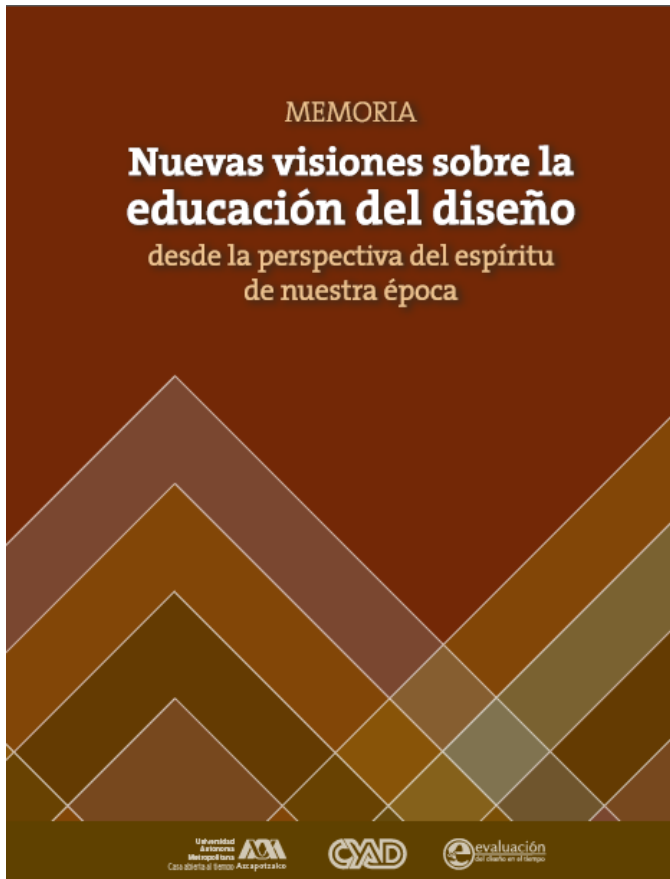


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Perspective taking and visual interpretation in today's world.

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Abstract

After a quick review of the state of the art, some of the leading edge tendencies in graphic design with examples are given and discussed. Next we look at decoding and underlying communication theories as they relate to understanding. Pathways for future developments are suggested in light of Samara's recommendations to go beyond the accepted rules.

Keywords

New graphic tendencies; underlying theories; improving applications.

Introduction

Today, we are facing offsetting tendencies in life in general and also in design with interesting results, as people often do not respect societal rules. A superb local example of this is the advertisement for a Beethoven concert at Bellas Artes (Figure 1: Misa Solemne). We are also facing constant gear shifting as everything goes faster or new technologies are invading us. We have to change. Maybe, because people find themselves in survival mode, struggling in their environments, they are often only looking for personal benefits. So, how can graphic designers accommodate to increasing complexity and representations for items that are sometimes kaleidoscopic causing multiple high intensity impacts and visual fatigue. For example, Figure 2: INK-

jection by Supakitch, on music performance entitled *Bounce Baby Bounce from Belio* (1999: 75), a Spanish experimental art and design magazine in Madrid looks somewhat cluttered. In the background, there are a number of records giving the impression of music playing, along with lines intended to show the turning of records, and there are many small characters looking like bouncing balls with in addition a lot of inscribed information. This is disruptive to the fovea, the parts of our eyes that usually seek to focus on something. In addition there is no use of white which is surprising, only lighter colours are used for numbers. For graphic designers, there are more fleeting images to compete with due to new technologies and the new perspectives require constant modification and constant scrutiny. More public crossovers are possible, therefore there is a need for more specialization, more definition. We go towards rationality and economy of words as consumerism moves fast with new products, and we see a non-rational positioning, through more of an appeal to emotions. For the graphic designer there is a lot of competition today with the bombardment of images coming also from non-specialists trying new things in blogs. At the same time there is a greater need for specialists in graphic design with these technologies, new studies of the mind and new knowledge on visual cognition and perception.

