

Colour in Food Packaging Strategies and Rules

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ABSTRACT

Originally made to prevent diseases due to poor sanitary conditions, food packaging is much more than this. It protects and communicates information not only about the food type (organoleptic properties for consumption), but also about the company and its corporate strategy. Factories abide by strict packaging standards, focusing part of their resources to the packaging look, through psychology, marketing and budget based analysis. For a packaging to work, it has to *safeguard the product, induce shopping, being read.*

On the sale shelf, the product has to be *first seen, then chosen and finally purchased* among many competitors. Products has to catch the attention of the consumers in a small timeframe. Moreover, since the consumer buys *75% by impetus* and only *25% by programming*, therefore it's clear that *purchasing means getting emotional. Succeeding in selling means being able to give rise to emotions.* Colour in packaging is a wonderful salesman. It evokes emotions and is a quick, efficient and silent messenger. Its "language" is ubiquitous, fully understandable and cheap. It is a powerful tool of non-verbal communication, able to strongly influence the mechanism for impulse buying. Colour can attract attention in a very short time, transmitting product specific messages and creating strong brand identity.

Colour per se cannot meet all needs: the degree of saturation, brilliance and combinations between different colours change from time to time the end result. The creation of a seductive and attractive packaging is highly dependent on hue and hue combinations, context, the type of graphics and print format. The chromatic effect of a final package also depends on the material and texture. Finally every colour evokes a different emotion and every colour evokes a different food (e.g. white for milk products). The language of colour, with its rules, requires a process of research and investigation that is difficult to fully understand, nevertheless, all food companies use colour in packaging with the strategy to increase their sales.

KEYWORDS

Colour, emotion, food, packaging, strategy, sales, salesman

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1. FOOD PACKAGING

Originally conceived to prevent diseases deriving from poor sanitary conditions, food packaging means more than a mere food package. A package both protects and communicates. Upon inspection, consumers get information not only about the food type, its organoleptic properties, its beneficial properties, but also about the company and its corporate strategy. Factories abide by strict packaging standards, focusing part of their resources to the packaging look, thus creating an analysis current, perching between psychology and marketing. The final aim consists in finding the best appropriate package for food, a compromise between budget requirements and the goal to stimulate the customer to purchase.

2. TODAY'S MARKET ANALYSIS AND LARGE SCALE RETAIL STORE

To understand the issues related to food packaging, it is necessary to examine the point of sale, the place where the product is displayed – among its many competitors. The attention of the consumer must be caught – the product must be sold. No serious company, wanting to loyalize its customers and sell its products would do it without knowing the weak and strong points of its point of sale [16]. If we consider a point of sale, putting aside the place, decor, design and colours, two are the fundamentals:

- The precise location where the product is displayed (i.e. counter, shelving units, showcase)
- The light source

In a grocery store, food products are arranged following a marketing rationale.

Brand products and market leaders are placed on the upper shelves: these are popular brands, known by consumers because of ads, whereby price and quality are high. Purchasing them is not easy: one has to look up to see them, and consequently raise one's arm. Private Labels are placed on shelves at eye level, i.e. the LSRS brand. They represent a good quality/price compromise. They stand in the most favorable position for purchasing, because they are both at eye and hand level. In the lowest shelves: best price products, unknown brands, with a low quality standard and low price. Purchasing them is uncomfortable: one has to bend down. Whilst the brand and leader products have to launch an advertising campaign to keep their market share, private label and best price products do not advertise. Moreover, to get the better strategical position, localization at eye level on

the shelves (approximately 135 cm high, i.e. the average height of an Italian woman), a company has to invest a lot of money [16, 20]. Food companies have to compete in a overstocked market with very tight margins, where products are surrounded by all their competitors. These difficulties are even worsened by the trend of consumers to shopping quickly and with less and less time of consumers to spend inside a point of sale. For a brand product, there is a difficulty in being *first seen, then chosen and finally purchased*.

