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Motion Graphics Ergonomics: Animated Semantic System, for Typographical Communication Efficiency

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Abstract

When a designer creates a communication project or object, he understands that the written text is just a part of the message. All the graphical decisions about placement, typography, color, materials, all have profound influence in the connotation and denotation aspects of the message. For better efficiency of communication, the designer must dominate these elements and have a methodology to guaranty the efficiency of communication. Movement is particularly versatile in terms of message manipulation and composition. This is very clear in practices like ballet, where the dancer uses just movement to communicate entire messages, stories and feeling. Here we intend to understand the practice of the motion designer relating it with to choreographer. This paper takes in consideration the lack of any epistemology associating communication design to the new information technologies and other complementary fields, while underscoring the need for a scientific approach to the study of elements that structure graphism when applied to communication in movement. This paper sets out primarily to establish a method to be used as a functional grammar to be applied to communication design. Here we will present the results of a PhD research that applied a qualitative-based mixed methodology, looking at the subject from two different angles: a theoretical contextualisation, the outcome of a literary critique encompassing various areas of knowledge that are specific or complementary to communication design: semiotics, visual perception, typography and digital supports; a collection and selection of movement variables, enhanced with a study of relevant cases. With this, we can understand the semantic effect of movement as applied to digital typography, how to manipulate it to fulfil an objective and use motion graphics and animation to communicate a message with better efficiency than with another medium.

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1. Design, and motion graphics

The evolution of graphic and communication design did not end in the desktop publishing revolution. Given the multidisciplinary nature of design as project, the new technologies gave way for the incorporation of new fields of action.

The designers versatility and capability to use cutting edge technology, allows them to incorporate new media, generating a broader scope of intervention and reach.

Although the motion graphic language is well understood by animators and cinema directors, the way the graphic designer uses these mediums requires a new epistemology and methodology that is compatible with the designers ways of solving communication problems.

2. Motion graphics, and semiology

Every type of communication presupposes the use of a language, and the same can and should be applied for the moving image.

This notion has been explored by Christian Metz in a series of essays on semiotics and signification in cinema. Here he successfully applies Saussure's structuralist semiology and the psychoanalytical theories of Jacques Lacan to understand on what terms and conditions should cinema be considered a functional language.

According to Metz the signification of cinema may be applied to studying the relationship between the film and the impression of reality it evokes, and the emotive universe of its audience.

Metz distinguishes between two types of code: the cultural, related to its own references to a specific group, and specialized ones, which "refer on the contrary to activities that are more specific and more restricted, presenting themselves more explicitly as codes and requiring special learning" [4: 134].

The viewer interprets these codes in accordance with his/her own experiences and cultural references.

Just like directors and animators understand and use these codes to create their motion pictures, designers should understand them to when working on a motion graphics projects.

The "assimilation of the cinematographic image to an enunciation" [6: 43]. Contrary to assuming images as an apparently given fact, Deleuze suggests drafting an enunciation that utilizes them as analogies that determine semiotic studies within the scope of cinema.

"These movement-image compositions, from the dual point of view of specification and differentiation, represent *signposting materials* that incorporate all different types of modulation characteristics: sensorial (visual and sonorous), kinetic, intensive, emotional, rhythmic, tonal, and even verbal (oral and written)." [6: 46]

According to Deleuze the diversity of verbal and non-verbal language used in cinema means that a fictionalized enunciation can be devised, so that it may be endowed with an appearance of reality or, at the very least, persuade the viewer to go along with that illusion. Semiotics analyses and interprets the language devices, mechanisms and procedures adopted by cinema employed in creating this fiction, decoding the signification of various facets constituting the particularity of filmic language: images, scenes, sequences, movement, and editing.

3. Animated Semantic System, for Typographical Communication Efficiency

I believe that for greater efficiency in communication, a designer can use a project methodology based on the view that there is a cinematic language composed of semiotics signs that can be used as a code or a functional grammar.

The first consideration is the power of movement. According to Rudolf Arnheim, because of our survival instincts Humans perceive motion in a much stronger way than any other kind of visual stimulus:

"Motion is the strongest appeal to attention. (...) Motion implies a change in the conditions of the environments, and change may require reaction. It may mean the approach of danger, the appearance of a friend or of desirable prey." [97: 372].

In scientific tests developed with motion type for my research, we have concluded that readers will give more attention to moving text than any other element on screen, regardless of size, colour contrast, legibility or any other graphic characteristic that designers may use for any other static medium, like for instance in a poster.

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