So it is necessary for graphic designers to be aggressive, understand the needs in marketing, up to the point of also creating a need, like for example, asking how

to stimulate or prompt or renew consumer attention. Then there is the question of targeting either a specific public or work for global appeal. Commercial art is fast developing, and already adds incredible value to everything with which it is involved, making us feel surrounded by huge numbers of high impact visual stimuli. Figure 3: Advertising drinks, taken from CNews Matin Publicité no 1498 (p.13, p.14), Wednesday, June 21, 2017, shows two ads going together but placed on successive pages, the first one creating a feeling of freshness and to counter the fleeting impression when the page is turned, the second picture on the flowing page reinforces the name of the make and also adds feelings of quality and customer satisfaction as a statement, yet almost coming across as a command. The graphics in these ads also follow new concepts in design like the use of different styles, white and transparency. With new technologies, there are many more challenges to face. Graphic artists are responsible for more than visual pleasure, also for the emotional and intellectual vitality of the experience they bring to the public. Figure 4: Parisienne 2017, taken from the same newspaper as above (p.7) is an advertisement for a women's race to express girl power shown by the styled woman and the Eiffel Tower in white, again giving a feeling of freshness with all the greenery, and a lot of rich detail and evident refinement and subtlety. Coming from a very different approach to pass on a message in both images and text, Figure 5: Tourist you are the terrorist, taken from Belio (1999: 34) also has a high impact, in a totally different style showing how graphic artists totally disregard traditional and not so traditional rules. Their role is to enrich people's environment, according to Willi Kunz (1998, p.9) and with macro and micro-aesthetics having to come into play today, the profession is becoming increasingly complex with the challenges of new technologies. In addition, there appears to be fast evolving diverse groups of people. The idea is to increase memory intake by providing utmost effectiveness, to diversify and to multiply. Figure 6: The party, also taken from Belio (1999: 129,139) shows a continuing advertisement for a party, placing together a photograph and graphics with the subtle continuation of the triangular confetti, passing unto the second page and beyond. There could be a great sweep occurring in graphic design, going from taking advantage of the different types of design, going from new types of innovative art (even perhaps looking at graffiti styles) to a renewal of more conservative approaches to get ideas.

Overall, graphic designers have to find varied and faster ways to impact in order to update constantly what is popular, to have a more visible presence. Perhaps a good approach in graphic design is to educate the consumers, so that they can be won over to new ways of doing things because it is important for the consumer to understand textuality at both the surface and underlying levels. As reality is both explicit and implicit, it is interesting to use people's knowledge base and playfulness. For example "Touten Kamion" was used as the sign for a French company in the Loiret specializing in trucks ("camion" in French = "truck"), playing on Tutankhamon, the Egyptian Pharaoh's name, so that people remember the company. The use of culture and popular sayings plays on emotions as well. For example, in the car advertisement for Renault in Figure 7: Car ad, the driver is sitting in a fashionable comfortable shoe, with the words "Voiture à son pied", a play on words in the popular saying, "Chaussure à son pied" (in English "If the shoe fits...") intending to express a perfect fit (Journal de Bellegarde, 17 juin, 2017: 6). The colour red used as the dominant colour also adds to the impact on the page.

Semiotic studies help with making connections. So, it would be good to study the field extensively. For instance, perfume ads are still using interesting devices, often the result of semiotic research. To create multiple impressions to appeal to as many senses as possible, perhaps like the perfumed paper samples provided in the past in magazines, in addition to smells, different surfaces and textures could be added. This new way of thinking and doing, like creating a big splash and being non-conformist is used in Le Signe, Newspaper of the Centre National du graphisme in Chaumont, France. Figure 8: Cacophony, from page 1 in the paper, shows the non-conformity, a bombardment of colours and styles, a sense of humour with the donkey that is going to be the leit-motiv throughout this 2017 edition, with lots of colour, different uses of graphics, writing in white, many different shapes, including a profile as a shadow in contrast to a white section. Figure 9: Styled animal, from the same publication (p.10), shows the addition of another animal although through minimal representation of a giraffe and an opposition of modernism with odd shapes and history with a few artefacts drawn to contrast the modern parts, with, as well, an unusual treatment of text alignment.

According to pediatricians, the TV generation with more rapid eye movement has different tendencies in reading pictures and graphics, and thanks to gaming has better eye to hand coordination, and this could be used advantageously by including manipulations in designs to make them eye-catching and more interesting to the reader.