Moreover, the food company has to take into account that

- Every food product satisfies not only a functional need (hunger, thirst), that is primary need, but also a symbolic one, which is secondary: I eat in search of gratification, I eat because of my social position, I drink to have more energies etc.
- *The first and foremost driving force of purchase is emotional* [16].

The consumer, in fact, buys something by impetus or by programming.

All research institutes agree about the data that out of four products bought, three are bought by impetus and only one by programming [16, 17]. These figures, 75% by impetus and only 25% by programming, vary slightly depending on the Point of Sale, but it is clear that *purchasing means getting emotional*.

At the mall, one does not read the label, but looks at the package!

Succeeding in selling means being able to give rise to emotions.

3. PACKAGING: FROM MERE PACKAGETO REAL COMMUNICATOR

EFFICIENT PACKAGING AND WINNING PACKAGING

For a packaging to work, it has to include three features [20]. These are:

- It must adequately safeguard the product
- It must induce shopping
- It must be read.

These features, skillfully combined by creative and advertising agencies may lead to successful result. If we consider only the graphical aspect, in applying this rule we simply represent the product by way of a picture or a sketch on the box containing the product (i.e. putting an orange on an orange juice tetra-brick). This kind of packaging has a limit, though: it satisfies

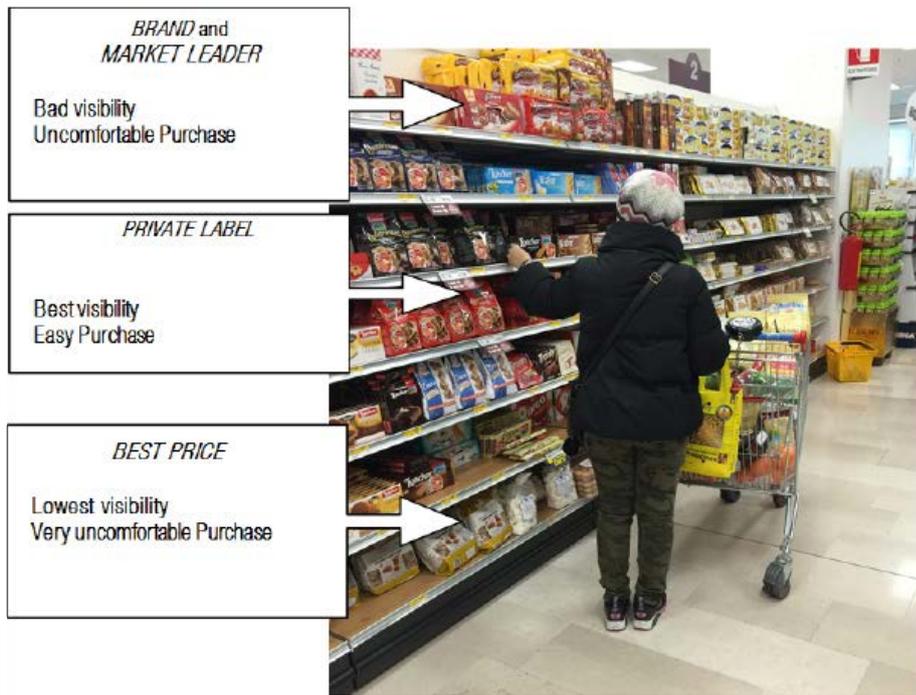


Figure 1 - Shelves Layout in Large Scale Retail with Brands, Market Leaders, Private Labels and Best Prices

only the primary need of the consumer, (hunger, thirst) but not his secondary needs [15, 19]. To satisfy all the requirements, the packaging has to stimulate not only the eye, but also other senses [1, 2, 3]. Multisensorial messages evoke emotions, beneficial and pleasurable feelings during food consumption. Moreover, it has to stand out among all competitors, express a strong personality and a special plus: appeal [7,13].

A fourth feature is then necessary, that is being seducing and charming: it must be "catching"!

