

Inter-facing Everydayness From Distance to Use, Through the Cartographic Paradigm

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1. Intrinsically hybrid: a very brief history of cartography

The production of cartographic surfaces has been evident in human history since ancient times: evidence can, in fact, be found today in various areas and as long ago as the Neolithic, Bronze and Iron Ages (respectively Çatal Hüyük and Bedolina maps). Cartographic products are in fact cultural constructions and variable by their nature, interdisciplinary and greatly influenced by external forces prevalent at the time of their creation. It is difficult to observe, before the 20th-century – in which there was mainly an unconditional acceptance of the presented cartographic product – the artistically connoted re-configuration (therefore parallel to the instrumental one) of it. Formerly, in fact, the artistic and the pragmatic dimensions of such a device were developed in the same object.

Between the 20th and 21st-century, a countermapping culture becomes prevalent. It contemplates a re-appropriation of the cartographic medium as a means of protest and re-configuration of the experiential material performed in various ways: it is rooted in the 20th century period of avant-garde artistic research, and continues via Neo-avant-garde, until today¹.

During this time the union between the artistic and the scientific aspect, which in the previous centuries occurred in one product, seems to disappear, thus making the two main nucleuses proceed in a parallel manner. The configuration of the art object is made by the artists, the production of the scientific tool in the hand of the cartographers (this is clearly a generalized spread and not an absolute trend).

Nevertheless, starting from the 21st-century (although the technological progress and, among the many, two world wars significantly fostered countermapping's first

¹ For a detailed overview on the history of mapmaking see Wood (2010).

phase of development), phenomena such as globalization, the expansion of the Internet, the optimization of geolocate devices, the development of increasingly advanced hardware and software, seem to have re-established that bond which has been untied for almost a hundred years, taking the direction of interactivity and everyday use of specific tools. These tools include smartphones, tablets or laptops and have decidedly augmented the individual's «cartographic awareness» (even if often virtual), who is already, necessarily involved in the dialectics functionality/beauty.

Nowadays, this is the general tendency followed by a significant amount of contemporary art's production (i.e. Locative Media Art projects), where in some fortunate cases, it seems to reduce the distance between the artwork and the audience. However, furthermore, such a tendency is evident in everyday life in many ways through design, whose planning basis will be compared to cartographic devices' *modus operandi* in the following paragraphs, involving some thematic issues analysed by Gestalt theory, the recent Everyday Aesthetics and finally by referring to Nelson Goodman's constructivism.

2. *Paths at your fingertips: everydayness and nowness*

Therefore, it can be said that cartography is historically characterized by a double nature: on the one hand it is an *art object*, often connected to a mere contemplative dimension. On the other hand, the cartographic medium is effectively *useful*, pragmatically spendable: it has to do with a formative-constructive activity and certainly has a design and planning quality.

Nonetheless, in recent years, the cartographic practice acquired a third fundamental attribute: the *everydayness*.

This is due, as already mentioned, to the widespread use and popularisation of smartphones, tablets and analogous devices with related applications. Thanks to a predominantly touchscreen technology and user friendly interfaces, this certainly activated a democratization and normalization of the cartographic activity, bringing a practice and a set of centuries-long history artefacts to an interactive level. That, just like any functioning design projects – and tracing a sort of semantic-functional proximity with the latter – eliminate the auratic distance typical of some art and assert the paradigm of proximity and accessibility, in other words, usability's. Noteworthy are services as Google Maps and similar applications, check-in through Social Media, Social Media itself and travel guide e-books.

The consequent and significant spreading of «cartographically-themed» design projects that we are witnessing over recent years is therefore not coincidental. This spreading is a repercussion of the progressively common practice of the perceptual acclimatization to, and the creation of planimetrically connoted realities: we furnish, clothe ourselves, plan, play and interact using cartographically qualified functions and patterns.

The progress of technology, combined with a captivating layout, corresponds hence with a proportional increase of the user's cartographic awareness, whose perception of the world², gestaltically speaking³, becomes more structured. As a consequence, the interaction with the environment progressively undergoes an economization process: the user therefore demands functionality.

It is furthermore evident, through the usage of such devices and software, what occurs is an increased awareness' achievement of the notions of place, displacement (even though often virtual, but formerly unimaginable) and of the gestures we make in our *everyday life* (no doubt including our relationship with objects).

