



From Visual Studies to Interactive Design: What About Digital Aesthetics?

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Abstract. In this paper, we illustrate how digital aesthetics is based on symbolic layering and a system of images and imagery. At the same time, we introduce the fundamental susceptibility to the sensitive in the design environment and how this relates back to a culture of the sensitive visual. We will address more specifically the aesthetics of images and rêverie in Gaston Bachelard and the use of pathosformeln in Aby Warburg's philosophy and art theory. Next, we will attempt to create a relationship between the new interactive techniques of design and somaesthetics and how they represent to date the new worlds of a digital aesthetic. In conclusion, we will try to reiterate the fundamental concept of the sensitive in the digital world.

Keywords: Digital Aesthetics · Images Culture · Imaginary · Phenomenology · Somaesthetics · Interaction

As an image is a sensitive representation, it inevitably finds its own specification in a relationship with the sensory sources from which it springs and the bodily channels from which it draws nourishment. The diversity of images therefore depends on the body and its different sense-motor trajectories. The reference to the image is, for a start, conditioned by the visual experience of the eye. In the Greek language, *eikon* descends from a representation that is an offering to the eye, capable of reproducing a reality. Alongside the terms derived from the same root, there are others of different origins, such as *eidolon* in the sense of an image, a name derived from -eidos, which means 'appearance or form', from the root -weid, meaning 'to see', which is widely attested in Indo-European languages. The image therefore moves on a semantic register that oscillates between the idea of a visible form (pictures, figures, patterns, frames) and the idea of unreal and fictitious content. In this context, first, we illustrate how the image science culture [1, 2, 9] introduces some tools for representing the world (rêverie, pathosformel). Second, we illustrate how these invisible tools are necessary for creativity in interactive and soma design concerning developments in the digital world.

1 Digital Aesthetics

Digital aesthetics might appear as an oxymoron. How can one approach what is sensitive (aisthesis) through a virtual world? We find the first answer in the etymology of *digital*:

digitalis or digītus. The finger is a bodily extremity and the key to knowing the infosphere (Florida 2020) and, simultaneously, the natural and physical world. In the dynamics of the digital world, there is, a priori, a mutual relationship between the elaboration of creative processes and the sensitive and aesthetic approach of phenomena. In this regard, through the meaning of digital aesthetics, we would consider the symbolic and semantic stratification of certain factors capable of determining the theorisation of these links. We want to clarify whether the meaning of aisthesis today includes our way of *feeling* reality. In this regard, we want to refer to what Fabrizio Desideri introduces about this word. Experience, as an original relation antecedent to all knowledge and language, is primarily an experience that takes on the body, something that is co-extensive with our corporeality (Desideri 2019: 8). The first meaning of the sensible experiential origin is therefore to be found in the etymology and origin of the Greek word *aisthesis*, whose meaning can be traced back to sensation, perception or feeling. Through the etymology of the word *aesthetics*, we can understand why there is an aesthetic dimension of experience that is prior to any autonomy of the aesthetic [3, p. 13]. How does the body interact with the digital world? In this regard, is there a way to deal with the digital world through aesthetic and therefore sensitive behaviour? Social networks are increasingly representing the innervation that Benjamin defines as the introduction of technology into the modern world, so images represent the introduction of new meanings that no longer represent reality as such but permeate all meanings. This includes not only social networks but also all those devices that postmodernism proposes as a turning point with respect to the real world. In this regard, the COVID-19 pandemic has created an even more precise demarcation of the worlds we live in until it spread. Probably before 2020, we were using mixed methods of communication, however, after such a rupture that has made our intimate worlds available to everyone, there is a need to reflect on how our feeling can be reflected in our use of digital. This means that when we talk about digital, we are not talking about *other* worlds or rarefied worlds, but we are referring to the reality that surrounds us now, totally immersed in what seemed very distant to us as life beyond the screen.

2 The Values of Images and the Imaginary in Digital Aesthetics

If, for Benjamin, the first form of media is language and the first form of apparatus is the camera, we could reflect on the use of images in the digital world. This is because in the world of images, we find the answers of a symbolic culture that is based on a semantic stratification capable of representing the logical and formal system of images (Gaston Bachelard) and their use in an atemporal system (Aby Warburg).