3.1. THE BARILLA CASE

One of the first food companies to understand the need to use the term appetite as an ad on its box has been Barilla, the Italian pasta leader and popular brand name all over the world. In 1969, Barilla started a *re-styling* operation of its packaging, known as "*appetizing in the box*". The pasta box of 1956, a square shaped cardboard box chosen by the company, resulted in a market survey as being felt masculine, cold, industrial and dull, unable to provoke emotions,

too outdated in a world of communications. The restyling was committed to Lippincott&Margulies, an international company specialised in visual communications. Barilla decided to keep the colour blue, perceived as the company colour, which had been chosen by Pietro Barilla, founder of Barilla in 1877, who started with his first pasta shop in Parma, since the colour reminded of the so called "sugar paper" once used to wrap up the loose spaghetti. The 1956 box, light blue with a bulk of spaghetti on it, was hence restyled. The new feature consisted in reminding the appetite, showing pasta at the moment of its cooking process [7].

The Barilla package, as displayed nowadays in a point of sale, has undergone another restyling around how the product is presented, which is shown at the very moment of its consumption, and not, as it was before, during the cooking, so to further evoke its appetizing properties. The light blue becomes a dark blue, a more refined and exquisite colour. Pasta has been therefore "*refined*" from a large consumption Italian main course to an exclusive and refined food product.

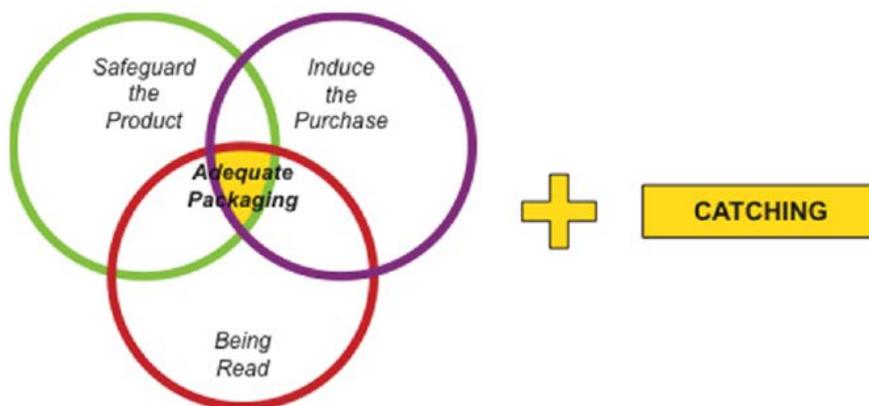


Figure 2 - A winning packaging has to be "catching"

This new message has been supported by a massive advertising campaign all over the world. At the time, many famous testimonials like Alberto Tomba and Steffi Graf appeared in the ads, sitting in a luxury restaurant and ordering a nice Barilla maccheroni dish instead of exclusive courses like caviar [7, 18, 19].

Although minor changes have been introduced from time to time in the pasta packaging, according to the outcome of periodic marketing surveys [21], the Barilla food company has always relied on two traditional features of its brand:

- the Blue chromatic code
- the cardboard box

Moreover, Barilla has never substantially modified the traditional image of the fork with a spaghetti knot, originally launched in 1985. In this picture pasta appears already deeped in sauce, ready to be tasted.

The addition of a plastic window to the main side of the pasta package, originally used only in the foreign markets to provide a visual definition of the pasta type (not always known), is consistent with the food packaging strategy currently dominating in western countries: to show the content for its immediate identification and emphasize the manufacturer transparency and corporate integrity. One may observe:

- Barilla is the market leader and owns the colour code.
- The best strategy for consumer goods - mass market goods - is appetite recall – displaying the scope on the package [15, 19].

Colour: Inspiring and preempting flavour

Several studies prove the great power of colours on consumers, inspiring and preempting the perceived flavor [8- 12].

Ernest Dichter's Test (1964) envisages the following steps:

- The same coffee poured into 4 cups
- Behind every cup were standing 4 different tin cans, in four different colours: brown, red, blue, yellow
- A considerable sample of people were asked to depict the perceived flavour of all cups

3.2. MARKET LEADER/PREMIUM PRODUCT THE LAVAZZA/PELLINI CASE

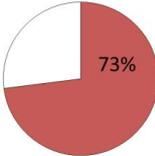
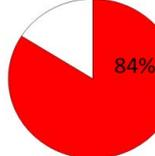
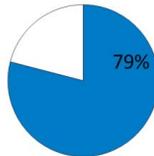
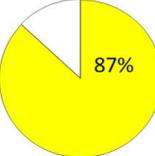
In 1964, the Dichter's Test was made. In 1970 Lavazza comes out with the Qualità Rossa which soon becomes the most sold coffee [13, 14].