Thanks to the above listed technological means, in fact, a re-appropriation of the latter is taking place, letting us comprehend aspects of it, that we didn't consider before. By means of the services and possibilities they offer us, a compelling need for recording, documentation of and often sharing the everyday, or rather, the *immediate*, is also developed – in this case, we will talk about *nowness*, a more urgent concept, instead of everydayness.

² In this respect, G.J. van Tonder and Dhanaraj Vishwanath (2013) state that «When someone creates a design, the more salient perceptual qualities in what is envisaged and seen, dominate the trajectory of the design process: perception significantly shapes the design outcome. Any human-made creation therefore reflects back upon perception, offering potential insight into the constructs that resonate with the internal organization of percepts. [...] Nature may be considered the evolutionary blueprint for perception. While it is likely that all sentient entities experiencing their own version of "reality" (von Uexküll [1926]), human-made design can alter, exceed or antagonize perceptual organization that, at the outset, evolved to deal with a natural environment unfettered by human hands».

³ In this context we are specifically referring to the concepts of order and complexity, the relationship between function and expression [«An object must not tell a lie (Arnheim [1966]: 202), [...] functional appearance is due to a translation of physical forces into visual language. [...] What we see [...] is the expressive behaviour of a pattern of visual forces. This pattern is related to the pattern of physical forces that constitutes the function of the object» (Arnheim [1966]: 204-205)] and in particular to the conception of contemplation as active and functional to the creative process analysed by Rudolph Arnheim. It may also be noted that Arnheim analysed the visual interaction between maps and individuals more broadly in his 1986 (first published in "American Cartographer", 3, 1 [1976]) essay *The Perception of Maps*.

Therefore, through the *cartographic paradigm*, using Thomas Leddy's words (2012), we will find the extraordinary in the ordinary (a dimension clearly susceptible to a following and gradual normalization process): an otherwise-invisible (as it hasn't been thoroughly elaborated yet) dimension is brought to a tangible level. It is not a coincidence in fact, that the concept of *augmented reality* is a widely debated theme nowadays.

It is also interesting to note that the three features, which characterize the cartographic nature, are constantly and simultaneously evident in the relationship that occurs between the individual and the cartographic *device* (even though, account must be taken of the fact that the latter of the three, as already said, is relatively recent, at least with such intensity). These features keep it in a hybrid terrain made of a strong perceptual fulfilment for formal aspects and of a considerable pragmatic and functional contribution to everyday life. It can be argued that there is a substantial analogy as to what the dialectics functionality/beauty is in design, which in fact must incorporate in a single tool the fundamental qualities already referred to cartography.

The latter can be then considered an efficient paradigm for the understanding of the different modalities with which we relate to the objects that shape our everyday life.

On the basis of these observations, the *planimetrically connoted universe* (immanent also to design) described so far within this paper, with a specific attention to the most technological implications of the cartographic practice (which actually coincides with a peculiar turn contemporary design has taken, that is to say *interactivity*)⁴, can be included in a everydayness perspective.

The four main aspects that Melchionne (2013)⁵ points out as characteristic of Everyday Aesthetics can be helpful to support what previously has been stated:

a. Ongoing. Everyday life is marked by an economy of effort, a minimum of planning, and the easy integration of the aesthetic into routines with amendments and variations along the way.

The economy and the easiness mentioned in this first point are howbeit the final results of a scrupulous design, and a functions, shapes and tools planning process, which provides the suffix «ness» to the noun everyday. That is to say, they add a quality to it, which can be so called thanks to a *constant* consummation of experiences (I would con-

⁴ It is also worth noting that an interesting essay concerning interaction design and map manipulation has been authored by R.E. Roth (2013).

⁵ A further commentary to and clarification of Melchionne's essay has been carried out by Ossi Naukkarinen (2013).

sult the routine Melchionne talks about in this sense). All this is made possible through an unavoidable and designed accessibility: in fact, by way of the aesthetic, or rather, of an engaging functionality, it guarantees the individual the viability of the everyday, but is still able to actively involve him in the construction of the latter.

