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Perceptive and Ergonomics concerns in Corporate Visual Identity

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ABSTRACT

This article is an explanation based on the bibliography of the specialties of communication design, Corporate Visual Identity, ergonomics and visual perception of graphic signs, with the intention of increasing communicational efficiency in designers' work.

Based on the assumptions of perceptual efficiency, ergonomics and symbolic, graphic brands are contextualized as strategic elements of Corporate Visual Identity.

The globalized knowledge society for the information that surrounds the Internet on a global scale, the cultural changes and technological developments appear to facilitate that the design of symbols creates problems in a semantic, perceptual and ergonomic dimension. In particular, new digital media seem to foster graphic solutions with a strong mesmerizing power, but moving at a pace that the evolution of human cognitive system is unable to follow.

Keywords: perception, ergonomics, graphic brands, corporate visual identity

1 A GAP BETWEEN VISUAL ERGONOMICS AND EMPTY AESTHETICS

Much of the literature devoted to design, places the Man as the centre of all the projectual activities of the designer. From this perspective, design starts to meet a human need contributing to improve life quality in an eco and sustainable while

conciliating with commercial or market issues. However, the history of communication design and other visual arts is marked by stylistic variations to which images and brands representing corporations cannot be dissociated.

In order to make themselves known, even to compete with other and establish an emotional connection with audiences, brands seek notoriety through the combination of signs of Visual Identity conveyed by various graphic means, sonorous, digital or video (Perez, 2005).

According to Gasch (1991) the design of a graphic brand implies some perceptual requirements such as legibility (the possibility to read at a considerable speed and distance), memorability (enable recognition, being expressive and impactful for easy memorization) and flexibility (the possibility to reproduce in various sizes, shapes and graphics production processes), as well as semantic, such as the graphic expression (suitable according to company values), bimedia meanings (relationship between graphic style, image and text) and formal validity (adequacy to the codes of time and culture).

According to Chaves and Bellucia (2003) the role of graphic brands is to identify, differentiate and contribute to the reputation of the represented entity, although reality shows evidence that graphic expression does not always follow these assumptions, given that it changes according to the style of the author. For this reason, it's not difficult to collect graphic brands whose symbols are formally complex, overly detailed, somewhat contrasting or ambiguous.

2 DESIGN AS CULTURAL INTERFACE FOCUSED ON THE HUMAN BEING

The origins of the term "communication" come from the Latin *communicatio*, *communi* which, in turn, comes from *commune*, meaning "common good", "public good", "participation", "sharing" and "to have in common". So, briefly, in a general perspective, "communication is a form of interaction between two separate beings, and the support of interaction is the exchange of information" (Castro, 2007, p.26). Communicating is to share or to have in common, as a transmitter and receiver, a piece of information.

In this study, objects of communication design are meant as strategic tools designed to a purpose, interfaces between sender and receiver (appropriate to their shared inter-subjective codes). To that purpose, the designer Providencia (2000, p.16) considers that through design, communication design, it creates artefacts of communication, that is to say, instruments that promote the decoding of the message by recipients.

According to Frascara (2008, pp. 23–24), "visual design communication deals with the construction of visual messages in order to drive knowledge, attitudes and behaviour of people" and the task of the communication designer consists in the interpretation and representation of messages according to a program, "a work that is beyond cosmetics, which is related to the planning and structuring of communications, with its production and evaluation".

Authors such as Joan Costa (2008) reported that the definition of Corporate Visual Identity (CVI) is particularly complex, since visual language does not have a repertoire of universal, unequivocal signs as it occurs with writing. Moreover, as stated by Acaso (2006, p.27) visual language is "the oldest semi-structured communication system known... and the one with the most universal character".

And as with the visual language in general, Corporate Visual Identity depends on successful integration of signs into a coherent system whose value is created by the whole instead of all the parties "the message - that is, the interpretation created by the public - is a cognitive/emotional/operative integral unit, which can only be divided into several components with the purpose of studying its structure" (Frascara, 2006, p.75), for example, as it happened with the Gestalt Theory.

For Acaso (2006), the characteristic that most distinguishes visual language from the others is its resemblance to reality, and the great variety of ways to represent it. The designer decides which level of approximation to reality and gender he is interested in incorporating to the visual message.

In summary, the effectiveness of Corporate Visual Identity depends on a number of signs, inter-subjective and shared by sender and receiver.

The verification of the peculiarities of visual communication, emphasize the need for studies that meet communication design's point of view, that is to say, contemplate the perspective of "message builders" and its receptors (Frascara, 2008, p.93).

