Graphic design production as a sign

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Abstract. The article attempts to show that graphic design production works through a particular semiotic process. The performance of a new sign category, the *Graphic Sign*, makes possible the articulation of the iconic, the plastic, and the linguistic signs in case of a specific dialogue that exists between the letters and the images in some graphic design productions. Overhauling theories of Eco, Groupe μ and Klinkenberg, we will be able to understand that Graphic Design generates meaning in a formal dimension, yet it also generates particular cognitive structures. Therefore, understanding this new kind of sign, we can recognize its communicational dimension and the powerful cultural creation platform this Design is, beyond its ability to make things visible and in the best cases clear and beautiful.

Keywords: Graphic Sign, Graphic Design, semiotic model

Introduction

The abundance of design pieces and their relevance in society and culture is a contemporary phenomenon that has grown notably during, and since, the last century. The production of such graphic images is far from whimsical or arbitrary, and it makes evident the particularities of the visual sign produced by this discipline. This is why from the perspective of Graphic Design – as producer and shaper of meaning – it is of paramount importance to reflect, within the scope of semiotic studies, how these seemingly spontaneous processes produce meaning and, thus, culture.

Since the 1970s, there have been attempts in the field of semiotics to develop methodologies related to the communicational dimension of the image. Barthes (1970, 1980, 1982), Eco (1971, 1974, 1976), Arnheim (1986, 1997) and Moles (1973, 1976, 1981), among others, have argued that 'the visual' is, in itself, a form of

significance that goes beyond the motivation problem or the indexicality level. Even though they were attempting to standardize the internal systems of meaning production (see e.g. Barthes 1970), these pioneering theories could not have been totally independent of linguistic studies.

This is evidenced by the text functions of 'anchorage' and 'relay' that Barthes outlined in one of the first works on visual semiotics, his *Rhetoric of the Image*, first published in 1964.

In this sense, the abovementioned authors assumed the image to be a text – and conveyed it as such – via the idea of coordination between what is seen through visual stimuli and what is already known from codification processes. Consequently, within this reasoning, the real object and the sign have the same meaning (Eco 1971). Meanwhile, Groupe μ considered the way of analyzing the image as an autonomous 'grammar' that does not depend on the linguistic field. In other words, they considered it as an independent semiotic process: a visual one, in which the expressive dimension or visual stimuli may correspond to the content dimension in any way other than univocal (Groupe μ 1992).

The polarity between the two structures – the linguistic and the iconic – on the one hand, and the polysemic quality or uniqueness of the meaning on the other, could, however, find a new mode through which to relate to each other, not just in terms of dependence or disregard, but also in terms of collaboration. That is, in some design productions the particular relation between text and image – the border between which is becoming increasingly blurred – generates a new relation that allows a richer articulation between the linguistic and the iconic signs. For this kind of *Graphic Images* significance is not a property of the text; rather, 'form' also has – and is itself – a conceptual content (Arnheim 1997). Furthermore, in this encounter, the image not only refers to, indicates or sustains textual significance as an *iconic sign*; it also enriches textual significance in a wider significance process (as will be elaborated in the images below). In these cases in which text and image merge, the performance of a new semiotic category – the *graphic sign* – begins.

Hence, by considering the possibility of a *semiotic structure* particular to the *graphic sign*, in terms of these graphic images, we could take into account the complex development of visual/communicational production of meaning. Besides, this kind of graphic sign, even being 'a conventionalized sign' (Eco 1974), in order to be a code, it also – and at the same time – conventionalizes the culture and society in which it is produced and distributed. This design perspective and its setup imply perceptual, cognitive and semiotic possibilities that suppose different communicational phenomena and not just mere stylistic strategies or transcriptions (Eco 1974).

This endeavour requires an overhaul (as in-depth as permitted by the scope of the current article) of the background of the *iconic sign* and the *plastic sign*, as

addressed by the abovementioned authors, together with the recent reformulation of Groupe μ proposed by Jean-Marie Klinkenberg (2006), which will be presented in the background section below. Next, in the discussion section, the revised theories are going to be questioned particularly from the point of view of the field of Graphic Design. Following this, the results section presents the *Graphic Sign Model* with its parts, relations and articulations. Finally we conclude the article by reflecting on how graphic design is a powerful tool for the creation of meaning, and how it therefore plays a seminal role both culturally and socially.

Background

Umberto Eco has also worked in the field of visual semiotics, but in a much more specific way than Barthes in his *Rhetoric of the Image*. He starts from Peirce's iconic sign understood as "a sign which bears some resemblance to the object referred" (Eco 1974: 189).

Eco affirms that iconicity is a matter of grades, so if the iconic sign has properties in common with something, it is not with the object, but with the object's perceptual model (Eco 1974: 191, 202). Thus, what is seen has to be coordinated with what was previously known (codes) to form what Eco calls a *perceived structure*, wherein the real object and the sign have a correspondent meaning. In other words, the meaning is the synthesis (selection and reduction) between the correspondence of what one sees and what one knows. This is possible via the equivalence of what he calls a "conventionalized graphic sign" – that for him is a graphic and conventionalized representation – with a relevant property of the *recognition code*. Hereby he qualifies the "graphic conventions" as "simplified reductions", because visual productions consist in selecting relevant features through which we recognize the objects represented. Hence, for him, the iconic sign is a mere convention (Eco 1974: 208).

