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An Indepth Study in the Area of Package Design

ART 490 Independent Research
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The packaging of goods or products is something which all of us encounter every day of our lives. The box of cereal we pick up in the morning, the shaving cream, soap or makeup we use, the products we use at dinner, and even the bedding we sleep upon does or has involved the use of packaging at some time. There is no escaping it. But what exactly is packaging? A few pieces of cardboard? A label or printing on the box? Plastic wrap? J.H. Briston and T.J. Neill define packaging in their book, *Packaging Management*, as, "the art, science and technology of preparing goods for transport and sale. Packaging may also be defined as the means of ensuring the safe delivery of a product to the ultimate consumer in sound condition at the minimum overall cost."¹ I suppose that this "definition" is correct in its capsulation of purpose. However, I tend to feel that packaging has a much larger purpose than is mentioned here. Marshall G. Baldwin, author of *New Directions in Packaging* lists seven basic requirements of a package. "It must contain a product, carry that product through the distribution system, keep it protected, keep it fresh and usable, it must provide a storage or utility function, it must merchandise or sell a product and it must resell it at a later date."² These last two items are the merchandising functions of a package, as well as my primary points of emphasis as a graphic designer. As Mr. Baldwin states, "Merchandising provides the most intimate link between the product and the purchaser of the product -- it is the package and product display itself, literally saying, "Pick me up and take me with you." It is the extension of advertising to point of sale."³

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He goes on to state, "The package's ability to be a good merchandiser depends on size, its shape, its appearance, its color, and its character."⁴ These are the points which I intend to discuss and show how color, typography, form, shape, design, pattern and texture are all intertwined components of package design and should be considered when designing or redesigning a products housing.

Lets begin with the importance of color in packaging. Author of the book, Notes on Graphic Design and Visual Communication, Gregg Berryman, states, "Color is the most direct path to the emotions of an audience. In some graphic situations like packaging, signs, posters and advertising, it might be the single most important design element."⁵ It is a conveyor of quality of content, of preparation and of meaning on a subconscious level. Psychological reaction to color have been studied since the early 1920s, beginning with the effects of colored lights on the mentally disturbed, to present day observations and recordings of provoked emotions to color swatches.

The overall consensus of my research revealed that most sources believed that color did reach the consumer on this subconscious level, but the amount of effect it had on whether or not it influened the purchaser varied. The book, Principles of Package Development, listed the following descriptions for the basic colors of red, orange, yellow, pink, green, blue, black, white and brown.

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RED: is an exciting color. It signifies strength and virility and causes people to look at the package. Light red is a cheerful color, but dark or bright red is more likely to induce depression and irritation. Cherry red is sensuous. As red becomes darker, it becomes more serious and depressing.

ORANGE: expresses action and has the ability to communicate. It looks clean and appetizing and has an intimate character.

YELLOW: is a cheerful color and is the loudest and brightest of all colors. Pale yellow looks dainty, golden yellow is active, green yellow is sickly, and a deep, strong yellow suggests sensuousness.

PINK: is suggestive of femininity and deep affection. It lacks vitality and gives an impression of intimacy and gentility. When a bright magenta pink is used, the viewer tends to feel frivolous.

GREEN: is a quiet, refreshing color. It is associated with youth, growth and hope. Being an undemanding color, it evokes neither passion nor sadness. When darkened to olive, the same color becomes a symbol of decay and rot.

BLUE: is a cooling and subduing color. It is a tranquil color suggestive of celestial infinity. It differs from green in its tranquility. Since green suggests earth-like quiet, whereas blue suggests a heaven-like quiet. If darkened to indigo, it becomes a severely depressing color.

BLACK: is a symbol of death and despair. It is a depressing color that contains an impenetrable character. But, when used as a shiny color, it can convey an impression of nobility and

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elegance. In the 1980s, black is being used extensively for cosmetic packaging to connote luxury, quality and expense.