The social responsibility of the designer, Alexandre Wollner (Stolarski, 2005) advocates the need to scale signs of identity based on the location and context of use. Calculating the position and size of a sign on a building is a plausible example that must be projected so that it is noticeable and readable from a passer-by's point of view without contributing excessively to visual pollution or constitute an obstacle (Plácido da Silva, Nakata, Paschoarelli, and Raposo, 2010). To that purpose the conceptual description of the design department of communication HFM (where he studied) describes that "the experiences in the department aim to establish a clear possible coordination between visual messages and its purpose. For this, methods must be developed, adding knowledge through the theory of perception and meaning" (Wollner, 2003, p.83).

3 DRAWING ON A HUMAN SCALE

As described by Costa (2011, p.131) "drawing a brand is to give visible form to an idea, which is that way conveyed. "To that definition of the author it might be added that perceiving that one graphic sign is seeing it, identifying it and correctly understand their meaning, so that "designing for the eyes is designing for the brain" (Costa, p.12).

For Arnheim (1965), the perception of shapes begins with the recognition of the most evident structures, both the limits and outlines of their skeletons. Also, Gestalt psychologists describe how the human eye prefers to establish their structural

connections as simple as possible (Gomes Filho, 2003).

The sequence of cognition presented by Wheeler (2003, p.7) begins in the recognition of shape, the semantic evocation created by colour and finally by denotative content. The brain takes more time to process language than identifying shapes.

Gomes Filho (2010, p.161) states that visual perception depends essentially on the "capacity, facility and quickness" of the decode, which depend on the graphic shape and cultural knowledge of the receiver. However, this dependence on the recipient's culture is reduced when it is about natural and symbolic signs. Thus, the functioning of the graphic sign depends on whether its design is systemic, the relationship between the sign, the context and the user, and the appropriate relationship between the various graphical resources (tone, texture, shape, position, orientation, size, proportion and movement).

The eye does not work like a photography that captures everything. Aicher (2004, p.140) argues that human behaviour is especially prone to saving efforts, leading him to simplify and economize and interesting only by what contrasts and stands out - "We only see what it has meaning for us, make a selection (...), filter and simplify the redundant material." The author wishes to emphasize that the interest requires a definition of levels of importance to ensure concentration.

The filter is symbolic and cognitive. Neumeier (2006, p.34) considers that "differentiation occurs through the human cognitive system, where the brain acts as a filter that protects the vast amount of irrelevant information that surrounds people every day." For the author, visual cognition involves the Gestalt laws but also aesthetics to the level of differentiation.

The eye's tendency in retaining a summary of the envisioned shape explains why the generalization of a graphic brand should be as simple as possible so that it can be quickly perceived and memorized. Thus, through a scientific research on the eye and the entire system of visual perception, would be expected that design would evidence concerns or adjustments to the human eye. However, the rapid and growing development of cities and companies has led to an excess of graphic communication elements in constant competition, upsetting people and creating what is known as visual pollution (Gomes Filho, 2003; Plácido da Silva, Nakata, Paschoarelli and Raposo, 2010).

According to Plácido da Silva, Nakata, Paschoarelli and Raposo (2010) for financial reasons or lack of appreciation towards design, most SMEs do not invest completely in a Visual Identity project. Whenever it is urgent to communicate, "a non-specialized service is hired, to charge cheaper, culminating in an excess of harmony errors both in shapes, typography and colours". Therefore it is not uncommon for errors to arise within the hierarchy of graphic signs, lack of coordination or identity, as well as scaling, contrast and framing in the context problems.

Considering the perspective of visual and cognitive ergonomics, Gomes Filho (2010) believes that one of the primary objectives of graphic signs is to ensure the function, contributing to the people's comfort and safety. In this sense, the sign must have in mind stereotypes (contradicting or reinforcing), the location and scale

display in accordance to the best conditions for its viewing so that the person does not have to undertake a major effort.

The perception of the meaning in graphic forms is dependent on the experiences, culture and filters of each individual (Arnheim, 1965), but derives largely from the evolution of the human species. In this regard, Frutiger (2005, p.18) illustrates that, contrary to what occurs with other animals, the human eye is conditioned at a cognitive and symbolic level because the Man moves in a horizontal plane and because, usually, danger zones came from the sides rather than top. "This millenary effort, Man's genetic legacy, led to the fact that our visual field is much wider in the horizontal dimension than vertical."

For Frutiger (2005), Man tends to be located as an active vertical element towards a passive horizontal plan (real or mentally established by the observer). Based on this principle, individuals tend to judge all graphic shapes by comparison to the horizontal plan. Considering how the most dynamic and active shapes contrast with the horizontal plan, on which are based those seen as more inert, stable and discrete.