However, the attempt to codify the iconic sign is complex and controversial, since it is an "analogue" system (i.e. it has gradations) and not a "digital" one (with discrete parts). Because of this, the iconic sign's expressive power is much less clearly defined than that of the phonemes of the language system, and is presented in a continuum without evidence of defined and discrete units, which is why Eco categorized it as a "weak code" (Eco 1974: 204). He also sustains that "the fact that usually is accompanied by verbal inscriptions confirms that the iconic sign is not always as representative as one may think; because although it is recognized, it appears with some ambiguity" (Eco 1974: 201).

All quotes given in this article have been translated into English by the author.

Subsequently, during the 1990s, Groupe μ , in their *Traité du signe visuel* (1992), delivered a harsh critique of several studies on the image, arguing that some attempts seemed to offer particular cases of analysis and proposals for *ad hoc* theories, while others exaggerated categorizations that fragmented the possibility of understanding the gestalt concept of "the whole" in the image.

In response, they proposed the existence of a visual significance system independent of linguistic structure, arguing that the visual phenomena are sign producers (Groupe μ 1992: 88). They support this by articulating a dialectical relation between the perceptual processes and the cognitive ones – the visual sign enunciation. Proceeding from this interest they rely on rigorous fields such as physiology of vision, perceptual psychology and cognition studies. Groupe μ 's analysis does not take into account the origins of production nor the intentions of the piece (e.g. painting, photograph, advertising etc.). Neither do they consider the legitimization and social divisions that defined the image, such as gender or artistic movements (comics, art, photography and/or futurism, pop, dada, etc.). That is to say that Groupe μ work with images making no discrimination, and taking them as a communication system in itself.

For this visual semiotic to work, Groupe μ first describes a global model of visual decodification, in which the perceptual dimension corresponds – "in any way except [the] univocal or conventional" (Groupe μ 1992: 41) – to a cognitive one. This model works by generating mental models as results of the comparison of the two dimension processes. Firstly, the one of expression is constituted by a set of visual stimuli or plastic phenomena that are a discrete system, as they work through three components – shape, colour and texture – and their respective relationships, validating Arnheim's position (1986) when he says that perception is itself visual thinking. Secondly, the conceptual dimension is formed by a set of *types* stored in *repertoires* as reference systems created by codes. In this way, these are the semiotic instances used to submit what is perceived as a "proof of compliance" with the object. In sum, a perceptual act as part of a cognitive process is subjected to a comparison test that will serve to recognize something.

This process of recognizing something by a sign that is in a way similar to the object is usually understood in semiotics as an Icon, but Groupe μ questions the equivalence of the iconic and the visual because, as they said, the iconic concept is totally independent from its physical nature. There are some icons that are not necessarily visual and some visual signs that are not necessarily iconic. Accordingly, visual communication exists without being linked with icons (Groupe μ 1992: 99), and there is not only one, but two kinds of visual sign: the *Plastic Sign* and the *Iconic Sign* – with their respective models and joints. In these two signs, both the

expression and the content dimensions are embodied because they are theoretical models instead of empirical objects.²

The iconic sign model (see Figure 1) works through the relationship between three elements – the *type*, the *referent* and the *signifier* – a triad in which the three parts work simultaneously and cannot be isolated as they are all conditions of the sign. Here, the discrimination between the *Referent* (an entity that holds perceptible physical characteristics) and the *Type* (which is an internalized entity of 'class' based on conceptual elements that are confronted with the product of perception in an integration process) determines the process of signification in a relationship of *conformity* (stabilization and recognition). On the other hand, the *Signifier* (a modeled set of visual stimuli that corresponds to a type, also via a conformity relationship) is related to the referent through appropriate and relevant *transformations* that allow the approval process. The traditional visual semiotic problem of motivation is reviewed in this particular process.

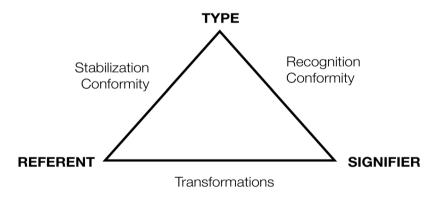


Figure 1. Iconic Sign Model. Groupe μ. 1992

On the other hand, the plastic sign includes units of shape, colour and texture. However, the sense of its signifiers is not produced through Types and Referents, but each plastic statement establishes its own system of units (*plastic signifiers*). These units do not have standardized aspects within the plane of expression. Rather, they constitute plastic statements and establish their own opposition system, and the meaning production occurs through three levels or *sémantismes* that are particular ways of sense making according to their location, and to the association with other *sémantismes* (Groupe μ 1992: 170). Without trying to provide an in-depth account, these different levels of sense making, are:

For more information, see Chapters IV and V in Groupe μ's *Traité du signe visuel* (1992).

- (1) Sémantisme Sácope-plastique. At this level, meaning is achieved through an opposition with another, different meaning. Thus, by giving the meaning of 'bad' to the colour black, white by opposition takes on the meaning of 'good';
- (2) Sémantisme Sácope-iconoplastique. At this level, sense occurs only when the plastic sign is in connection with an iconic significant. Thus, by saying 'Weeping Willow' we recognize the genus Salix, given the association of its form with a type and a referent;
- (3) Sémantisme Extravisuel. Here the meaning production lies outside the plastic dimension, as the significance rule is more associated with the arbitrary symbolism understood as conceptual construction. Thus, the figure of a circle can have a meaning of 'divinity' or 'perfection', depending on who sees it.