WHITE: denotes virginity and purity. It connotes the unexplainable and inaccessible. When used near blue, it has a refreshing and antiseptic effect.

BROWN: is a utilitarian color and is suggestive of work and compactness.

It is a healthy color that is neither brutal nor vulgar. As it becomes darker, it assumes the character of black.⁶

A much more extensive listing of these colors as well as many others was also found in the book, *Color Manual*, written by Stephen J. Sidelinger, on pages 72 - 83. This source also gave general associations, general symbolism, sensory associations, preference ratings, visibility ratings, visual motion, color to shape relationships and environmental uses for each of its listed colors as well as for light and dark values of each.

A color's lightness and darkness (value) as well as a color's intensity (chroma) are both important factors in determining visibility and color harmony. Gregg Berryman emphasizes, "The visibility of color combinations are determined by contrast . . . the more contrast, the more visibility."⁷ This principle goes hand-in-hand with his statement, "Colors that are visible at the greatest distance will also be attract the eye the quickest, even at short range."⁸ It is for this reason that colors should be given a great deal of consideration when chosen for use on packaging. If a products colors are appealing as well

as attracting to the eye, chances are it will stand out from its competitors and be sold a high percentage of the time. A survey showed that, "a package which draws attention to itself is more than half sold. Since the average time a shopper has to look at a package in the supermarket is less than 1 second, attention is won by exciting the eye with something about the package that is new and interesting."⁹ This principle of attraction can be both positive and negative in terms of selling a product. For instance, if the box for a brand of baby soap is bright neon green and orange, chances are it will capture the consumers attention but it will not sell the product. Color harmony as well as appropriateness for the product must be taken into consideration during the design phase.

"Color harmony takes place when two or more colors are placed next to each other or in neighboring areas, and produce a pleasant effective response as a result."¹⁰ This reaction depends upon several factors: the size of the individual areas, the value and chroma of the colors chosen, the placement of the areas in relation to each other, and the overall composition or balance of the total area under consideration. These are aesthetic decisions which the designer must consider. The everyday consumer doesn't rationalize each package from its competitors, using these criteria, but the overall look of a package is often a stronger selling point than what the product is that is being sold. This point has proven itself with new items such as frozen dinners, yogurt, dog food, etc., that do not have a long standing brand loyalty. With items such as these,

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which most consumers have only been recently exposed to, the products packaging often does the selling. With items such as soup, spaghetti, ketchup or paper products, brand loyalty has been established from the time you were young. Perhaps mom bought Hines Ketchup when you were young and you continue to use it as an adult. Maybe you found a product you're happy with and have decided to look no further. In either case, a product's packaging or its competitors packaging may make little difference in your decision making process. The objective of a products packaging is to entice and attract the uncertain buyer and not necessarily to persuade those who aren't interested, into changing brands, although a good package may do so.

Product or brand loyalty may be enhanced through the effective use of color. Louis Cheskin, author of the book, *Colors -- What They Can Do For You*, states, "Because colors are remembered much more easily than forms, they should be used for building product identity. A design with a multitude of colors has no specific identity, while one with one or two colors is recalled with ease."11 Take Campbell's Soup for instance -- red and white. Oscar Meyer -- red and yellow. Coca Cola -- white and red. General Mills -- white and blue. This theory extends beyond the field of package design and can also be seen in corporate identity marks and fast food chains as a means of recognition among their competitors.

A final aspect of color may also be taken into consideration -- color preference. A weighted average was taken among a survey group revealing that for the six common hues, blue was most

preferred, followed by red, green, violet, orange and yellow, in declining order.¹² It should be noted though, that color preference is not universal, and can be effected by life experiences, both positive and negative.¹³ This also holds true for different nationalities as well as for different ethnic backgrounds. When packaging is to be distributed in other countries, or to special target audiences, color should be given extra attention due to the symbolism it may carry in these markets. The following chart explains this in greater detail.