Seeing the graphical shape, the observer draws parallels with the real world, assessing the signs towards a horizontal and vertical plan. For this reason, Dondis (1976) establishes symbolic relations with geometric shapes in which the square means boredom, honesty, righteousness, the triangle is action, conflict and tension, while the circle corresponds to the cosmos, is continuity, protection and warmth. According to Perez (2005), angular shapes are associated with masculinity, toughness, stability and conflict, while the circular are soft, dynamic and feminine.

Everything is learned and created according to our reality. And in this perspective nothing is new, it just changes according to the way you look at that reality. Artificial graphic shapes are created having as a model the human proportions, experience and culture, which assume in the two-dimensional plan some of the principles of reality, such as gravity (Bruni and Krebs, 1999).

By nature, graphic shapes are bound to the two-dimensional plan. However, over time, both large and small shapes, light and dark, overlapping or in perspective, are examples of the different graphic techniques used to suggest three-dimensionality, depth and hierarchy.

If in its essence the graphic sign only suggests volume, it might result tempting to give it three-dimensionality, which can lead to ambiguous solutions. Three-dimensionality implies attention to a greater number of issues that are not only symbolic, but especially perceptive such as the viewing angle, depth, light and shadow or optical illusions (Frutiger, 2005, p.63).

While the two-dimensional graphic sign is admittedly artificial, the efficiency of the three-dimensional representation requires a greater similarity to the fact that surrounds the Man (Jacobson, 1999).

The very notion of symmetry is no stranger to the contemplation of the human body and objects in the world in which we live. For Frutiger (2005, p.22), "certainly we feel very safe or quiet when we see a geometric construction figure, while not ignoring that its interior may contain asymmetrically arranged elements for functional reasons." A permanent tension between the internal and external elements could be accepted.

Graphic signs and human behaviour have relationships with these principles, as it is proved by the symmetry of the Latin alphabet vowels, but also in the Phoenician writing, which is part of the history of our alphabet (Costa and Raposo, 2008).

Being acquired in the Western society to observe the signs from left to right, this is the result of established conventions throughout history.

However, asymmetry can be used as a means to obtain contrast, since graphical shapes eventually end up being more dynamic and unbalanced.

Spivey (2005) relies on art history to show how cultural factors influence the representation of graphic shapes, which although related to real ones may be more geometric or organic. For this author, Greek civilization was the first to master drawing, painting and sculpture techniques, allowing them to accurately represent real, which eventually resulted too human and hardly fascinating. The reality does not satisfy and the search for graphic shapes with greater power of fascination led to the choice of formal exaggeration, to the superhuman, the choice of the Greek, as well as previous and subsequent civilizations.

The investigations of the neuroscientist V.S. Ramachandran indicate that the graphic and symbolic accentuation of shapes and the unreal largely contribute to the power of fascination in the brains of individuals (Spivey, 2005). Costa and Moles (Moles and Janiszewski, 1990) explain that in this context, fascination refers to expressiveness, to the power of the graphic shapes to attract and retain the attention of the eye. A shape that not only attracts, but also retains the human eye.

4 CONCLUSIONS

The specificity and social character of the discipline of communication design, give it a degree of considerable importance because of its contribution to a more intelligible world, to increase the quality of life, provide information and dissemination of culture.

In the manifesto, "First Things First", published by 22 signatories in Design, the Architects' Journal, the SIA Journal, Ark, Modern Publicity, The Guardian, in April 1964, updated and republished in 2000 in *Émigré* and *Eye* magazines, sought to establish itself as an awakening of conscience. An inversion of priorities to value the utility, durability and visual messages of democracy and less consumerism agenda.

In 1997, in the Mexican magazine *DX*, Joan Costa also published his manifesto "For the design of the XXI century", republished in 2000, proposing the appointment of design and designers to improve the quality of life of individuals. Communication design is contextualized in the Age of Information and Service Culture, assuming an effective role in improving the quality of life, referring to the communication of functional assets, aesthetic and cultural that guarantees a contribution as a service and useful knowledge to the society.

These principles seem to be consistent with the idea that communication design works for the eyes and the brain.

For the communication design to play a truly responsible and focused on the user role it is only possible to meet the expectations and limitations of people. To improve people's quality of life it is necessary to contribute to resting the eye, drawing signs of identity that are not dubious, properly sized for the environment, viewing context, culture and support in question.

Thus, in most cases, it is essential to consider the principles of simplicity, visibility, identification, semantics, technical and cultural constraints. Draw for the eyes as the brain perceives, without complicating graphic shapes, without limitation regarding fashions, trends or personal tastes.