This is evident in the functionality and in the use of both cartographic devices and design, or, better, the industrial *work* of art (Vitta [2012]) that is such, since it is working, active and concretely taking part in our everyday life experiential multiplicity.

b. Common. Widely experienced or practiced it is accessible and generally, though, not universally practiced.

Any infographics related to touchscreen mobile device sales and application downloads in 2013 available on the Internet, reveal that on a population of approximately 7 billion people, about 2 billion smartphones and 200 million tablets have been purchased, with a significant increase in mobile Internet usage: this data seem to be enough to justify this second point.

The mentioned accessibility (though not universal), tends to be particularly evident in the phenomenon just described. This supports the idea that industrial design and production and the following marketing at competitive prices, in particular, of personal computers, palmtops, iPods, iPads, but also video cameras, photographic equipment, all introduce an experience of shapes, creativity and responsiveness into the everyday. Prior to the present day this was unthinkable, and has now created unprecedented aesthetic constellations and unforeseen taste tendencies (Vitta [2012]: 135).

c. Activity. Everyday aesthetics is defined more by form than content, in other words more by the doing than its product. [...] We must look to the object's *role* in everyday's life.

A role is nothing but «the function assumed by a person or thing in a particular situation»⁶ and a function is an «*activity* that is natural to or the purpose of a person or thing»⁷: design, or more generally a project, is something intrinsically planned, and as a matter of fact, its *performativity*, its activity, as Donald A. Norman ([1998]: 80) states, «relies upon the physical presence of the *task* environment».

Also in this case, affinities with cartography's *modus operandi* emerge: nevertheless, they will be discussed in the following paragraph.

⁶ As stated in Oxford Dictionary.

⁷ *Ibidem*.

d. Typically but not necessarily aesthetic. What matters is not the logical possibility of a quality but, instead, its typicality. The typicality and conventionality of the activity fosters and gives shape to the aesthetic.

Among the four points described by Melchionne, this last one, in the perspective of what has been maintained in this paper since the beginning of it, and with a specific reference to the technological apparatuses outlined hitherto, is perhaps the most relevant.

The introduction of terms such as *typicality* and *conventionality* necessarily refers to concepts such as *usability*⁸ and *accessibility*, because a device, or actually any aspect of the everyday life, without the latter two features, could never, afterwards, become typical, conventional and widespread.

It is a matter of *functionality*: in this regard, it is worth noting that Nelson Goodman – who, moreover, coined the formula “make works work” – in his 1963 work *The Significance of Der Logische Aufbau der Welt*, referring to the role of constructivism in philosophy, establishes a parallelism between cartography and the latter⁹.

A map is schematic, selective, conventional, condensed and uniform. And these characteristics are virtues rather than defects. [...] The map not only summarizes, clarifies, and systematizes; it often discloses facts we could hardly learn immediately from our explorations. [...] It is, indeed, in an artificial language, and has to be read and related to the terrain; but it is consistent, comprehensive, and connected. It may needlessly give us a good deal of infor-

⁸ Donald A. Norman ([1998]: 78) underlines the everyday-dimension of usability alleging that «unless you actually test a number of units in a realistic environment doing typical tasks, you are not likely to notice the ease or difficulty of use».

⁹ The reference to Nelson Goodman’s claim, necessarily involves E.H. Gombrich’s opposition to his conception of the geometric perspective’s method as conventional (more precisely, Gombrich’s disagreement originates from Goodman’s interpretation of the behaviour of light and the concept of fidelity in «rendering space»). In his 1972 work *The “What” and the “How”: Perspective Representation and the Phenomenal World*, in fact, the austrian art historian states that it actually possesses objective validity: «I have attempted to separate three ways in which the perspective picture is stretched or transformed: The first corresponds to the Thouless effect of the constancies and demands that objects in paintings that are drawn as tilted will appear slightly more turned to the beholder than they are really represented. The second, which should be based on the same tendency, would demand that the picture itself, frame and all, would appear less foreshortened than it is; and yet the third, which is the most important and the most interesting, is precisely based on the objective and unnoticed transformations in the plane which are due to this foreshortened view. Introspection suggests that the three actually co-exist peacefully. As our attention shifts in its search for meaning, all the pulls and counterpulls that shape our phenomenal world come into play in the processing of pictures. Maybe it is precisely this paradoxical type of transformation that points to the connection between fidelity and the behavior of light, and therefore to the limits of relativism in representation» [Gombrich (1972): 149]. It should be noted that Gombrich carried out a further consideration of the map in his 1975 lecture *Mirror and Map: Theories of Pictorial Representation*.

mation we already have well in mind; but it may also reveal unsuspected routes and lead us to rectify misconceptions that might otherwise have gone unquestioned. (Goodman [1963]: 552-554).