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TABLE 8.1 Color and Symbolism in Packaging for Asian markets*

Country	Color	Color Connotation	Symbol	Symbol Connotation
China	White	Mourning (avoid)	Tigers, lions, and dragons	Strength (use)
Hong Kong	Blue	Unpopular (avoid)	Tigers, lions, and dragons	Strength (use)
India	Green and orange	Good (use)	Cows	Sacred to Hindus (avoid)
Japan	Gold, silver, white, and purple	Luxury and high quality (use)	Cherry blossom	Beauty (use)
	Black	Use for print only, prefer gay, bright colors	Chrysanthemum	Royalty (avoid)
Malaysia (Population is mixed Malay, Indian, Chinese)	Yellow	Royalty (avoid)	Cows	Sacred to Hindus (avoid)
	Gold	Longevity (use)	Pigs	Unclean to Moslems (avoid)
Pakistan	Green	Islamic religion (avoid)		
Singapore	Green and orange	Good (use)	Pigs	Unclean to Moslems (avoid)
	Red, red and gold, red and white	Prosperity and happiness (use)	Tortoises	Dirt, evil (avoid)
	Red and yellow, yellow	Communist (avoid)	Snakes	Poison (avoid)
			Pigs and cows	Same as for India and Pakistan (avoid)
Taiwan	Black	Avoid	Elephants	Strength (use)
Thailand			Elephants	National emblem (avoid)
Tahiti	Red, green, gold, silver and other bright colors	Use		
Arab and Moslem states	White	Avoid	Animals	Avoid
			Pigs	Religious pollution (avoid)
			Star of David	Political (avoid)

*Information courtesy of Hyntride Packaging Co. (New Zealand)

In these instances, color selection and usage for package design could prove critical. However, in the American market, color preference has a limited effect on product selection.

In addition to the selection and use of color, typography should also be given consideration due to the character which it gives to the package. This is dependant upon the history of the face chosen as well as the features which are characteristic to that font. By examining the two faces below, it is easy to see the noticable differences between them. "The roman typeface, Garamond, has a history dating back to 1615 with its invention by Jean Jannon. It is a typical Old Style face, having very little contrast between the thicks and thins, heavily bracketed serifs,

and oblique stress. The letterforms are open and round, making the face extremely readable."¹⁴ In comparison, "Helvetica is a contemporary typeface of Swiss origin and was presented in the United States in the early 1960s. Its clean design makes it very readable, and like most other sans serif types, has relatively little stress and optically equal strokes."¹⁵

ABCDEFGHIJKLMNOPQRSTUVWXYZ&
abcdefghijklmnopqrstuvwxyz1234567890\$,-:;!?

24 POINT GARAMOND

ABCDEFGHIJKLMNOPQRSTUVWXYZ&
abcdefghijklmnopqrstuvwxyz
1234567890\$,-:;!?

24 POINT HELVETICA

By choosing one typeface over the other, a package could take on a more traditional or classic look as opposed to a modern or contemporary appearance. This does not mean that a contemporary package could not be designed with a classical face or that there are any hard, fast rules of design governing typography applications. It is merely meant to suggest that typography does contribute to the overall appearance of a package and should be

given consideration during the design process.

There are other factors regarding a typographic selection which should be mentioned before moving on. Readability based upon size of the type used, readability in terms of type face selection, the use of color in contrast to the background upon which it is to appear and the length of line standards for particular point sizes are all critical factors to be considered. Several of these criteria are intertwined and effect one another. Color selection should be chosen to enhance the readability of the product's name and other vital information such as instructions for usage and precautions to be taken, if any. Federal law governs the size of type to be used on packaging as well as what information is to be prominent on given items. Therefore, the designer should be familiar with these guidelines. Further information on packaging regulations can be found in Briston and Neill's book, Packaging Management, on pages 208 - 225.