Decoding

Today there is a revival of the Gestalt movement but with resistance to the Gestalt psychology principles of the early 1920's that deemed to consider careful attention to figure and ground, similarity, proximity, closure, and continuation as positive features. Traditionally there often also was the division of space around a horizontal division into three parts and the eye sweep from lower left, up and then to lower right or vice versa. Now, graphic designers (Wagemans et al, 2012a; Wagemans et al, 2012b) push the limits. They look for anomalies instead of similarity. Instead of smooth continuation, there are elements added to shock, surprise, or items placed further apart or differently. Instead of closure, items are placed far apart, or different media used, so that an effort is required to put the whole piece together. Instead of proximity, items are just far apart enough, so that people have to make the effort to tie shapes together. There remains questioning the self-organizing brain. Scientists seem to be moving away from electrical impulse conceptions to more magnetic implications in brain function. This also forces us to look at hierarchical structure. With information technology, there is transparency added and there are questions on subjective contours, modes of color appearance and phenomenal transparency (Palmer & Nelson, 2000). Most importantly, causality appears directly in spatiotemporal events presented. Now there is talk of modal and a-modal completion (Palmer et al, 1996). Mostly, all has to do with contour integration and completion. There are more questions. What needs to happen to see things as a whole? How many whole units are present within a given product? Today more complexity is required (Rock, 1983). The long accepted golden rule is also questioned, as it could stem from a natural tendency or overuse over the years as it started early on in history. Then there is the golden spiral or also called intelligent design and today researchers just recommend using your eyes

naturally (Palmer & Rock, 1994; Biederman, 1987). A new idea among new principles of grouping is to use camouflage to make an object stand out based on aspects of visual perception. Wagemans et al (2012a :1172-1217) make the following recommendations: a) Look for generalized common fate, using brightness to group things perceptually, similarity groupings based on changes in featured values including position, like using sunlight or shadow. b) Use synchrony, grouping together elements that change simultaneously, not necessarily into the same direction, break expectations of strong temporal regularity. Palmer (1992) thinks one has to look for common stimulus, color, orientation and size. Recent research shows that connectedness with a line helps with associations. Palmer and Rock (1994) recommend using how the visual system connects brightness, color, texture, motion and depth. c) Question grouping by proximity or similarity. d) Look for equilibrium. e) Look for discrete dynamic patterns. f) Remember that interpretation depends on overall configuration, based on Biederman's (1987) theory of human object recognition, but also know that the visual field allows illusory contours (Palmer) and figure-ground segmentation through autonomous processes that are also context-sensitive.

An on-line repository, listing all the good ideas from Gestalt psychology and their latest developments that pushed the limits successfully, would be useful. These entries if ordered in a graded continuum, from what worked best in given situations and what was ineffective, including ideas on how to correct would be of crucial importance.

Communication

Today there is a tendency to use both analytical views and holistic views. Now the approach consists of creating constraints for the representation to make people do what the designer wants them to do. Technology allows more things but requires additional skills and a study of its impact. We also need to deal with psychological conditions. We make sense of images and graphics in the context of the social institutions that regulate what and how it is acceptable, and how we interpret images. This may either cause immediate and direct involvement or not. However, regardless there is mental activity. Ex. If I say, DON't imagine a small package, wrapped in a shiny white paper and tied with

a bright red ribbon. Can you NOT visualize this in your mind's eye? As for the color red, what color red did you imagine? There are probably several different ones chosen based on cultural connotations and personal preference. It is important to identify the elements that will predominate and the designer has to make sure that this was the intention. As regards the wrapping and the bow, how would you draw them?

In the graphic designers' list of things to think about when dealing with graphic visual interactions there are several points to consider: a) What to represent: people, places and things depicted or written out, b) Who will interact in the production, who are the people who will communicate or make the images communicate? Both producers and viewers make the images communicate. Are there testers involved before sending out the final product? c) Who are the people who will read the images and graphics? Then, there are the interactions between a) and b) (attitudes towards what is represented in a)), and the interaction between the people in c) (what these people do to each other or for each other through the images and graphics) after having decoded them.