What emerges is a selective, revelational (Nelson Goodman [1978] talks about realism and, why not, everydayness, as revelation), contextual, organizational and normalizing value intrinsic to cartography, a downright way of worldmaking, as the American philosopher would say.

That planning quality (which is a design quality) previously only summarily attributed to cartography is now attested by Nelson Goodman, who built his philosophical apparatus in terms of a programmatic demolition of concepts, habitually considered fundamental and absolute in philosophy, fostering a strong functionalist and *operational* component in his own aesthetic speculation. This is, in fact, free from any sort of compartmentalism or ontologism, following instead the direction of a more inclusive interdisciplinarity, in which *art* and *science* equally collaborate for the construction of the organized and connected symbolic systems which constitute our *everydayness*.

3. *Mapping is natural: aesthechnics*

The question of usability, functionality and accessibility in design and cartography has strongly emerged in this paper: the latter two have also been analysed in the light of the most recent electronic devices available. They are involved here in their programmatic comparison by analogy and appear to share three distinguishing features: *a captivating layout, usefulness and everydayness*.

It has been widely discussed already how, this latter property in particular, attests that the distance between subject – formerly spectator, now actor – and object, has been progressively reduced, if not yet cancelled. However, what it is that concretely makes this interaction possible and releases it from an auratic dimension of staticity, mainly dedicated to a merely contemplative approach?¹⁰

The *interface* plays a key role for the access to this everyday and dynamic dimension of cartography, and in particular, this dimension has been reached not only thanks to the widespread availability of the above mentioned devices, but especially through a new way of approaching them, characterized¹¹ by a strong *interactivity* and *tactility*.

¹⁰ What we witness here is the passage from visibility to usability.

¹¹ Vilèm Flusser, in his essay about «non things», speaking of the increasing importance that software have gained in the modern age (forerunning somehow Lev Manovich's Software Cul-

These connect the user and the functioning device in a more direct and synesthetic way. Maurizio Vitta (2012) argues that interfaces are distinguished by a perceptual behaviour, a set of gestures and sensations which mere contemplation ignores. This establishes – thanks to a visual codes' and *ad hoc* designed symbols' arrangement – a communicative space between the two interacting parts, which if efficiently articulated, facilitates the *working* of the object.

In this regard, a further structural-semantic affinity between interfaces, design and cartography arises: the specific issue we are referring to is *natural mapping*, a process that

emphasizes the importance of resonance between form and function. Specifically, natural mapping refers to a *design methodology* where the layout of the controls is intentionally arranged to resemble the spatial layout of the designed object or environment. [...] Natural mapping can be extended to the structural mapping of the physical human body. (van Tonder, Vishwanath [2013])

It is essentially the process, which should guarantee *simplicity* or rather, *immediacy* and *perceptual pleasantness* (in this respect our relationship with object is «essentially and functionally» aesthetic) to interfaces, and therefore should make them work (Francalanci [2006]: 22).

This is just a further substantiation, that the usability, functionality and accessibility which have been discussed during the development of this paper, can be obtained only through a process, an organizational dynamic – described by a cartographic lexicon – which is able to guarantee the user a manipulation of devices with which he can build his own everydayness. This can be done through a reciprocal enhancement relationship, made possible thanks to an integrated organization, as well as the dialectics between, and the symbolic relation of, materials, shapes and functions.