Lavazza's choice is red, the colour conveying at best a rich and full flavour to consumers, adding the image of a hot coffee cup on the packaging. Usually, a company wanting to launch a brand and acquire a market share from a competitor,

Figure 3 - Barilla cardboard box of 1956 showing the product, center: 1969 picture of pasta while cooking, right: 1985 pasta ready- to –eat



Figure 4 - A 2016 Barilla typical spaghetti package

Tin can colour			
BROWN	RED	BLUE	YELLOW
			
Answer Percentage and Taster Comment			
			
too strong note	richer note	lighter note	too sweet note

has to differentiate itself. In this particular case, two were the options:

- Getting rid of the image recalling the function - which will be only sensed or
- Breaking with the habits and use a completely unusual colour.

Lavazza and Pellini coffee brands are the best example of different strategies to gain market shares and increase sales [19].

Pellini's packaging choice was almost imposed by the fact that they were obliged to design a new package opposed to that of Lavazza [18]. To differentiate itself, Pellini broke with the habits launching its product on the market (100% Arabica) with a new packaging, following three innovative rules:

- No drawings of a cup
- Colour code change: red has been changed by dark brown, almost black (a "noble" colour which recalls the colour of a roasted coffee bean)

- No vacuum-sealed package: instead, a cylindrical tin can labeled: - 100% Arabica – to highlight the value of the product (a tin can is definitely more valuable than a bag).

This packaging has made possible Pellini's market repositioning so to address a different market segment, a "niche", and increasing thus its sale price [13].

From consumer good, Pellini became a premium product, an exclusive and high quality brand, supported by a polished image. Illy had a similar approach with its elegant silver tin can [18].

4. COLOUR IN PACKAGING

Colour: a quick, efficient and silent messenger.

Moreover its "language" is ubiquitous, fully understandable and cheap!

Because of these features it is a powerful and extraordinary tool of non-verbal communication, able to strongly influence the mechanism for impulse buying. Colour could be defined as "the



Figure 5 - Pellini comes out on the market employing the breaking strategy

silent salesman" for its ability to attract attention in a very short time, transmitting product specific messages and creating strong brand identity [9]. If colour can "*conquer*" the eye in a second, the reaction that everyone has towards a specific colour is based on sensorial, emotional and cultural perceptions.

It's important to understand that a colour per se cannot meet all needs: the degree of saturation, brilliance and combinations between different colours change from time to time the end result. The creation of a seductive and attractive packaging is highly dependent on hue and the selection of its combinations, its context, the type of graphics and print format. The chromatic effect of a final package will also depend on the material, its nature and texture [13].

Understanding the language of colour requires a process of research and investigation that is difficult to fully complete.

4.1 FIRST ASSUMPTION: ALL COLOURS ARE ALLOWED IN NUTRITIONAL PACKAGING

In this area wrong colours do not exist. It sounds surprising but this is due to the extremely broad number of competitors active in the market and faster and faster and emotions-based selecting criteria. It's very hard to obtain and hold market shares and any tools and means are allowed

[19].

4.2 SECOND ASSUMPTION: ANY HUE IS USEFUL PROVIDED THAT IT'S PROPERLY UTILIZED

Notwithstanding the unique features of an item (texture, shape etc.), its printing and graphic format and its marketing characteristics (target, end user, purchasing mechanism etc.), it's important to remember that the message conveyed by a colour depends on individual, social and cultural values. Many studies have been carried out on this topic: some have shown that people with light eyes and hair are attracted by packaging with light and soft hues while those with a darker complexion prefer darker and more intense colour shades [19].