Despite the meticulous work undertaken by Groupe μ to form a visual system structure, the excessive fragmentation of the proposal makes a resulting fragmentary image, when actually they are *wholes* (in the *gestalt* sense of the term) that, although they are composed of parts, are much more than the sum of their parts.³

Finally, Klinkenberg (2006) who separated from Groupe μ , proposes a new model of the iconic sign (see Figure 2) through a tetradic system, as opposed to the traditional binary relationship between the signifier and the signified, and the proposal of the triadic variation of Groupe μ . Klinkenberg's model is a square whose lower vertices represent a *Referent* and a *Stimulus*⁴ in relation to *transformation* (corresponding to that of *Cotipia* of Groupe μ); a relationship that accounts for both the similarities and differences between the two entities, and makes possible the modelling of the referent (Klinkenberg 2006: 353). In particular, in graphic design practice this process is what allows the recognition of rhetorical images. Meanwhile, in the upper vertices are the *Type*, a mental representation that is part of the "*encyclopedia*"

We refer here to the gestalt principle "the whole is more than the sum of its parts". Harris (1999: 72) also comments – closely related to design productions in which text and image meet – that "[i]n such cases we have combined two forms of communication instead of postulating a separate and unique category of signs that are neither pictorial nor scriptural. That is, in these cases, the analysis can proceed by relating the separate components combined with the forms of communication that can exist independently. But it doesn't mean that it's possible to solve the graphics settings on different sets of marks, colors, relationships, etc., or divide the graphic space into two discrete areas assigned to two forms of communication" (Harris 1999: 72).

⁴ These two elements differ from each other, to the extent that the stimulus is the material support of the sign that one experiences, but unlike the referent, is not associated with any type (Klinkenberg 1999: 351–2).

and ensures the transformations that occur between the stimulus and referent, and the *Signifier*, a modelled set that can be reached through the stimulus, in a relationship that establishes the "conventional equivalence between a set of modeled spatial features and a set of semantic features" (Klinkenberg 2006: 355).

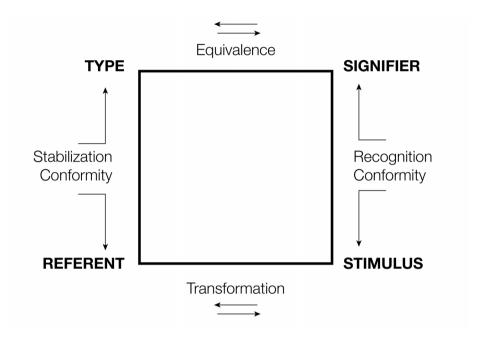


Figure 2. Iconic Sign Model. Groupe μ. 1992.

The use of the term *Type* is particular to Klinkenberg's proposal, replacing the word 'signified' in an attempt to move away from a linguistic category and closer to a perceptual one. It further shows that 'type' is broad, while 'signified' suggests the univocal. Thus Klinkenberg argues that meaning is not necessarily nameable. Another peculiarity of Klinkenberg's is his position on the issue of motivation as a key factor in the iconic sign; he states that this notion "undoubtedly comes from the fact that it wanted to enclose the phenomenon in a single definition" (Klinkenberg 2006: 369). Klinkenberg claims that as the relationship between the stimulus and the signifier is a recognition relationship, or one of identification – which is updated by the type – the motivation then works within a (conventionalized) cultural framework and is therefore arbitrary.

Klinkenberg also validates a double articulation in the iconic system by signifier units that work differently from the language system. These signifier units relate to one another by means of what he calls *determinations* (subordination, coordination,

preordination, etc.) (Klinkengberg 2006: 371). In this system, there is therefore a tabular and nonlinear syntax, where the units and their relations offer their own dynamic relationships of significance according to the pragmatic rules given by the *encyclopedia* (where there are types) that is flexible and in a state of permanent change.

From the brief review of some of the Iconic Sign theories, and in order to try to "make intelligible a spontaneous process" (Eco 1974: 193), we could then hold that Graphic Design production is a very specific kind of visual communication. Therefore, it is a semiotic system itself.

Discussion

First of all, it is important to note that none of these analyses takes into consideration from where, how or why the visual signs are produced or categorized, as mentioned above, and that for Groupe μ neither the legitimization nor social divisions defined the image (Groupe μ 1992: 11), similarly to Eco's (1974: 193, 194) and Klinkenberg's proposals. For the purposes of this article, it is crucial to specify that graphic design production differs from many others in its ways of production, as well as in its *intentions* – evidenced in the place where the pieces are shown, or by the visual resources themselves -, because they define the communicational context in which semiotic processes occur.5 These aspects provide an indication of how graphic design production is to be understood. For example, an image used in a magazine specializing in animals does not work in the same way – even though it is identical – as a piece in a fashion one. The codes implied in the visual decisions are going to work in different ways or levels. Without taking into account the text of the piece, a high contrast in the eye of a little cat, that could be seen as mere white and black little dots, could be related to watery eyes, which in the animal magazine context could mean terrible conjunctivitis in a kitten, while in the fashion one these visual characteristics could suggest that the cat has the most tender eyes in the world. With all this, it is necessary to demonstrate not just the obvious importance of the context, but also how the media in which this kind of images are distributed define the signification process. It also makes a differentiation in the communication possibilities between a photo – as a 'visual genre'–, and a graphic design piece that uses photographic techniques as part of its visual resources.