Another aspect of packaging which Federal law has strict restrictions upon is the physical packaging or housing of products for retail sale. As mentioned in the introduction, a package must contain a product, carry it through the distribution system, keep it protected as well as fresh and usable. To accomplish these goals, any one of the following products or forms could be used: metal, plastics, paper, wood, glass, laminates or composites. Each of these materials has a certain amount of appropriateness for housing selected products. For instance, you probably wouldn't want to package cotton balls in a

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glass jar, or peanut butter in a non-reclosable metal can. Housing should encourage the consumer to use the product. "It should be useful in size and shape as well as being functional and attractive. Re-use features, special giveaways and easy-dispensing devices are all instrumental in repeat sales."¹⁶ These too are marketing features, along with overall product image. However, special attention should be given to the nature of the product and the nature of the form in which it is contained.

Protection of the product falls into two main categories: protection against chemical hazards and protection against physical hazards. "Chemical hazards include chemical interaction between the product and its container, acting as a barrier against entry into the package (such as water damage), loss of liquid or vapor, and contamination by micro organisms. Physical hazards include compression in stacking or transportation, impact damage from being dropped, puncturing and effects of light and temperature upon the product."¹⁷ The following chart lists the types of products used in packaging and the possible forms they might take.

Group	Classification	Types
1 Metal	(a) Materials	Steel (plain or lacquered), aluminium, tinplate (plain or lacquered)
	(b) Containers	Drums, kegs, cans, aerosols, pails, tubes
2 Plastic	(a) Materials	Polychethylene (low and high density), PVC, polyvinylidene chloride, polystyrene, polypropylene, polyester, ABS, Phenol formaldehyde, urea formaldehyde, polycarbonate, polyacetate
	(b) Containers	Blow moulded, injection moulded, compression moulded, film overwrap or shrinkwrap, thermoformed tubs, trays, etc. bags, sacks, tubes
3 Paper	(a) Materials	Paper, board; plain, coated or laminated, corrugated board; plain, waxed, coated, laminated
	(b) Containers	Labels, cartons, outercases, moulded pulp, sacks, drums, cans, envelopes
4 Wood	(a) Materials	Wood, cellulose film; coated, uncoated or laminated
	(b) Containers	Casks, kegs, crates, barrels, film overwraps, pouches, bags
5 Glass	(a) Materials	Glass; coated or uncoated, decorated or metallised
	(b) Containers	Bottles, jars, carboys, ampoules, tubes
6 Laminates	(a) Materials	Paper/plastic film, aluminium foil/paper, aluminium foil/plastic film, plastic film/plastic film, plastic film/cellulose film, cellulose film, multiple combinations
	(b) Containers	Overwraps, pouches, bags, cups
7 Composite	(a) Materials	Paper/plastic, metal/plastic, Paper/plastic/metal, metal/wood/plastic
	(b) Containers	Drums, cans, sacks, kegs

Major packaging materials and containers

To find out more on specific methods of packaging, Briston and Neill's book may be consulted, pages 176 - 186. Detailed information regarding plastics, blow molding, injection molding, extruded films, overwrapping, thermoforming, and glass containers may prove to be useful for a more indepth examination of this topic.

A final aspect of product containment is the asthetic importance of the package to enhance product sales. Size and shape must be both functional and attractive, as mentioned before. "Obviously, size is dictated by quantity of the contents, but shape can be varied extensively. Shape can make a package more convenient to hold or to stack on a shelf. It may permit better communicatin of package advertising. Shape can imply lightness or thinness, delicacy, or strength."¹⁸ Package forms can reveal the physical state of the product as well as echo the product itself through texture incorporated into the form itself. An arbitrary example of this would be water droplets molded into a hard plastic bottle of shower gel.

