Information as an Aesthetic Event

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Abstract

How do designers of information technology understand the interaction between the users and devices? How do they design user interfaces? In this article I will analyze the recent shift in information technology design. Contrary to ten years ago, today the designers no longer try to make the interfaces invisible. Instead, the *interaction is treated as an event* - as opposed to "non-event", as in the previous "invisible interface" paradigm. Put differently, using personal information devices is now conceived as a carefully orchestrated *experience*, rather than only a means to an end. I will discuss different aspects of this new interface paradigm using the examples of OSX, LG Chocolate, and iPhone.

Introduction

If you recall the very first mobile phone you owned – lets say at the end of the 1990s or maybe even the first years of this decade – and compare to the phone you have (or wish to have) today, the difference in design is striking.

The change in the design of mobile phones is just one example of larger trend which I call "aesthetisation of information tools". The trends begins around 1996-97 (1996: Wallpaper was launched and Collete was opened in Paris; 1997: opening of Guggenheim Bilaboo). It can certainly be connected with the democratization of design, the rise of branding, the competition in global economy and other larger socio-economic shifts. However, there are also particular reasons for it -- non-reducible to these other forces.

Until mid 1990s only people working in particular jobs spend all their time interacting with information. In addition, these interactions were limited to work spaces and times; they were not spilling into leisure and other non-work activities. The rise of information society has greatly increased the proportion of people whose work involves information processing. At the same time, during the 1990s, interacting with informaton via computers and computer-based devices has gradually entered people's lives outside of fwork. Because of its inherent multifunctionality and expandability, a computer and other devices build on top of it such as a mobile phone came to be used for all kinds of non-work activities: entertainment, culture, social life, communication with others. Consequently, work and non-work, professional and personal met within the same information processing machines - the same physical objects, same hardware and software interfaces, and in some cases even the same software.

As these machines came to be redefined as consumer objects to be used in all areas of people's lives, their aesthetics were altered accordingly. The associations with work and office culture and the emphasis on efficiency and functionality came to be replaced by new references and criteria. They include being friendly, playful, pleasurable, expressive, fashionable, signifying cultural identity, aesthetically pleasing, and designed for emotional satisfaction. Accordingly, the modernist design formula "form follows function" came to be replaced by new formulas such as "form follows emotion."[1]

Aesthetisation of Interfaces

Something else has happened in this process. Until this decade the design of user interfaces was often ruled by the idea that the interface shoud be invisible.

[1] "Form follows emotion" phrase was used by a number of designers in the 2000s – for instance, Remote Home project XXX.

In fact, the really successful interface was supposed to be the one which the user does not notice. This paradigm made sense until the middle of the 1990s – that is, during the period when, outside of work, people used information devices on a limited basis. But what happens when the quantity of these interactions greatly increases and information devices become intimate companions of people's lives? The more you use a mobile phone, a computer, a media player or another personal information device, the more you "interact with an interface" itself.

Regardless of whether the designers realize this consciously or not, today the design of user interaction reflects this new reality. The designers no longer try to hide the interfaces. Instead, the *interaction is treated as an event* - as opposed to "non-event", as in the previous "invisible interface" paradigm. Put differently, using personal information devices is now conceived as a carefully orchestrated *experience*, rather than only a means to an end. The interaction explicitly calls attention to itself. The interface engages the user in a kind of game. The user is asked to devote significant emotional, perceptual and cognitive resources to the very act of operating the device.

OS X

Today a typical information device such as a mobile phone has two kinds of interfaces. One is a physical interface such as buttons and the phone cover. The second is a media interface: graphical icons, menus, and sounds. The new paradigm that treats interaction as an aesthetic and meaningful experience equally applies to both types of interfaces.

The most dramatic example of the historical shift in how interfaces are understood is the differences in user interface design between the successive generations of the operating system (OS) used in Apple computers – OS 9 and OS X. Released in October of 1999, OS 9 was the last version of Mac OS still based on the original system which came with the first Macintosh in 1984. Its

look and feel – the strict geometry of horizontal and vertical lines, the similarly restrictive pallete of greys and white, simple and business-like icons – speaks of modernist design and "form follows function" ideology. It fits with grey suites, office buildings in International Style, and the whole twentieth century office culture.