Once the product is out, the producer is usually not there so the viewer cannot interact and ask questions: this is likely to change with new technologies, there might be a dialogue going on that could challenge graphic designers to constantly rethink and modify their creations. Then there could be multiple producers and their assistants, with different roles regarding conceptualizing, layout, plus an editor. The viewer is usually also absent for the producer, so there may be a need to have a group check the product but one can never really know vast and absent audiences, one can only start with a mental image of the viewers and how they will make sense of the product. This is not easy and requires theoretical understanding in several domains. There is probably always a disjunction between the context of production, and of reception, but you look for the common elements. One has to look at the product itself, the image and, or the graphics. One has to know the communicative resources for its design (articulation and understanding), as well as how social interactions and social relations can be encoded in images and graphics in the specific social context. This requires a certain competence and implies a structuring of that competence within the product.

More questions remain: 1) Are the right messages communicated? Are the pictures demand pictures (addressing the viewer in a look and used to do something to the viewer), or offer pictures? 2) What does distance do? Are there boundaries set? If so, trespassing means aggression. What is the size of the frame? One can imagine the distance if a group of people appears from the torso up. If a person is too close in a frame, it is as if you can peer in the person's soul. 3) What is the angle? Sideways means detachment whereas frontal suggests involvement. Use of a horizontal angle represents an involvement with the content in the product. There can also be a representation of an interaction with demand and offer: "our-ness" and "their-ness" with a body sideways but a frontal face. 4) Symbolic power differences can be conveyed, for instance when the angle is high, the viewer has the power. From a low angle, the represented has power over you the reader. At eye level there is no power difference, it represents equality. Ideas from the movie industry would be useful as regards the impact one wants to create.

The viewer

When the viewers look at the product, they can see the producer as having permitted the sending and the receiving of the product messages. The receiver could be passive, only receiving. Producers are more fluent, active and eloquent as images or graphics are concerned, they know their trade. They specialize in non-verbal communication. However, words, cultural expressions, routine or common expressions, collocations and proverbs when used playfully add value. Producers have to work within defined conventions that change given time, they have to know societal values (that change too) and the beliefs of the social institution around their work plus be aware of what is expected in the global village.

The viewer will react differently to photographs vs drawings on the same topic on a page. Photos imply a direct relation, eye to eye, if the vectors are along eye lines, another vector corresponding to this is in a gesture (finger pointed at you) as if it wants the viewer to enter into an imaginary relation. Researchers think that this is supposed to be the purpose of religious figurines, like for instance the statues looking at you with compassion. The problem of choices to be made becomes complex when you need to relate to the lar-

gest public possible. One also has to consider graphic design for an educational purpose and all the demands attached to this endeavor.

Beyond rules

What can we take from Samara's (2014) manual of graphic design? Looking through the text the examples given show refinement. It is a book for graphic designers, and intended to educate viewers. Samara suggests that theory does not determine how things look in graphic art. It is up to the graphic artist to choose how to bend the rules and this is a huge responsibility. He suggests that the greatest successes have been around innovations (p.297) by choosing the moment and the manner of transgressing. He examines each of David Jury's (1996) twenty rules, suggests modifications and provides examples (Figures 9 to Figure 20). The rule is in quotation marks and the comment follows.