Hence, particularizing the kind of visual production, and understanding that its material, perceptual, and cultural dimensions are relevant in every communicational

The difference between "artificial" and "natural" is determined by the notion of intention, and how this is transformed by the projection of the receptor (Groupe μ 1992: 97).

situation, we could deduce that any change in any of these aspects generates repercussions in the signification process. The dialectical behaviour between signs (iconic or plastic), considered already by Groupe μ , is going to change, or define the meaning production, also because it depends not only on the signs but also on the relationships within a specific context, which, in the Graphic Design field, I call the *graphic space*.

This *context* includes not only the signs but also the support and the format these occupy; think for example on handling a box full of glasses and how relevant it is to identify the side of the box where the arrows and the 'fragile' signs are marked. The relations between those signs are not the only relations that define the meaning; in this case, their location is what particularizes the whole meaning in a specific situation. In this way, the integration of all elements that constitute graphic production in its temporal (conceptual or cultural) and spatial (physical) spaces or contexts, with all that this implies, is not only what produces meaning, but also what specifies it. Remember that according to Arnheim 1968, seeing means seeing in relation to everything else, and in the particular practice of graphic design "the meanings lie less in the forms-in-themselves or colours-in-themselves, but in their relations" as Kandinsky said in his Bauhaus classes. This is in agreement with Groupe μ when they held that because visual syntagmatic relations are not linear, plastic signs relate to each other in particular reciprocal relations, and so depend on norms. These norms are given by the occurrences of the plastic sign positions and their relations with others (Groupe μ 1992: 287), as happens in graphic spaces. However, in graphic production, this problematic relation of plastic signs in need of norms occurs in collaboration of the iconic sign and the context.

Accordingly, the importance of the units of significance in the visual messages that have contributed to the articulation of the debate in visual semiotics, also has contributed to supporting the idea of Graphic Design as a particular semiotic system. Unlike all semiotic systems with double articulation, wherein the units are distinctive on the one hand and significant on the other, it is conceivable that in design the units could be at the same time distinctive and, by the same particularity, significant, depending on the context. Similar to music notation, the distinctive characteristics are simultaneously meaning units, depending on their distinction (colour, location, etc.). They are units that support both functions – an overlap between the perceived degree and the conceived degree – at the same time.⁶ An example of this is the layout definition in the design work, in which the graphic space – that contains, as mentioned above, not only the signs but also their physical and conceptual context and their relations – is what makes the double articulation possible. Thus, the space, the medium, the shapes (and their characteristics: colour, texture, etc.),

This is following what Klinkenberg (2006: 356) says about *rhetoric* in the image.

that are involved in the graphic sign, in relation with the iconic signs and especially with the context are *distinctive* units, and moreover *significant* ones. It is not just the associations between them that determine the meaning; it depends also on the cultural codes.

Besides this interaction of the signs with the context, we agree with Klinkenberg's iconic sign model explanation (see above), in which motivation works within a (conventionalized) cultural framework



Figure 3. Smiley. Harvey Ball. 1963.

and is therefore arbitrary (Klinkenberg 2006: 370), making visual pieces a result of that conventionalization. Therefore we could also think that design is a meaning producer, in synergy with the culture to which it belongs.

Having said this it is noteworthy that graphic design productions are also an authentic process of *conventionalization*, beyond being a mere recovery process of conventional aspects. In fact, graphic design production constantly proposes new conventions for traditional forms of representation.⁷ If it did not do that, these permanent abstraction processes would not be possible, nor would many of the changes in

visual style exist. An example of this is the famous Smiley created in 1963 by Harvey Ball (Figure 3), which corresponds to Eco's expectations system in which meaning is reliant on graphic convention, since the abstraction of the crescent indicating a smiling mouth and a pair of dots for eyes – which together denote a smiling face – was known before Ball's Smiley appeared.

However, when analysing the book cover for *A Smile in the Mind* (1998), designed by Alan Fletcher (Figure 4), where the 'D' in the word 'MIND' is turned ninety degrees clockwise onto its side, it can be noted that this is not a convention used previously in design to mean something.



Figure 4. A Smile in the Mind. Cover design: Alain Fletcher. 2004.

⁷ This is why Peirce says that the iconic model is an analogy, since while being conventionalized it is at the same time institutionalizing its own system of discretization. This is why iconic signs cannot be analysed as digital structures.

This latter case is an example of a design decision that creates a new convention, or at least a new method of conventionalization. Here, without the need for other elements, and not in the expected position of a 'smile', we understand the meaning in a new formal way.

The same example can be used as a further case to affirm that there is no lack of ability to represent, but instead significance is enhanced in two ways. The word supports the image (which in this case is a letter) and *vice versa*, making this situation a case of 'semiotic balance', in which, although there is the 'anchor function', there is also a certain freedom of interpretation. In this way, graphic production is not a simplification of a convention, but is in itself, in its way of acting, a proposal of meaning and a theoretical possibility, as opposed to Eco, when he says that "the fact that [any visual productions] usually is accompanied by verbal inscriptions confirms that the iconic sign is not always as representative as you think" (Eco 1974: 201).

In fact, this conventionalizing process proper of graphic design production is specific to the "distance" – in terms of the similarity – between the *referent* and the *signifier* (Groupe μ). This is justified given the different representational transformations, depending on the idea of "what is similar", which requires a process resembling the one of *stabilization*, but this goes beyond a mere confirmation (see the example in Figure 5). This is that thin line that Eco mentions when thinking whether

the properties of the object represented by the iconic sign are the ones that you see or the ones that you know (Eco 1974: 196). So Graphic Design is simultaneously conventional and conventionalizing.