Texture can act as a means of controlling the handling of the package as well as being an asthetic element. Ribbing on bottles of detergent or other household products allow the consumer greater ease in pouring or in use of the product. This can be a primary feature of convenience as well as adding recognizabel character to the package. Briston and Neill summarize a packages end-use functions as follows,

1. Display of product for selling and visibility.

2. Ease of opening

(Ex: tear tapes when film overwraps are used, or pop tops on cans)

3. Convenience

(Ex: aerosols, shaving cream, mousse, boil-in-the-bag pouches)

4. Dispensing

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The actual design or pattern which is to be placed upon the package should take all of the previous items discussed, and combine them into a final package for consumer purchase. Color, size, shape, texture, typography and materials used should all be taken into consideration. As Leonard M. Guss discusses in his book, *Packaging is Marketing*, "Good packaging is tending toward more convenience in use, toward greater compactness to reduce shelf-space demands, and toward increasing the use of illustration, graphics and color."²⁰

Package graphics and their design, are becoming a steadily increasing field due to the continuously growing, competitive product markets. This is easily seen by walking down any aisle of your nearest supermarket. Dozens of products, all essentially the same, are competing for your attention. But which ones do you choose? Brand loyalty has some effect, as was discussed earlier, but unit impact also plays a major role. "Because packages are displayed in stacks, the design must be effective in

the over-all pattern which results when the packages are stacked."²¹ It is in this situation, that color domination can play a major role in product or brand recognition. It can also heighten any feeling of femininity or masculinity which a product may be conveying intentionally or unintentionally. Leonard Guss states, "Products do have 'sex', and packaging should reflect this. The image afforded by the package should be consistent with the product and with the buyers personal image of himself. Some products are specifically designed for masculine or feminine use."²² This is one of the five major audience factors taken into consideration when a package is designed. The others are age, racial backgrounds, social class and regionalism in terms of location within the country.²³ All of these are equally important in determining a products target audience or consumer public which it is trying to reach.

In summarization, the elements of color, typography, form, shape, pattern, texture and design all play important roles in the ultimate sale or purchase of any product. These items should be taken into account in every phase of the products packaging, from the form and type of container it is housed in, all the way up to the finished label design placed on the outside.

The finished presentation should attract attention, tell the products story, build confidence in the product, look clean and sanitary, should be convenient to handle, carry out at the store and to use, and finally, should look like a good value.²⁴

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END NOTES

- ¹J.H. Briston and T.J. Neill. Packaging Management. (Great Britain: Gower Press, 1972), p. 1.
- ²Marshall G. Baldwin. New Directions in Packaging. (New York, NY: American Management Association, 1970), p. 19
- ³Ibid., p. 19
- ⁴Ibid., p. 19
- ⁵Gregg Berryman. Notes on Graphic Design and Visual Communication. (Los Altos, CA: William Kaufmann, Inc., 1979) p. 35
- ⁶Roger C. Griffin, Stanley Sacharow and Aaron L. Brody. Principles of Package Development. (Westport, CT: AVI Publishing Co., 1985), p. 269 - 270
- ⁷Op. cit., p. 35
- ⁸Ibid., p. 35
- ⁹Griffin, Sacharow and Brody., p. 264
- ¹⁰Robert W. Burnham, Randall M. Hanes and C. James Bartleson. Color: A Guide to Basic Facts and Concepts. (New York, NY: John Wiley and Sons, Inc., 1963), p. 213
- ¹¹Louis Cheskin. Colors - What They Can Do For You. (New York, NY: Liveright Publishing Corp., 1948), p.177 - 178
- ¹²Burnham, Hanes and Bartleson., p. 209
- ¹³Ibid., p.212
- ¹⁴James Craig. Designing With Type. (New York, NY: Watson-Guptill Publications, 1971), p.34
- ¹⁵Ibid., p. 74
- ¹⁶Griffin, Sacharow and Brody., p. 267
- ¹⁷Briston and Neill., p. 7 - 11
- ¹⁸Op. cit., p. 267
- ¹⁹Op. cit., p. 12 - 14

END NOTED CONT.

²⁰Leonard M. Guss. Packaging is Marketing. (New York, NY: American Management Association, 1967), p. 58 - 59

²¹Cheskin., p. 182

²²Op. cit., p. 106

²³Op. cit., p. 189

²⁴Op. cit., p. 55

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