1. "Without concepts only emptiness". Having no concept is just as valid an idea than any other as it allows neutrality, permits refined work through direct presentation, good readability and hierarchy and a consumer centeredness according to Samara. Just provide easy access to facts, he writes.
2. "To communicate is to simplify". There is nothing wrong with embellishments according to the author. You can take ideas from Baroque or Victorian art, use a kaleidoscopic approach...
3. "Reach universalism". Samara says that you also have to reach sub-cultures if these are your audience.
4. "No visual cacophony". However, according to Samara, placing an element surrounded by a high impact mess will draw attention. A break in the harmony, composition or color is also giving a message.
5. "Less is more". Complex representations will attract a certain public, says Samara.
6. The use of white space is important. According to Samara, this is right in general but you should not stop a real rich invasion of most of the space in some area.
7. "Without hierarchy, no direction is given". However if the viewer has to sort out what is given because of the effort involved, things will better stick in memory according to the author.
8. "Symmetry is your good friend". This is traditional but Samara thinks that it can be used well with more dynamic features and help give impressions of elegance, cheerfulness and restraint opposed to the more traditional heaviness, tightness and monotony.
9. "Use depth and more depth." Samara agrees that caution is important, as you don't want to take the visual reader away from the message. However, he feels that optically flat representations can support an aggressive presentation, as long as there is alignment with the message.
10. "Color but only with balance". According to the author breaking this code can bring about very effective results. Convention can in fact be boring. If not sticking with the color rule you can in fact help and ease putting the message across.
11. "Less color is better". This is possibly so but a viewer might better remember something if the array of colors was surprising or shocking.
12. "Use strong oppositions of light and darkness". Softer contrasts can convey a feeling of elegance and meditation, rather than, aggression and tension.
13. "No aggressive fonts." Using very overwhelming set-ups of typesets, stressing or dangerous looking arrangements can be better if they are adequate to convey the intended meaning. It will appeal more to emotion, which helps with memory storage.
14. "Only 2 or 3 at most font types". For a complex text, if more fonts are used, it gives unity to groupings of meaning. This could be the hardest thing to do, and the researcher even recommends to just use fonts haphazardly if one has difficulty choosing.
15. "You cannot just plank letters around images as in grafting". This is not necessarily true, to accompany a visual that requires high impact, the print can be small and totally offset to the sides.
16. "No redundant redundancy". Redundancy can be useful to brand a series of products, with small color changes or different color contrasts as long as the message conveyed is simple and clear according to Samara. He sees no problem with re-iteration.
17. "Only new elements". It is much easier, says the author, to rework old things, even very plain, culturally popular items for interest.
18. "No copy of old stuff". When historical connections are required, Samara thinks you need to resort to what already exist but give it a new twist.
19. "Today's popular way of doing things is not tomorrow's." There is indeed a fast change of pace, Samara agrees. However, he adds that using retro styling with a modern outlook can be very effective.

tive and elegant. Especially where teen-agers are concerned, it is best to use the style that appeals to them.

20. "Indecision is at the core of all ambiguity". Clearly, to read a message fast, it is best if it is very clear. Yet some messiness and uncertainty can also help create more complex venues for interpretation, and a richer experience, says Samara.

This attempt at rule breaking is obvious in the examples provided earlier, from the Spanish magazine "Belio ", 026 ([www. Beliomagazine.com/store](http://www.Beliomagazine.com/store)) and the newspaper of the French national center of graphic arts, "Le signe". Such developments should be ongoing for the graphic designers who want to be at the leading edge of their profession.

Conclusion

Researchers confirm that verbal description helps to better monitor the image, so in fact graphics can help support the description or be used to be subversive. Just as it was identified that we also see with the "mind's eye", in design, advantage could be taken from the fact that we also hear with the "mind's ear" and that we taste with the "mind's tongue".

In the future what else could prove beneficial? To figure out the hierarchical structures to be followed, perhaps designers have to look at the interpretation by multidisciplinary teams and choose from the proposed ideas. It may be helpful to keep in mind texture segregation. Because of field effect and context, the effect of geometric distortion can be used to one's advantage. Using embedded figures in graphic design may be very advantageous as well as economical. It would be interesting to keep track of the research on the holistic processing of faces currently carried out and see how to put it to best use. Another research area that could bring about new strategies is testing on visual integration, as it is participant specific because of individual differences. This is useful to target and attract your audience, if a product is aimed at a specific group. Also, as past experience is important, one needs to keep in mind that the visual system is tuned to the properties of its environment so the question of the global context should be given prominence as graphic designers can tap more into that market. Research into world culture homogenizing, should be followed closely by

graphic designers. Ideas from self-branding and personal blogs could prove useful.

Most important is the notion that memory storage is based also on effort to be produced by conscious memory work on color, shapes, fonts, contrast, opposite representations (like for instance some researchers refute the traditional color codes). Using unusual long pattern continuation and exaggerations is a good idea, just to cause a little irritation (although not too much) in such a way as to get a reaction and hence more attention. Finally as an exploration method into future possibilities I would recommend to think about paradigmatic and syntagmatic substitutions in terms of the graphic design rules, somewhat as Samara does when questioning Jury's rules in his manual. This activity, carried out more systematically around minimal pairs for image composition and print, not just in word choice but also in morphology, could bring about new perspectives. Subjecting the latest Gestalt principles developed to the same treatment, might bring about an innovative twist on representations.

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