Moreover, the theory of Groupe µ seems to suggest a similarity between the *type* and linguistic meaning, arguing that all that is perceived can be verbalized. This, however, brings us back to Klinkenberg's (2006) arguments that the graphic design iconic operations do not have to comply with a test that necessarily 'confirms' what is perceived in a unique way, because the cultural frameworks that constitute the conventions are constantly changing. Precisely because of their visual character – much broader, and perhaps ambiguous to some – some graphic design signs have no need (or possibility) to be nameable, and their definition cannot be



Figure 5. The Second Plane. September 11 Terror and Boredom.

Cover design: Alfred A. Knopf. 2007.

made independent of the context or the relationship maintained with other elements of the graphic image (as an example, see Figure 9, which will be explained later).

In this regard, design production is a genuine (not circumstantial but defining) condition of some of the categories of the plastic sign proposed by Groupe μ , more specifically, of the *Sémantisme Sácope-iconoplastique*, in the sense that the iconic and the plastic coexist in a condition not only of solidarity as suggested by Groupe μ , but of intersection.⁸ However, this is not the only condition in design situations; conditions from the *Sémantisme Extravisuel* are also operating, given the large number of cultural agreements essential to understanding them. This *sémantisme*, considered by semiotics to be an 'accident' (Groupe μ 1992: 177) and in no need of an upgrade, is quite familiar to the production of meaning in design, since the values attributed to it are agreed upon according to the context. This is why a graphic image – a graphic statement produced from the graphic design discipline – takes on a semiotic status in itself. In other words, this could be understood as a multi-code character when it operates in different systems of meaning within a statement; actually, however, it is just a sign that converges with others.

An example of this is the work of Alan Fletcher for the cover of the book *Beware Wet Paint* (Figure 6). Here the units of form, colour and texture (*'formemes' or 'texturemes'*) serve to 'pass the test', as Groupe μ says, in accordance with the type 'fresh liquid' and the referent 'fresh paint'. This could be easily associated with the morphological decisions of forms and textures in the unstable vertical lines that make refer-

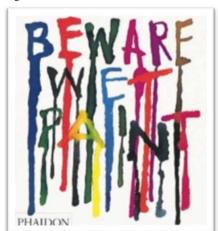


Figure 6. Beware Wet Paint. Cover design by: Alain Fletcher, 1996.

ence to a hand-made stroke with more or less brush's load. Also, on the basis of its vertical direction it can be suggested that it has been 'painted on an upright wall'. And, finally, the colour that blurs in some parts, for example in the yellow one, refers to the freshness of the painting. Thus, we understand all this beyond what is explicitly conveyed by the verbal meaning of the words of the graphic image.

In sum, both the iconic sign and the plastic sign construct the meaning and the relationship between the type and the referent, not only through equivalence but also through enrichment. Conformity

⁸ As Fred Andersson (2010: 14) writes, "In this manner, icono-plastic analysis basically shows that plastic features can be endowed with a striking and even rhetorical meaning at the background of iconic content."

with a type (iconic sign) and suggested associations (plastic sign) are not exclusive to the design of graphic images, but are complementary to the extent that these units of meaning (which for the Groupe μ correspond to colour, form and texture) depend only on who sees and interprets them. In fact, in Graphic Design the producer disposes the provision of such markers, not only by choosing them but also determining their position in space, which a fortiori validates the claim that these decisions are not subsidiary, but rather generate meaning.

Because of this possibility of design to define and specify its semiotic scope in the statements that it produces - by determining the opposition relations among its elements and between these and the context - design productions come along with message creation while enriching it, and not only as a later visualization. In graphic images, design decisions at the same time conform to the meaning of the message, while making it visible or transmitting it. This is due to the kind of production that relates to the type not necessarily in an equivalence or conformity relationship, but in one of constant oscillation. Also, the two categories – the iconic and the plastic – present in graphic design production, work in dialectic and complementary ways, and not just one of solidarity as Groupe µ sustain.

In the following, the article proposes a structure in which the verbal and the visual are not entirely independent but rather blended, taking into account the complexity of the production of visual/communicational situations that arise frequently. We therefore present the hypothesis of a *Graphic Sign*, with its own model and operating system, as a particular communicational phenomenon.

The Graphic Sign

1. Model

The tribute to New York City, designed by Milton Glaser after September 11 2001 (Figure 7), shows how design production is not only a field of formal operations but also a discipline that articulates visual statements that operate simultaneously through different meaning processes. Situations that hold both verbal and visual structures make an encoder system out of communicational design. It is a complex system that works against assumptions such as the linearity of reading, for differently from the traditional reading competencies, it works not only in images that function as texts, but with texts that also function as images.

In 1968, Umberto Eco first introduced the term 'graphic sign' in his work La Estructura Ausente. For him, the graphic sign is a 'medium', and he claims that semiotics is concerned with making clear how verbal or visual signs communicate, regardless of whether they are graphics or photographs. In other words, for Eco the graphic sign is a vehicle that carries a 'perceptual coded meaning', though without being part of the meaning itself. Meanwhile, Giorgio Cardona used the term 'graphic sign' again in 1981, in *The Anthropology of Scripture*, but in a different sense. Based on the assumption that writing is not just a transcription act deriving from oral communication, but rather a graphic system with communicative purposes, Cardona (1991: 25) argued that this system is formed by units or graphic signs, which contain both dimensions: the expression and the content one.