Images and the imaginary culture were developed strongly in the second part of the 20th century. A strong testimony to this context is Jean-Paul Sartre's dedication of his two works to the imagination and the imaginary: *L'imagination*, PUF, 1936 and *L'imaginaire. Psychologie phénoménologique de l'imagination*, Gallimard, Paris, 1940. Sartre continues to follow a traditionalist line, remaining anchored to an irrational conception of imagination. Thanks to Bachelard, the imagination culture acquires a philosophical value. Starting from his thought, a surrealist aesthetic developed in France from the 1940s to the 1990s, with many intellectual contributions—Roger Caillois, Paul

Ricoeur, Gilbert Durand, Henry Corbin, Gilles Deleuze, Jacques Derrida and Michel Serres.

In the wake of Jean-Paul Sartre and Maurice Merleau-Ponty, Bachelard adopts a phenomenological system capable of integrating with his philosophy images. However, he reshapes his philosophical system through dimensions of his thought: 1) in poetic activity, in which imagination presents itself as a primitive intention of consciousness; 2) in material images, in which the image is a psychic and physical continuum; and 3) in the reunion of being with the world through imagination. Bachelardian aesthetics is developed through two fundamental macro sets: 1) the world of images, which includes the development of material imagination, imagination and reverie; and 2) the world of poetics. The interest in images was born on the background of the first epistemological approach. Realism and pre-scientific conceptions are, in fact, aspects that wrongly condition rational knowledge. At the same time, images acquire a formal, productive, syntactic and semantic system of their own, ridding them of the irrational or the fantastic. The phenomenological interaction of images opens up a lead to how the digital world or digital aesthetics can be based on it.

Another starting point is that suggested by Aby Warburg, who, through the enormous work of Mnemosyne, introduced a series of images ordered through a single criterion, that of pathosformel, i.e. images based on the study of the movement of the portrayed figures in which the form of the image is based on the pathos (or feeling) that the image represents.

Pathosformeln are still images that condense the original creation (pathos) with the repetitiveness of the canon to which they involuntarily refer (formeln or formulas). The principle of the presence in European art of the expressive gesture is taken from pagan antiquity and that of inversion—the overly expressive gesture can only reappear transformed into its opposite. We are talking about an original creation that is repeated in time without developing; it remains crystallised and then reused.

Warburg conceived of the history of images as a stratification of different experiences. The different epochs overlap as sediments of different geological phases, ready to re-emerge suddenly from the subsoil an image that has been absent for a long time. They are images whose form is inseparable from the content, an inheritance of physiognomy and content.

Warburg focuses more on a few dynamic images, which are maximum examples of pathosformeln: Orpheus, Nymph and Centauromachia. Comparing ancient sculpture and sarcophagus reliefs with Renaissance works, Warburg emphasises that mythological images are not limited to the illustration of ‘ancient fables’ but are ‘reactivated by the artists of the Florentine fifteenth century, first and foremost Donatello in the pathetic charge of their forms in movement, and invested with a new meaning’.

The phenomenon of a Western collective visual memory preoccupied Warburg since the 1890s. In his notes on the *Ausdruckskunde* (the theory of expression) that accompanied his thesis on Botticelli, Warburg theorised that artistic recourse to stereotypical images from antiquity was a performance of memory. Artists dealing with intense events, crises and radical changes unconsciously reproduce visual formulas for extreme emotional states.

From theorists such as Ewald Hering and Richard Semon, scholars of perceptual psychology and evolutionary biology have proposed that memory traces are inherited. Warburg borrows the terms *engram* and *mneme*, with which he describes the encoding and preservation of images in the psychic apparatus and the artistic organism. Warburg focuses particularly on the semantic changes that visual formulas experience in their new contexts, rather than concentrating in terms of conventional iconography on the petrified meaning of the motifs and trying to trace their historical development in the context of own understanding of iconology.