The next version of the operating system introduced in 2001 - OS X - was a radical departure. Its new user interface was called Aqua. Aqua's icons, buttons, windows, cursor and other interface elements were colorful and three-dimensional. They used shadows and transparency. The programs animated when started. The icons in Dock playfully increased in size as the user moved a cursor over them. And if in OS 9 default desktop backgrounds were flat single-color monochrome, the backgrounds which came with Aqua were much more visually complex, more colorful, and assertive – drawing attention to themselves rather than trying to be invisible.

In OS X, the interaction with the universal information processing machine of our time – a personal computer – was redefined as as explictly aesthetic experience. This aesthetic experience became as important as the functionality (in technical terms, "usability"). The word aesthetics is commonly associated with beauty, but this is not the only meaning which is relevant here. Under *OS X,* **user interface was aesthetized in a sense that it was now to explicitly appeal to and stimulate senses** - rather than only users' cognitive processes.

The transformation of Apple from a company which was making hardware and software to a world leader in consumer product design – think of all design awards won by iMACs, Powerbooks, iPods and other Apple products – is itself the most clear example of what I called aesthetisation of information tools. It is relevant here to recall **another classical meaning of aesthetics: the coordination of all parts and details of an artwork or design** – lines, forms, colors, textures, materials, movements, sounds. (I talk about classical aesthetics

because twentieth century art has often aimed at opposite effects – shock, collision, and establishment of meaning and aesthetic experience through montage rather than unification of parts.) The critical and commercial success of Apple products and the truly fanatical feelings they envoke in many people to a large extent has to do with the degree of this intergration which until now has not been seen in commercial products in this price range. In each new product or version, the details are refined until they all work together to create a rich, smooth, and consistent sensorial whole. This also applies to the way hardware and software work together. As an example, think of the the coordination between the circular movement of user's finger on the track wheel of the original iPod and the corresponding horizontal movement of menus on the screen (which borrows from OS X column-view.)

In the beginning of 2000s other personal technology companies had gradualy begun to follow Apple in putting more and more emphasis on design of their products across all price categories. Sony started using the "Sony Style" phrase. In 2004 Nokia introduced its first line of "fashion phones" declaring that personal technology can be "an object of desire" (two years later this became true for the whole mobile phone market). By investing in industrial designs of their consumer products, Samsung was able to move from an unknown supplier to a top world brand. Even the companies whose information products were almost exclusively used by professionals and business users started to compete in design of their products. For instance, the new 2006 version of BlackBerry smart phone popular with business people and professionals was introduced with this slogan: "BlackBerry Pearl – Small, Smart, and Stylish".

Interaction as Theatre; Interaction as Experience

In retrospect we can see that aesthetisation (or perhaps, theatrisation) - of user interfaces of laptops, mobile phones, cameras and other mobile technology which took place between approximately 2001 and 2005 was conceptually

prepared in previous decades. Based on the work done in the 1980s, computer designer and theorist Brenda Laurel published a ground breaking book *Computers as Theatre* in 1991. She callled interface an expressive form and compared it with a theatrical performance. Using Aristotle's Poetics as her model, she suggested that interaction should lead to "pleasurable enjoyment".

The notion of interaction as theatre brings an additional meaning to the idea that a mobile phone engages its user in a kind of game or a play which I put forward in the beginning. In suggesting this I was thinking of how the buttons on LG Chocolate suddenly appear glowing in red when you switch the phone on; or how when you select some option on the same phone it confirms your selection by replacing the current screen with a whole new graphic screen; or, how pressing the cover of Motorola PEBBLE opens the phone in an expected and unique way. In over words, I was referring to a variety of ways in which **the current generation of mobiles responds to user actions in a surprising and often seemingly exaggerated manner.** (This applies to both physical interfaces and media interfaces). The notion of interaction as theatre makes us notice another dimension of this play-like behavior. As I will describe in more detail below using the example of switching on LG Chocolate mobile, various sensorial responses which a mobile generates in response to our actions often are not single events but rather sequences of effects. As in a traditional theatre play, these sequences unfold in time. various sensorial effects play on each other, and it is their contrast as well as the differences between the senses being addressed – touch, vision, hearing – which together add up to a complex dramatic experience.