Thus, the proposal of the graphic sign presented here (Figure 8) corresponds to a sign that, although contained within the visual, does not



Figure 7. Tribute to NYC after the attacks of September 11. Milton Glaser, 2003.

refer to *any* visible expression. This is so because these graphic images not only carry, but also generate meaning by a particular semiotic performance that differentiates them from other visualization routes such as illustration, painting, infographics, etc. In this way, not everything that can be viewed necessarily belongs to the category of graphic sign in the sense that we intend to give it here: namely, a result of the operations of design production with a cognitive and semiotic dimension. Thus, in addition to being visual solutions, these productions are proposals that respond to a very definite intention, and in an explicit need for significance within particular conceptual and physical contexts, despite the "sharp separation between the modes of creation of the Graphic Design products and their cultural significance" (de Valle 2009: 32).

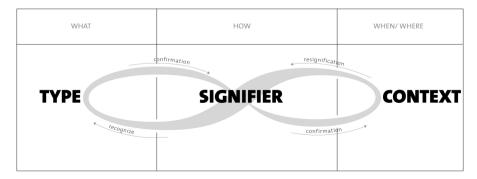


Figure 8. Graphic Sign Model, María del Rosario Restrepo. 2012.

The definition of the graphic sign is given as not only operating through the visual channel (which is where Groupe μ and Klinkenberg turn their attention), but through the intent and the action scope - what Klinkenberg (2006) calls referent and context in his general scheme of communication - making it a sign in the Peircean sense of the word, because it takes into account the relation with someone, in some respect or capacity. Thus, it is a sign in which iconic sign characteristics - in the sense that they remind us of an agreed upon and flexible reality - and the plastic sign with its accuracy converge due to the mobility of the codes that determine their components. These components, which were understood by Groupe μ as discrete units of the system (form, colour and texture), are what in design are referred to as the design elements (Dondis 2010; Wong 1995) and belong to a lengthier list of items. Thus, in the graphic sign the conditions of the plastic sign and the iconic sign are complementary, ensuring that the multiplicity of meanings of the former is limited by the latter. In this way, what forms a plastic sign in cases such as the equivalence of one colour to a concept, or the characteristic of a stroke as an expressive stroke, itself becomes part of the sign, as we understand it here.

A triad of signifier, type and context constitutes the proposed model. These three cannot work independently, but rather act simultaneously in a kind of "infinite" continuous process. As with other models, they work in a constant process of meaning production through synergy. Thus the signifier brings together conditions from the iconic sign (discrete units as Groupe μ presented them) and from the plastic sign (variables). These conditions are stabilized only by a confirmation with the type, but also especially within the context for which it was created and which defines its meaning.

2. Parts

(A) Signifier

There are sets of visual stimuli that make the signifier identifiable. It is what is perceivable in a piece of design and is updated by the type. Being a 'signifier' means being 'significant': this means that the referentiality is included in its essence and not in the equivalence with the object referred to. It is about what becomes apparent through perception – which refers to concrete and physical elements (design elements) captured by the senses in the first instance – and also to the organization of these stimuli. In Klinkenberg, this is equivalent to stimuli and signifier, and in Groupe μ to the complementary nature of both the iconic and the plastic signs. In the graphic signifier, the relations of transformation between the stimulus and referent within Klinkenberg's theory are an essential condition for the graphic sign as part of the communicational dimension of

design production. Thus, the relationship that occurs between the referent and the stimulus is inherent to the signifier in this new kind of sign.

(B) Type

This is a stabilized conceptual model, which acts as the basis for all perceptual processes. It is part of Klinkenberg's *encyclopedia* of speech, but is more flexible and is constantly evolving through the feedback relationship with the signifier. Its main task is confirmation, which is different from the mere equivalence proposed by Groupe μ . The relationship between a signifier and what is represented in the universe of graphic production can be very distant, without losing its signification capacity. This occurs under a more flexible regime for the traditional problem of motivation through arbitrary conventions. Apart from being directly correspondent with the object, these arbitrary conventions confirm the constant movements between types and signifiers, which are those that generate culture and that enable recognition (which correspond to the conformity relationship).

(C) Context

Just as it is for Klinkenberg, the context is the object upon which the sign is realized. But in addition to this, it is the object for which the graphic sign exists. It is a conceptual entity to the extent that it groups classes and models, which limit or circumscribe the range of semiotic processes. The context also has a physical dimension in the sense of understanding the spaces that the sign inhabits and in which it coexists with other signs (the graphic space with its diagrammatic and perceptual relations of the elements that form it). The distinctions between these two dimensions, both physical and conceptual, might resemble Arnheim's (1957: 64) distinctions of spatial and temporal contexts.

The context constantly determines the type and signifier, because apart from limiting them, it also nourishes both at the same time. This is a relationship that could be likened to that of diachrony in the Saussurean sense of the term.

3. Relations

The relationships between the parts of the graphic sign are not only double, but dialectical. Although this is a triad that might normally be thought of as a triangulation, it operates under the logic of an "infinite" that is constantly moving and in which all the relations happen at the same time, both during production and during reception of significance.

(A) Signifier - Type

The signifier is confirmed with a previously known type, and this in turn allows the recognition of the signifiers; not only according to the motivation principle of 'similarity' but also by cultural agreement.

Thus, through the confirmation relationship, what is known of the type is updated in the signifier. What I see and what I perceive I could confirm with the type, which are already stabilized in my memory. In turn, what is known from other visual sign events is added to the type and extends it, allowing subsequent recognitions. The graphic production could be not necessarily similar to the object concerned, but referential, given certain cultural conventions. This could also happen in other sign processes beyond the visual one.