In this paper, we have presented a substantial organization of the everyday experiences' material in cartographic terms. This has been a paradigmatic kind of choice: cartography, in fact, must be identified, and more broadly, mapping processes and mapped products (respectively meant as a methodology and an active construction of possible ways of interaction and operation), as a broader spectrum activity, evident with great intensity in various subject areas, from computer science to architecture, through con-

ture's theories), and referring to the «new human being in the process of being born all around us and within us», states that «he does not handle things anymore [...]. The only thing left on his hands are the tips of his fingers, which he uses to tap on keys so as to play with symbols» (Flusser [1999]: 89).

temporary art. More importantly, it can be defined as an intrinsic design quality that fulfills itself through interactive functions and man-sized built interfaces, immediate and available-at-your-fingertips.

It is indeed in the immediacy (or, even in this case, nowness) of the relationship between the object and the «user's body», or rather in its greatest functionality, that technology reveals its own *aesthetic substance* (Vitta [2012]: 89).

In other words, what we are facing in the present age is a passage from the aesthetics of gaze (often peddled as related to interactive or synesthetic experiences, but at the end of the day, relegated in set up places and moments), characterized by a certain distance that occurs between subject and object, to the aesthetics of use, or rather, usability, related to and rooted in an everyday set of experiences. These experiences are based on proximity and immediacy: a new horizon of aesthetics, or rather, *aesthechnics*, shaped and made accessible through the interdisciplinary union of a careful research and design activity with a formal organization of symbols. These are described paradigmatically in this paper by means of a planimetrically connoted attitude, example *par excellence* of the union between art and science, which fosters and is fostered by the pragmatic experience of our everyday life.

Bibliography

- Arnheim, R., 1966: *Toward a Psychology of Art: Collected Essays*, University of California Press, Berkeley-Los Angeles.
- Arnheim, R. 1986: *The Perception of Maps*, in *New Essays in Psychology of Art*, University of California Press, Berkeley-Los Angeles-London, pp. 194-202 (first published in "American Cartographer", 3, 1, [1976]).
- Farinelli, F., 2003: *Geografia. Un'introduzione ai modelli di mondo*, Einaudi, Torino.
- Flusser, V., 1993: *Vom stand der Dinge. Eine kleine Philosophie des Designs*. Eng. Trans.: *The Shape of Things. A Philosophy of Design*, Reaktion Books, London, 1999.
- Francalanci, E.L., 2006: *Estetica degli oggetti*, Il Mulino, Bologna.
- Gombrich, E.H., 1972: *The "What" and the "How": Perspective Representation and the Phenomenal World*, in Rudner, R., Scheffler, I. (Eds), *Logic and Art: Essays in Honor of Nelson Goodman*, Bobbs-Merrill, Indianapolis, pp. 129-149.
- Gombrich, E.H., 1975: *Mirror and Map: Theories of Pictorial Representation*, "Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences", 270, pp. 119-149.

- Goodman, N., 1963: *The Significance of Der Logische Aufbau der Welt*, in P.A. Schilpp (Ed.), *The philosophy of Rudolf Carnap*, La Salle, Illinois, pp. 552-554.
- Goodman, N., 1978, *Ways of Worldmaking*, Hackett, Indianapolis.
- Leddy, T., 2012: *The extraordinary in the ordinary: the aesthetics of everyday life*, Broadview press, Peterborough.
- MacEachren, A.M., 2004: *How Maps Work*, The Guilford Press, New York.
- Melchionne, K., 2013: *The Definition of Everyday Aesthetics*, "Contemporary Aesthetics" 11:
<http://www.contempaesthetics.org/newvolume/pages/article.php?articleID=663>
- Naukkarinen, O., 2013: *What is "Everyday" in Everyday Aesthetics?*, "Contemporary Aesthetics" 11:
<http://www.contempaesthetics.org/newvolume/pages/article.php?articleID=675&searchstr=naukkarinen>
- Norman, D. A., 1998: *The Design of Everyday Things*, The MIT Press, London.
- Roth, R.E., 2013: *Interactive Maps: What we know and What We Need To Know*, "Journal of Spatial Information Science", 6, pp. 59-115.
- Van Tonder, G.J., Vishwanath D., 2013: *Design insights: Gestalt, Bauhaus and Japanese gardens*, in J. Wagemans (Ed.), *Oxford Handbook of Perceptual Organization* (in press), Oxford University Press, Oxford.
- Vitta, M., 2012: *Il rifiuto degli dèi*, Einaudi, Torino.
- Wood, D., 2010: *Rethinking the Power of Maps*, Guilford, New York.