In 1991 when Laurel published her book the use of technology products was still limited to particular professions but as designers of iMAC have clearly recognised, at the end of the decade these products were becoming the mainstream items of consumer economy. And this economy as a whole was undergoing a fundamental change. In their 1989 book *Experience Economy: Work Is Theatre & Every Business a Stage* Joseph Pine and James H. Gilmore

argued that consumer economy was entering a new stage where the key to succesful business was delivering experiences. According to the authors, this was the new stage following the previous stages centered on goods themselves and later services. The authors stated that to be successful today, the compnay "must learn to stage a rich, compelling experience". If Laurel envoked theatre as a way to think about the particular case of human-computer interaction, authors of *Experience Economy* suggested that it can be a metaphor for understanding the interaction between consumers and products in the new economy in general.

The aesthetisation (which is my preferred term) of hardware design and user interfaces of information products which took place throughout the industry in the following decade fits very well with the idea of "experience economy". Like any other interaction, *interaction with information devices became a designed experience.* In fact, we can say that the three stages in the development of user interfaces of computers – command-line interfaces, classical GUI of 1970s-1990s, and the new sensual and entertaining interfaces of post OS X era can be correlated to the three stages of consumer economy as a whole: goods, services, and experiences. Command-line interfaces "deliver the goods", that is, they focus on pure functionality and utility. GUI adds "service" to interfaces. And at next stage, interfaces become "experiences".

Experience design in LG Chocolate

The idea of the experience economy works particularly well to explain how the physical interaction with technology objects - as opposed to their physical forms and screen interfaces only - was turned into the stage for delivering rich sensorial and often seductive experiences. For instance, early mobile phones did not have any covers at all. The screen and the key were always there and they were always visible. By the middle of 2000s, the simple acts of opening a mobile phone or pressing its buttons were turned into real micro-plays: very short narratives complete with visual, tactile, and three-dimensional effects. In the

short history of mobile phones the examples of particuar models whose commercial and critical popularity can to a significant degree be attributed to the innovative sensorial narratives of interaction with them are the Motorola RAZR V3 (2004) and LG Chocolate (2006; the actual model number is LG VX-8600).

LG Chocolate sold over one million units in only eight weeks following its introduction. This phone offers a unique (from a 2006 point of view) interactive narrative which can be called a real Gesamtkustwerk – directly engaging the three senses of sight, sound and touch, and envoking the fourth sense of taste through the phone's name and color. When the phone is closed and off, it appears as a solid monocrome shape with its display and touchpad completely invisible. It is a mysterious Thing. When you switch the phone on, the whole multimedia drama unfolds. The Thing gradually awakens. Suddenly previously invisible buttons appear in a glowing red color. The screen lights up and it begins to play an animation. As the short animation unfolds towards its finale, the phone suddenly vibrates at exactly the same time when the LG logo comes into the screen.

Given that the process of aesthetization of information tools only started less than a decade ago, I am sure that what we have seen so far are just initial shy steps. More wild effects and experiences which we can't even imagine today wait for us in the future.

Supermodernism: The Aesthetics of Dissapperance

As iMAC (1998) and OS X (2001) demonstrate, aesthetisation of information technology paradigm was applied equally to designs of information products and and their user interfaces – i.e. both "hardware" and "software." In fact, although released at diffirent time, the first iMACs (1998-1999) and OS X (2001-) share similar aesthetic features: bright clear colors, use of transparency / translucency, and rounded forms. And while both aim to remove the standard twentieth century

associations of information technology - cold, indiffirent to human presence, suited only for business - they at the same time cleverly exploit their technological identity. Both the translucency of iMAC plastic case, and the Dock magnification and Genie effects in Aqua interface similarly stage technology as magical and supernatural.

In this respect it is relevant that a number of Ive's subsequent designs of Apple products – Titanium and Aluminum PowerBooks (2001, 2003), iPod and iPOd shuffle (2001, 2005), Mac Mini (2005), the accompanying power cables, earphones, and so on – adopted very diffirent minimal aesthetics. In this aesthetics the technological object seems to want to dissappear, fade into the background, and become ambient - rather than actively attracting attention to itself and its technological magic, like the original iMACs. Whether consciously or not, these Apple designs communicate, or rather foretell, the new identity of personal IT which today is still in development - the actual practical dissappearance of technological objects as such as they become fully integrated into other objects, surfaces, spaces and cloves. This is the stage of ubiqutious computing in which a technological fetish is dissolved into the overall fabric of material existence. The actual details of this potential future dematerialisation will most probably be diffirent from how it is imagined today, but the trend itself is clearly visible. But how to stage this future dissapperance using technology available today? Apple designs of the first part of the 2000s can be understood as responses to this challenge. Historically, their particular aesthetics occupies an intermediate, transitional stage - between the stage of technology as a designed lifestyle object (exemplified by Apple iMACs from 1998 onward or Nokia's Fashion collection of mobiles, 2004-) and its future stage as an invisible infrastructure implanted inside other objects, architectural forms and human body.