Thus, the relationship between these parts is not symmetrical, but dialectical, in the sense that they can enrich or modify the *types* (mental categories), and thus allow several, and broader, recognition processes. This is a dynamic that generates new and mutable distances between the signifier and the object, given the scope of graphic representation possibilities. It confirms once again that plastic signifiers, as a way of expression, are part of the graphic signifier, because they help in representation, 'distant' or not, with respect to the object represented. Thus, the equivalence relationship between a set of visual and perceivable features and a set of semantic models is not one of static equivalence but one of enrichment and mutation.

So seeing the emoticon ! _ ! as a signifier (that I see and perceive) is confirmed with the type - 'emoticon' (which includes the type 'grammatical signs') - and ratify it because I actively find an expression 'sad' or 'surprised' etc., because it reconfirms - in a cyclic action - the types of 'sadness' or 'surprised' that I have known. From this, we see it not as being motivated by its status of mere similarity; rather, it is more the case that it is extended in its range of significance. Note that you can read sadness or surprise or boredom into this particular emoticon, etc., and it is precisely at this point that the functions of the other components of the graphic sign (type, context) will help to further define the meaning.

(B) Signifier - Context

Aside from being resignified, the signifier that is confirmed by a type is also confirmed by the context in which it is located. Meanwhile, through this, the context often becomes expanded or modified to the viewer.

Through the confirmation relationship, an update takes place that validates the signifier in the context. In turn, this context is also validated as a framework of meaning for the signifier. The orientation or 'entrainment' with which I see or perceive the signifier is given by the context, because it directs or focuses the 'potential

significance'9 in the process of signification. This happens not by a principle of motivation but due to earlier arbitrary cultural agreements.

The context, through a relationship of resignification, expands the number or possibility of different codes, or becomes more 'distant' in relation with the object represented, thus validating the graphic signifier. Furthermore, the context is modified by the validation that conveys the signifier.

When compared to the previous example of the emoticon, the signifier is validated when the context (conceptual/physical or temporal/spatial in terms of Arnheim – in this instance, perhaps a digital communication situation or a cell phone screen) confirms it. This situation generates a simultaneous redefinition of certain grammatical signs arranged in a certain way. Thereafter, within the digital communications context, now extended, exclamation marks on either side of an underscore have another semiotic function, apart from the one we already knew.

(C) Signifier – Type – Context

These elements have a dialectical performance within the cultural practices; they shape the culture and its practices, and at the same time they are defined during their interaction. The constituent relationships between them (Figure 9) could well correspond to the different moments that take place in the signification process: the 'how' for the signifier as the way it appears and the stimulus we could perceive and recognize, the 'what' for the type as the mutable source or motivator in the significance process, and finally the "where and/or when" (space/time) corresponding to the context in which the whole process takes place.

It is in this sense that we speak of a sign, which, aside from responding to a convention, also conventionalizes, since the signifier's validation, which has been resignified according to a context, allows its reconnaissance in increasingly broader and more flexible types.

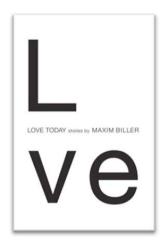


Figure 9. Love Today. Cover design: Barbara de Wilde, 2008.

⁹ Potential significance refers to a particular moment in the attribution of meaning during a communication processes, in which a number of possible meanings are present (Klinkenberg 2006: 90).

4. Articulation

As proposed by Klinkenberg regarding his iconic sign, the graphic sign has a 'double articulation' that does not function as that of linguistic signs. In the graphic sign, relationships between units, both distinctive and significant, and at the same time dialectical, operate in relation to their surroundings. Hence, the importance of the concept of the graphic space – not only to define a syntactic dimension, but also as a semantic value.

A number of decisions that define the operation of processing (and not just reading or viewing) the graphic sign make this process simultaneous and not necessarily sequential; though it may in any case be provided with an intention to hierarchize, determined by the producer of the graphic statement. Hence, the signifier itself contains the expressive decisions of the plastic sign of Groupe μ . In fact, this has generated some discomfort or doubts within semiotics, when it is asked if "the plastic may have a semiotic function by itself" (Groupe μ 1992: 168). Phrased differently, what reserves a semiotic status for a particular message? In this regard, the graphic sign as a dynamic visual statement is institutionalized as it works through a particular mode of semiosis, as distinct from other visual productions that are outside of its field of production, circulation and reception, such as crafts, pictorial expression or sculptural expression, etc.

Hence, in these productions the elements, the context and their relations do not necessarily relate to the type in a predictable conformity relationship, as we have seen, but it is precisely due to their permanent oscillation that they are defining and enriching the possibilities of graphic statements. A particular relationship is present all the time in the graphic sign between the iconic and the plastic signs, which both build the signifier; it is not, as postulated by Groupe μ , that the "system of plastic meanings should avoid the use of iconic elements" (1992: 175).¹⁰

As an example of how the graphic sign works, consider the design of the cover of the book *Love Today* (Figure 9) by Barbara de Wilde, from 2008. Both graphic and linguistic signs are validated by the context, as a piece of design and as a contemporary book cover, in addition to being a white rectangle in which there are some elements that relate to one another to define the physical context or graphic space.