Indeed, Johannes Itten was the first to observe that people tend to select colour shades similar to their face hues while studying individual reactions to "*Armocromia*" (Colour Harmony) at the Weimar Bauhaus [4]. In this respect, food industry has to implement different strategies based on the specific market they work in. Changes and adaptations of product packaging, shape and colour are common to meet country specific expectation. Minor modifications are often sufficient (i.e.: Barilla has introduced in its pasta packages a small window to show its



Figure 6 - From a study of J. Itten: People with light coloured face prefer light and soft colours and the same is true for people with dark shades who prefer darker and strong colour contrasts

content) or, sometimes, it's necessary to change recipes or ingredients (salts, spices, sugar etc.). Since 1941, we know that in western countries adults prefer blue (Universal Colour Score, Hans Eysenk, 1941) [6, 10] while in Japan white is the favourite colour [15].

5. HOW TO IDENTIFY A PACKAGING COLOUR

To facilitate the choice of a colour code some criteria exist that help identifying the hue more appropriate for a given food. In a situation where any colour is allowed, two rules are more relevant:

5.1. THE RULE OF COHERENCE

Based on intuition and common sense, the "coherence" rule is similar to the criterion used to strengthen a food/beverage colour.

The "coherence" rule is reliable because it doesn't depend on social and cultural values. Since the early Sixties, its applications has enable the manufacturing of easy to interpret and sell items. At present, it represents a good starting point but it's not sufficient (18).

According to this rule the consumer is immediately informed and at the same time reassured on the food content.

5.2. THE RULE OF COLOUR INDUCED MESSAGING

Colours may stimulate perceptions and convey messages based on people experiences, models, social-cultural values and living environment.

Table 2 shows the main colours and food they are associated to.

Although this rule helps in developing packages, it needs, as in the case of the coherence criterion, additional approaches.

On the basis of his studies on nutritional advertising (1949), Max Lüscher states that food which has to be perceived as natural and fresh requires red, yellow or warm hues to be seen as "living" [5].

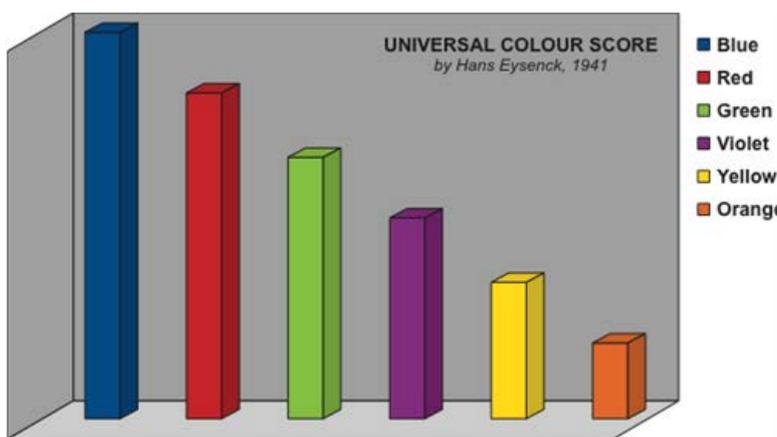


Figure 7- This graph describes western adults favourite colours among the six major ones

Using these rules, manufacturers try to offer consumers a product capable also to induce emotions.

5.3. THE RULES OF MARKET LEADERSHIP

As mentioned, the choice of a colour for a food package is based on corporate strategies that take into account market characteristics, competitors, target, positioning and market leaders. In the food industry sector, the colour selected by the leader set the rule and a colour code. The "Barilla blues" is a typical example.

When a food company plans to launch a product already introduced by the market leader, it has two options:

- to align (me too)
- to react (break the rule)

In the first case it will attempt to imitate the leader packaging colour and graphic, this would look appropriate but would lack attractiveness and originality. The "me too" strategy is typical of Private Labels [15, 19].

