traditional handmade package which conveys intimacy and friendship (Fig. 27).

The coconut cream colored label other than reflecting its flavor, reflects closeness and warmth. The informal typeface and the subtle drawings of palm branches express Hawaiian tranquility.



Packages designed for
SNAKEBITE SALSA AND EL
PASO hot and mild sauces
(Fig.26).



A package designed for
ISLAND PRINCESS coconut
cream flavored kona blend
coffee (Fig.27).

BLANC DE BLANCS proprietary selection champagne, has used fine arts as a key for the design of its package (Fig. 28). The package by its design and colors creates an atmosphere which would complement fine dinner tables. The golden yellow wrapping indicates the quality of the product.

The luminous pink brush scripts that rise with a speed from the bottom resembles the explosion of the fireworks that are sent from the ground up to the silent skies. This action is associated with celebration and the explosion which occurs at the moment of the opening of a champagne.

The package designed for MİS cream is not sufficient to display the product in an impulsive way, although the product itself is an impulse item (Fig. 29).

Cream - a sensuous and rich food equated with best- can not be displayed by such an illustration and such a poor design. It is a gourmet food and its use connotes something special. Thereby, its package should reflect at least one of these qualities and it has to use photography not illustration.

The only positive remark, that can be made about this package is the preference of strawberries to display the cream since, strawberries are accepted and therefore can be perceived as complementary food items.

The package designed for SADIA frozen chicken cuts has followed a wrong way in displaying its products (Fig. 30). We all know that frozen products are hard and unappetizing whereas, the real products are soft and appealing. Thereby, the package of a frozen food should fulfill the emotional flavor expectations of the consumer. And, as they are not ready-to-consume items they have to be displayed as if they are ready-to-consume items.



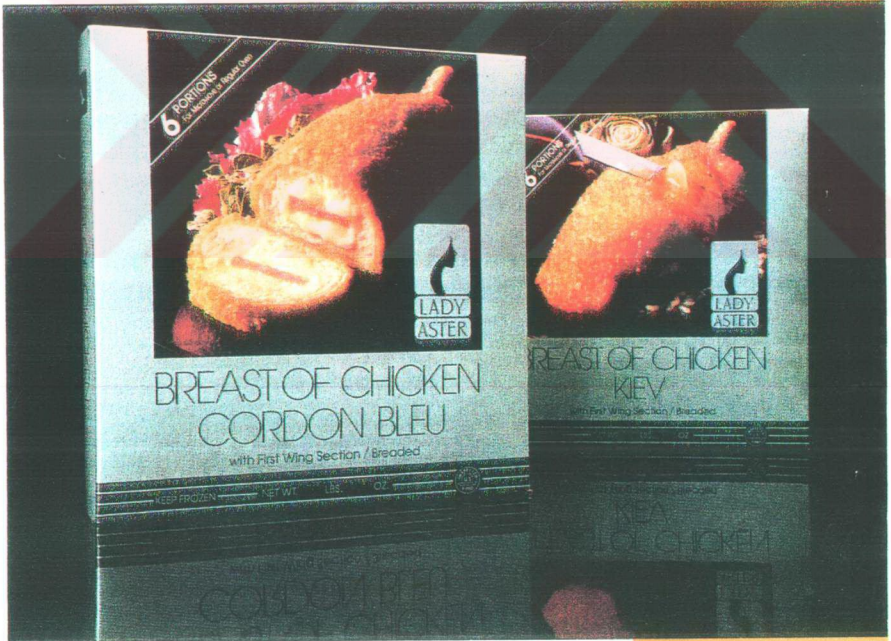
A package designed for BLANC DE BLANCS proprietary selection champagne (Fig. 28).



A package designed for MIS cream (Fig. 29).



A package designed for SADIA frozen chicken cuts (Fig. 30).



A package designed for LADY ASTER frozen chicken breasts (Fig.31).

Sadia displays the chicken cuts raw in a quite unappetizing manner. It is really a disadvantage to display the animal products, raw.