In 1998 Dutch architecture theorist Hans Ibelings has published a slim but soon to become influential book *Supermodernism* in which he identified the similar

aesthetics of dissappearnce in the architecture of the 1990s as exemplified by Foundation Cartier in Paris (Jean Nouvel, 1994), Railload Switch Tower in Basel (Herzog & De Meuron, 1994-1997), or French National Library in Paris (Dominique Perrault, 1989). According to Ibelings, supermodern aesthetics "is characterized mainly by the absense of distinguiishing marks, by neutrality."[2] This aesthetics stands in opposition to previos architectural aesthetics of the 1980s and early 1990s: "Whereas postmodernist and deconstructivist architecture almost always contain a message, today architecture is increasingly conceived as an empty medium."[3] But while architecture as "an empty medium" on purpose on purpose avoids communicating messages and over-signifying, it does instead something diffirent and new. It creates unique sensorial experiences. The large, open and empty interior volumes, the use of translucency and transparency, the employment of a variety of new materials and finishes which create finely focused sensorial effects – all these tactics have been by supermodern architects to craft unique spatial experiences – where the experience one can have by being inside a particular building cannot be duplicated anywhere else.

In retrospect, we can correlate supermodern aesthetics with the rise of "experience design" / "experience economy" in the second part of the 1990s. We can also see it as already partially employing the new logic of architecture which becomes fully operational in the next decade – that is, "signature" buildings by brand-name architects crucial for branding cities and companies alike. Canonical supermodern buildings used simple geometric volumes which offered subtle sensorial effects inside and tried to dissappear when seen from a distance. Canonical brand architecture of 2000s appears to work diffirently – its easily identifiable and unique forms function as icons designed for media communication. But at the same time, just as supermodern buildings, signature iconic buildings also function as spatial destinations, i.e. they offer unique

[2] XXX, *Supermodernism: Architecture in the Age of Globalization*, p. 88.

[3] Ibid.

sensorial experiences inside. The complex and dynamic forms of Frank Gerrhy's buildings such as Guggenheim Bilaboo, Los Angeles Disney Hall, or Strata Center at MIT is a perfect example of this double function – they look dramatic and unique when photographed, and they simultaneosly promise a unqiue spatial experience which requires a physical visit.

Ibelings was looking only at architecture, but ten years later, we can say that the same supermodern aesthetics was put forward by Ives and his team in designing Apple products in the first half of the 2000s. The new developed materials and finishes, the flat largely empty surfaces uninterrupted by multiple buttons or screws (as it is the case in typical technological objects), the monochrome appearance which visually emphasises the shape as a whole, the rounded corners, the glow of Apple logo which creates a three-dimensional effect, and the simplicity of the overall 3D form – all these techniques work together to create a powerful impression that an object is about to fade and completely dissolve. And at the same time, the same object – a laptop, monitor, or iPOD - creates another spatial experience which, inspite of the dramatic diffirences in size between these buildings and architecture, is a perfect analog of "a new spatial sensibility" that Ibelings found in supermodern buildings - "boundless and undefined space" which however "is not an emptiness but a safe contained, a flexible shell."[4]

Ibelings has speculated about the diffirent reasons for supermodern aesthetics in architecture, but in the case of personal information technologies, the spatial form which is simultaneosly "boundless" and "undefined" and also "a safe contained, a flexible shell," seem to me a perfect spatial metaphors for the meanings of these technologies as intended by Apple, Nokia and other progressive (i.e. attuned to lifestyle and cultural trends) technology/design companies in 2000s – mobility, flexibility, lack of predefined boundaries and limits. The last meaning, however, also happens to define a modern computer in theoretical terms – a universal simulation machine which via software can

[4] *Supermodernism*, p. 62.

simulate unlimited number of other machines and tools and, again via software, is infinetely expandable. But how do you find a visual and/or spatial expression for such a meta-machine? This is one of the challenges of contemporary aesthetics. **The supermodernist aesthetics of Apple product**s as designed by Ive and his team has so far been one of more successful solutions to this fundamental challenge.