As stated by Fascioni and Vieira (2001), in order to quickly grasp their audience, companies adopt colours, sounds and visual effects, often poorly selected and unhelpful. This pursuit of media coverage may result in sensationalism and kitsch.

Montesinos and Hurtuna (2004) believe that graphic signs involve the articulation of its symbolic and graphic aspects in order to meet ergonomic and perceptive questions. According to the authors, in each job, the designer needs to establish a hierarchy among the symbolic and graphic dimensions, which are not incompatible.

The evolution of graphic signs accompanied human history, developing with ways of thinking, culture and economy. Graphically, the brand is dependent on the human know-how, trends, technical and technological advances, but also on cultural developments and tastes.

Driven by strong convictions, in 1924, sociologist Otto Neurath began a project to develop a universal graphical language named ISOTYPE - International System of Typographic Picture Education, but only in 1928 the first symbols were designed. In collaboration with the Gestalt theory, ISOTYPE would greatly influence design communication.

According to Adrian Frutiger (2002, p.86), the 1939-1945 war would have stopped "any creative impulse in Europe," but out of the conflict, Switzerland followed its course in these areas. In the Art schools of Basel and Zürich, and in the context of the International Typographic Style design was developed coupled with a clear rejection of constructivism. Steiner in Zürich and Hoffmann in Basel, would have been the founders of a new direction in the field of graphic design, in which Eidenbenz, Falle, Piali and other reformed poster conception and Emil Ruder, the typographic design. In "symbols", figurative representation was abandoned in favour of simplification or graphic synthesis where the drawing would be limited to white-black contrast or to shape-background. The linear signs would gain greater formal relationship, with a constant thickness and proportion (Frutiger, 2002).

The industrial expansion of the Post-War gave a new impetus to the market of products and services, enabling the emergence of big companies and to the growth of the reputation of designers and design offices dedicated to corporate visual identity such as Paul Rand, Lester Beall, Saul Bass, Lippincott & Margulles, Chermayeff & Geismar, among others...

The complexity and size of the companies and world events from the fifties, sixties, and the HFG German School in Ulm, headed by Otl Aicher, contributed to

an extensive and systematic organization controlling all visual applications, so it has become a following example worldwide and continue on projects such as Lufthansa German Airlines in 1962.

With the introduction of the personal computer (1980) the emergence of Desktop Publishing was made possible (1985) and the slow assembling Letraset and photocomposition began to be substituted by PostScript and various software that allowed various combinations of fonts in different bodies, images and layouts (Clair and Busic-Snyder, 2009).

The emergence of the first personal computers was a pretext to the appearance of printers that such as monitors supported only low resolutions, forcing the creation of letters that remained legible in these conditions (Gaudêncio, 2004).

Regarded as pioneers of digital graphic design, April Greiman, Rudy VanderLans, John Hersey and Zuzana Licko began a project-oriented approach in which design takes dual advantage of computers: as a tool and as a means of expression, particularly by allusion to pixels. Other designers such as Neville Brody, Matthew Carter and David Carson followed their footsteps (Meggs, 2000).

Interestingly, as computer technology was perfected and allowed greater accuracy and legibility in design, designers experienced in seemingly opposite directions. On the other hand, as stated by Fascioni and Vieira (2001, p.7), since the late '50s, "perhaps by the excess of information and functions," the services and electronic equipment or gadgets industry has adopted a corporate style approaching kitsch.

Presented to the public in 1981, since its creation MTV realized the potential of the television, using a three-dimensional logo with great graphical variation. This was followed by the flexibility of customization offered by digital printing and the Internet, which enabled the emergence of brands created in the aesthetics of Digital Art, Web 2.0 or translucent bright or metallic effects.

It will be undeniable that the new digital media eliminated restrictions on the graphic reproduction and new ways to create meaning to enhance the interaction between brands and people. A relationship where the metamorphic brands may be the latest innovation.

The use of metamorphic graphic signs is found especially in brands aimed at a very broad audience and especially associated with such technologies as Swisscom, AOL, Optimus, Oi, Carat, or Google, but also cities like NY, São Paulo, and in Portugal, Guimarães, the Casa da Música and the bookstore Wook.

The graphic brands NY and AOL are clear examples of the absence of a structure or common constant skeleton to facilitate the perception of the identity sign. The AOL logo gets to be replaced by images capable of conveying feelings or sensations, a sort of image-brand that presents new challenges for research dedicated to ergonomics and perception of graphic signs of identity.

Interestingly, there has been a restyling of the identity signs of major brands, which tend to go towards the formal complexity, namely by the introduction of close to reality three-dimensionality. For example, the automotive industry has been adapting to paper a graphical version of the symbol that resembles what a car traditionally consists in its physical composition.

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