This is another package designed for LADY ASTER frozen chicken breasts (Fig. 31). But, this time a dramatic and appetizing photography is combined with distinctive silver carton to convey the gourmet quality and attractiveness of the product. Even the logo of Lady Aster which is grey in color conveys sophistication and care which is supported by the image. As can be observed from the example; showing the product as it is being tasted but not fully eaten provides a perfect bridge for the creation of a strong appetite appeal. Also, the merging of the image with its background creates a mystical atmosphere which provokes the appetite of the consumer.

CONCLUSION

As the word goes "Fine feathers make fine birds".....likewise fine packages make fine products at the moment of impulse buying which is mostly triggered by a visual stimulation. Impulse buying is achieved by supporting the impulsive impact with originality, reliability and a strengthened appetite appeal. Impulsive impact can be created by the package of the product that acts like an impulse item by the use of appetite appeal, decorative presentations, novelty, and nostalgia that may lead the consumer to curiosity, feeling of closeness, trust, qualification, and impression of usefulness apart from, stimulating their appetite.

Appetite is defined as, a want and hunger for what is seen whether needed or not. Taking in consideration the word seen, it can easily be claimed that our eyes play the major role in the area of stimulation of appetite. This process can be enforced the visual elements on the packages.

The visual elements can not share their dominancy with text in the area of stimulation. Since, statistically, a package has only two seconds to prove its existence in an average market-place, and the same two seconds by which the design of the package is measured. The perception of a pictorial message is faster and easier than those of an alphabetical message.

Pictorial message is created by elements which are called plastic variables, namely: color, 3-D form, material, and 2-D form. Out of these variables color gives life to pictorial message.

Psychologists speak of immediacy with reference to the human experience of color. As the sensation of color is of a primitive order, reaction to it, appreciation of it requires very little effort of intellect or imagination. Thus color can not be considered as a property in itself. In order to prove its existence it has to be reflected by an object.

The reason why color requires very little intellect or imagination is that, each color has a psychological characteristic of its own which is the result of sedimentations accumulated by human experience through the years.

Color is not only an important stimulus for our sense of vision but it also serves as a representor for our senses of touch, smell and taste by reflecting their psychological characteristics which are created by the use of those senses.

As mentioned before, color can not act alone, it needs to be reflected by other design elements such as 3-D form, material and 2-D form.

A three dimensional form is more real and therefore, closer to a human being since he considers himself as a privileged object within a world of objects. A three dimensional form and color can be perceived by visual senses whereas only 3-D form can be perceived by tactile senses. That is the most important reason why the package of a product is closer and more effective than any other promotional tools during an impulse buying. Although in the process of impulse buying, the package is not handled and examined, the existence of such a probability creates a relieving prejudice in the consumer.

The other design element, which is the material, is also very important as, nothing would exist in the world of objects without the existence of

material.

Thus, unlike the three dimensional form and material, the existence of two dimensional forms are dependent upon color. Since, they can only be perceived by the sense of sight, but not by the sense of touch.

These plastic variables are used to create four types of packages, which are differentiated according to their psychological impacts: integrative packaging, interruptive packaging, stimulating packaging, and restrictive packaging.

Integrative packaging is achieved, when package and product complement each other to present a single stimulus. Interruptive packaging is present, when package and product do not blend, each fits into a different unit of perception. Stimulating packaging is achieved when the package of the product does not reflect the physical attributes of the product, but the psychological characteristics and the nationality of the product. Restrictive packaging at first stimulates because of the use of associations but spontaneously restricts it by the explicit use of design elements.

All these packaging types create different psychological impacts by the use and not use of the psychological characteristics, the physical attributes and the nationality of the product reflected by the help of design elements in coordination with the use of color.

Those physical characteristics and nationality of the items, form the symbolic meanings of a product which are augmented by their physical attributes. Thus, the symbolic meanings of the products to be reflected on the packages should be properly analyzed to fit the existing image formed by those common symbolic meanings in the mind of the target group.

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