Mnemosyne is a machine, a sort of gigantic condenser in which all the energy currents that have animated and still animate the memory of Europe are collected. The objective of the atlas is to illustrate the mechanisms of the tradition of themes and figures from antiquity—Oriental and Greco-Roman antiquity—to the present day, with particular attention to the recovery of movements, gestures and postures that express the entire range of emotional excitement (aggression, defence, sacrifice, mourning, melancholy, ecstasy, triumph, etc.). These are *pathosformeln*—expressive formulas of emotions.

3 From Ocularcentrism to Sensitivity: Towards Somadesign

If we can retune along these lines, through images, we can arouse the pathos that would probably be conditioned by our only sensitive feeling. In this regard, as architect Juhani Pallasmaa [6, 7] suggests, we should take a step forward from using only sight to approach our sensitive world aroused by images to moving to all five senses, managing to make the digital world a completely aesthetic immersion. How can a digital design approach the world of the sensitive today? How can aesthetics aid in the sensitive understanding of digital images?

The sensitive world's approach takes place through the exemplification of a series of stratagems of aesthetic research. This aesthetic involvement of the designer brings us back to the more general and topical aspect of somaesthetic theories introduced by Richard Shusterman at the end of the 1990s. The relationship is deepened through somaesthetics and somadesign (Kristina Höök), which relates interaction design research to the soma involvement of the senses.

The project of somaesthetics uses the term *soma* to designate the lived, sentient and purposeful body in order to avoid the problematic associations of the *body* and *flesh* (an alternative term for body that Merleau-Ponty uses but whose ordinary meaning refers only to the carnal parts of the body and is strongly associated with Christian notions of sin). The term *soma* designates the lived, sentient and purposeful body rather than simply the physical body. The *aesthetics* in somaesthetics also originates in Greek, derived from the word for sensory perception (aisthesis) that Baumgarten used to coin the modern philosophical discipline of aesthetics [8]. In this regard, somaesthetic theory has been applied to issues of ethics, politics, health and gender studies, exercise science and interaction design.

In 2018, Kristina Höök completed a research project titled *Designing with the Body*. This book argues that for designers to create 'designs and systems that create harmony between the soma' and the object, a new design program is necessary. This program would help designers cultivate somaesthetic sensibilities so that they can better and

‘more deliberately shape the space of movements invited by technologies, increasing the possibilities for pleasure, somaesthetic experiences, and more meaningful interactions with our vital world’.

Höök [5] introduces the possibility of working through imaginary design with the four characteristics of soma design: (1) the lived experience, (2) the slowing down of design, (3) testing and retesting against the desired aesthetic and (4) socio-digital materials. The experience of living meets the socio-digital matter, which means that in this digital context, a synthesis of the world of images and the world of aesthetic sensibility can take place.

4 Conclusions

Today, the use of interactive platforms helps us understand more and more when digital design is part of our everyday lives and even how it represents a form of aestheticisation. The culture of images in this case represents today the real and symbolic foothold that the screen, as well as the *smart* world, uses. Images and their arrangement once again provide a glimpse of an escape from the total introjection that virtual life can confuse. The introduction of digital aesthetics can educate future digital designers to a world that is increasingly functional yet more real and less virtual.

References

1. Bachelard, G.: *La Poétique de la rêverie*. PUF, Paris (1960)
2. Benjamin, W.: *Illuminations: essays and reflections*. In: Arendt, H. (ed.) Trans. Harry Zohn. Schocken Books, New York (1968)
3. Desideri, F.: *Origine dell'estetico. Dalle emozioni al giudizio*, Carocci, Roma (2018)
4. Floridi, L.: *Pensare l'infosfera. La filosofia come design concettuale*, Raffaele Cortina Editore (2020)
5. Höök, K.: *Designing with the Body. Somaesthetic Interaction Design*. The MIT Press, Cambridge (2018)
6. Pallasmaa, J.: *The Eyes of the Skin. Architecture and Senses*. Wiley, New Jersey (1996)
7. Pallasmaa, J.: *The Thinking Hand: Existential and Embodied Wisdom in Architecture*. Wiley, New Jersey (2009)
8. Shusterman, R.: *Somaesthetics, International Lexicon of Aesthetics*, Autumn 2019 Edition
9. Warburg, A.: *Fragmente Zur Ausdruckskunde*. In: Pfisterer, U., Hones, H.C. (eds.) *De Gruyter*, Berlin (2015)