The second options requires the development of tactics based on totally different products features, including colours so as to induce new visual identity (i.e.: red vs blue, white vs black). Coca Cola, the unchallenged market leader, has chosen red as its colour code. In this case the colour has multiple meaning: indeed ice blue would have been more appropriate for a

Table 1- "The rule of Coherence". The colour of the packaging is reminiscent of content

FOOD	FOOD COLOUR	PACKAGING COLOUR
Milk e dairy products (yogurt, etc)	White	White
Water	transparent, colourless	transparent, colourless
Bakery products/pasta	Light Yellow shades	Warm Light Yellow
Eggs and eggs derived products/egg powder	Strong Yellow	Yellow
Egg pasta/egg noodle	Yellow	Bright Yellow
Grain products	Light Brown shades	Light Brown, Yellow Cake, Yellow/Orange
Mozzarella/ fresh cheese	White	White
Coffee	Dark Brown	Dark Brown/ Black
Fresh vegetables (salad)	Green	Green, Warm Green, Yellow-Green

Table 2- The rule of colour induced messaging

COLOUR	MESSAGE CONVEYED TO CONSUMER	FOOD
Blue in its lighter shades: Light Blue, Sky Blue	reassuring, harmless fresh refreshing undemanding, light reminiscent of water, air, sky	milk and dairy products fresh cheese water ice cream fish frozen food decaffeinated coffee products for children (when purchase decision makers is the mother)
Yellow: warm and light shades, orange shade	warm fragrant friable freshly baked reminiscent of grain, yolk	bakery products breakfast products pasta egg noodles
Green	fresh refreshing genuine no additives / preservatives reassuring reminiscent of nature	fresh vegetables salads

refreshing drink. However, Coca Cola contains caffeine to energize consumers likely to be young and dynamic. Coca Cola is not only a refreshing drink but, chromatically speaking, supports a “sparkling” and active life style. The product, its packaging and colour share the same message: they are coherent and thus believable. Pepsi Cola, its major competitor, has been forced to break the rule adopting the opposite blue colour [13, 20].

6. THE STRATEGIC UTILIZATION OF COLOURS

6.1. COLOUR AS A PRODUCT DIFFERENTIATOR

Based on its strong symbolic value, a colour code can better identify different types of products in the food industry [17]. Colour is a food labeling tool (Table 3).

Figure 8 - According to “the rule of colour messaging” the packaging of decaffeinated coffee is often blue or light blue



8

Figure 9 - The align strategy is usually used by Private Labels to imitate Market Leaders. Here Esselunga aligns to Barilla



9



Figure 10 - Applying the breaking strategy Pepsi Cola enters the market using the blue colour



10

6.2. COLOUR TO IDENTIFY DIFFERENT VARIETIES OF THE SAME PRODUCTS

A colour code, rather than specific shapes and/or graphics, serve to differentiate among variations of the same products, being more recognizable by consumers. Hues are changed so as to represent chemical or physical features (taste etc.). Some examples are reported on table 4 [19].

Common people adopt highly represented colours as colour codes, as shown in specific food products: in the case of "oven" products, red means salty and blue bland while for sauces,

spices and dressing red means tasty, hot vs blue which indicates mild, healthier. Even for mineral water red and blue means strong or light sparkling [18].

TYPE OF PRODUCT	COLOUR	CONVEYED MESSAGE
Premium Products	"Noble" colours: Golden, Silver, Black, Dark Green, Dark Blue, Dark Brown	nobility and finesse
Best Price Products	Red, Orange	induce to stop, stimulate purchase and appetite
Bio Products	Green	freshness, genuinity, no additives
Light Products	same colour of the basic product but in its lighter shades	the package colour, identical to the basic product, is only "lightened": the product appears lighter and low-calorie

Table 3 - Colour as a food differentiator

FOOD	PACKAGING COLOUR	EVOKED MESSAGE
Basic Product Milk pasteurized whole milk pasteurized skimmed milk	Light Blue Light Red	freshness lightness
Basic Product Crackers salted crackers unsalted crackers flavored crackers whole grain crackers	Red Blue Green Light Brown	tasty, flavourful healthier aromatic content high -fiber

Table 4 - Using colour to identify basic products and its extension line products



Figure 11 - Colour codes acquired over time: red for salted/hot/sparkling and blue for unsalted/mild/still

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