¹⁰ In other words, the graphic sign is in a permanent state (not circumstantial but defining) of *Sémantisme Sácope-iconoplastique*, a place where both the iconic sign and the plastic sign coexist in a condition of intersection. However, this is not the only condition that the graphic sign shares with the plastic sign. The *Sémantisme Extravisuel*, which is considered by semiotics to be an "accident" or outside of an upgrade, is so familiar to the production of meaning in design since the attributed values are agreed within the context as already explained. This is why a visual statement, such as a product of design, acquires the status of a semiotic category itself (Groupe μ 1992: 175–177).

This results in the outcome that the empty area in the upper right hand corner, while working as a graphic sign (not just in the capacity of a plastic sign), is confirmed by the type 'empty', which in turn confirms the context (in terms of the physical or spatial dimension) in the sense that it is a white space within a word, replacing the 'O' between the 'L' and 'V' in the word 'LOVE' (physical context). This in turn is the cover of a book (a conceptual or temporary context), which redefines the type as follows: the gap is part of the text and generates the recognition of emptiness in a new way, which is again confirmed when it is understandable that the absence of the letter 'O' is a deliberate component, not only of expression but of a communication level in order to construct the message. We therefore conclude along the lines that it is an 'emptiness in love' that is being implied. This example shows a new feature of our model, and its condition of operation is permanent. Thus, the model has a continuous organic form.

Conclusion

In conclusion, we could claim that the process of graphic design production occurs through a particular semiotic structure. In this way we are talking about a meaning producer and a socio-cultural transformer, and not, as it might seem, a simple work of visualization and beautification of messages.

The products of this particular kind of design are *graphic images*, in which iconic and linguistic categories converge. Within this kind of images, meaning production is driven not only by the signs, but also by the relations between them and the context in which these relations take place, be it physical or conceptual. Also, the focus is no longer particularly on the channel, but on the spaces and conditions – contexts and referents – where these situations are generated and put into circulation. These are further attempts to demonstrate the complexity of a practice that is perhaps already quite familiar.

Graphic production works as a multiple system of signification that operates simultaneously resulting in the performance of the *graphic sign*. This new semiotic category, presented here with its model, makes particular these kinds of images between many others (e.g. paintings, photographs, illustrations, etc.), and also works under cultural conventions to become a code, while conventionalizing the context in a dialectical manner. This occurs by making evident the intentions of the productions through taking into account the visual decisions (plastic, iconic, physical context). The intentionality that is reflected in the formal arrangement within design production confirms the message and its possible meanings, in addition to the influence in the relationships that it can generate.

Thus, we could hold that graphic design productions are visual statements, also we may think of them as a performative process deferred in time, in which the intentionality that defines its appearance also defines the responses and behaviours associated with the social dimension. Consequently, it becomes relevant to recognize the possibilities of Graphic Design, not only as a visualization tool, as, while it includes as well as exceeds perceptual and cognitive dimensions, it also influences the cultural and semiotic production of the surrounding reality. That is to say, we could think of graphic design as a powerful and critical stage for creating as well as questioning culture and society.

Moreover, it is relevant to recognize this discipline and its production as a way of *representation* in terms of J. W. Mitchell (2009), which implies a fully active viewer who not only reads or sees passively, but also anticipates the interpretation through an active *processing* of the visual statements. In addition, in the face of visual situations in which the graphic sign is performed, this observer not only recognizes, but also allows other kinds of operations such as conceptual integration (Fauconnier, Turner, 2002). This inevitably raises the question of the existence of responsibility in design practice – a condition, as J. W. Mitchell says, that goes together with all kinds of representation and requires a 'shared responsiveness' aware of the times, in which several exchanges of significance and therefore of power are produced.

Finally, this theoretical "voice" from within design practice allow us to understand, or at least think about, the effects of these communicational situations on those who are manipulated by them, or why they are important for communication today. Accepting the value of this particular communicational dimension of design production, we can think of the power as cultural agency that the designer and his designs have.¹¹

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Графический дизайн как знак

В статье рассматривается, как создание графического дизайна работает в рамках конкретного семиотического процесса. Представление новой категории знака, графического знака, позволяет артикулировать иконические, пластические и языковые знаки в конкретном диалоге, который в некоторых продуктах графического дизайна существует между буквами и образами. Применение теории Умберто Эко, Groupe µ и Клинкенберга позволяет понять, что графический дизайн создает значение в формальном измерении, но продуцирует также конкретные когнитивные структуры. Понимая этот новый тип знака, мы можем признать его коммуникативное измерение, а также то, насколько мощной платформой для генерирования культурных кодов он становится, позволяя делать вещи видимыми и в лучшем случае ясными и красивыми.

Graafiline disainiloome kui märk

Artiklis püütakse näidata, et graafiline disainiloome toimub konkreetse semiootilise protsessi kaudu. Uue märgikategooria, *graafilise märgi*, esitamine muudab võimalikuks ikooniliste, plastiliste ja keeleliste märkide artikuleerimise konkreetse dialoogi puhul, mis mõnedes graafilise disaini toodetes eksisteerib tähtede ja kujundite vahel. Kohandades Eco, Groupe μ ja Klinkenbergi teooriaid, võime mõista, et graafiline disain loob tähendust formaalses mõõtmes, ent tekitab ka konkreetseid kognitiivseid struktuure. Seetõttu võime seda uut tüüpi märki mõistes tunnustada selle kommunikatsioonilist mõõdet ning sedagi, kui võimsa kultuuriloomeplatvormiga on selle disaini näol tegu, lisaks selle võimele muuta asju nähtavaks ning parimail juhtudel ka selgeks ja ilusaks.