

# Holistic and bimodal study in packaging

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By Sofia Escudero

The application of a multi sensorial study of packaging puts us nearer, more accurately, to a brand's global perception.

A study performed by researchers Sandra Little and Ulrich R. Orth<sup>1</sup> verifies integration and extension of the holistic bimodal analysis of design, considering visual and haptic (touch-related) aspects, both in conjunction and separately.

In terms of holistic design analysis we find recent studies, such as the researches of Orth & Malkewitz,<sup>2</sup> that reinforce the importance of this approach. However, even though bimodal study is less extended, it is relevant to verify the importance of studying how packaging designs are perceived considering tactile attributes at the same time than visual attributes. Researches by Krishna<sup>3</sup> help to elucidate the importance of assessing the interaction of both senses during the purchase process (for instance, the perception of firmness or fragileness). Either way, it clarifies the fact of tactical design elements affecting brand assessment. Other studies confirm that haptic elements can contribute to brand image, as well as generate judgment over the brand and choice preferences. Regardless, studies performed by Van Rompay<sup>4</sup> determine that shape and typeface of a brand transmit impressions of appeal, luxury or indifference, as well as price expectation.

Regarding tactile and visual signals, previous studies by Lee & Labroo, suggest packaging that sustain a greater perceived congruence of symbolic meanings, transmitted through design features, facilitate brand assessment and inspire more favorable assessments. Likewise, a greater precision is obtained in behavioral measures.

In the study by Little & Orth, which comprehends packaging of 98 water bottles, considering visual and tactile perceptual processing, verifies the values obtained by Orth & Malkewitz in the study of visual elements in wine bottles, as well as results obtained in other studies. Although it is worthy of notice that there is a new factor in the study; typography, which is analyzed specifically, in addition to the factors of naturality, harmony, complexity, size, symmetry, proportion and audacity. All twenty five visual elements, synthesized in these eight factors, report a value and visual meaning and justify 74.5% of data. Also, all fifteen haptic elements are focused in size, hardness, outline and texture. These four factors explain 79.3% of data variance.

## Conclusions

Results reveal that the brand is perceived as more sophisticated when the haptic imprinting

matches the visual imprinting. This result verifies previous reports where multi sensorial congruency facilitates the assessment of brands as more sophisticated. Either way, a brand is perceived as more competent as the semantic congruence between both imprintings is greater.

On the contrary, a brand is perceived as less exciting when semantic congruence between haptic and visual effects is high. The fact that consumers assess a brand as more exciting and haptic keys match images of low congruence is a quite unexpected result, therefore this outcome must be considered when constructing a brand.

Finally, brands perceived as more appealing possess a greater congruence and, in the same way, consumers also expect their prices to be higher.

In the other hand, the study reveals that a great part of designers work mostly in visual aspects and, not so much in the haptic aspects of the packaging or of any other perceptive sense, in order to provoke brand associations. It also throws significant findings in the idea that a design initially conceptualized from a bimodal approach and therefore, with a semantic congruence between its meanings, affects positively to brand assessment on consumer's behalf. This fact is relevant due to the result being coherent with other studies, such as Van Rompay's, which state that congruence facilitates fluidity and fluidity itself related with a greater aesthetic taste.

Another important aspect of the study is that it established a holistic type of bimodal packaging design, a modal study of brand imprintings and the multi sensorial semantic congruence effect. This can be applied to communicate brand requirements to designers, since research establishes five bimodal packaging types for a range of products.

Thus, we see the ability to describe design using an integrate type taxonomy is important, because it allows a company to improve its communication with designers by using a *lingua franca*, as well as a better, more defined relationship and study between bimodal packaging aspects that must be stated.

Published on 20/03/2015

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