

Einführung and Architecture: About Language from Things to Design Criteria

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Abstract

The text tries to think about the impact that the discovery of mirror neurons might have in the field of architecture. Starting from the idea of empathy as a gestural prelinguistic language developed as extensive engine of a gradually more complex gestural communication of which word is the last stage and empathy as aphasic language of cultural transmission that allows us to have and pass on the cultural knowledge necessary to live in social groups, the text examines the most interesting experiences of the last century from the point of view of empathy and links them to contemporary design experiences, trying to understand what contribution can provide a critical concept as old as empathy, but now extremely topical as it is biologically justified, in the Information Technology era, tracking down a common basis of social experiential sharing for a heterogeneous and fragmented landscape as the contemporary one is.

Keywords

Einführung; information technology; empathy; mirror neurons; architecture.

Introduction

Recalling such a controversial subject, studied as *Empathy*, which over time has almost become a Penelope's web (Pinotti, 2011), woven to even compulsorily cover many concepts that collide with each other, and unsewn when required by the times of history, is not an easy task, but assumes a critical importance considering how the latest neuroscientific discoveries may open the door to a new architectural conception that, binding to Information Technology (Saggio, 2007), is able to give new life to structures, cities, territories, which, though no longer static, but more and more dynamic and interactive, are however still "different" from us.

The term *Einfühlung* and the four seasons of it

The choice of the term *Einfühlung*, which might seem synonymous to *empathy*, does not only refer to its original formulation in terms of the German philosophers Robert and Friedrich-Theodor Vischer (1873), but also to the physiological conception of the empathic feeling.

Now, not taking into account, except for some brief mention, the three seasons of the concept of empathy, which passes from the German *Einfühlung* to the English *Empathy*, and opens to the Anglo-Saxon psychological research (the first two seasons, primarily German, are of the late XVIII and XIX century), we are interested in the fourth season, launched by neurosciences in the recent years.

Origin of term

Starting from Herder's studies (1778) on *corporeal truth* (*Einfühlen*), F.T. Vischer begins to change the millenary philosophical concept from "beautiful - complexity of parts" to "beautiful - complexity of subject-object acts," mutual implication (Ineinander, 1873, cited in Pinotti, 2003).

The body structure becomes the material absolute of the beautiful artistic form. The result of the spatial relationship with an object is an increase or decrease in our vital sensation.

These studies are then recalled by Adolf von Hildebrand in his work *The Problem of Form in Painting and Sculpture* (1907), who admits a "sympathy" between man and external reality, by Aby Warburg, who coins the word *Pathosformel* (1905, cited in Pinotti, 2003), a relationship which is established between typical form and affection and by Theodor Lipps (1923), for whom empathy is the condition of possibility for an object to be aesthetic.

Many studies are also carried out in the field of art and architecture, outlining on the one hand the so-called Herder's "body truth" (Plastic Art, 1778), as we said before, and, on the other, ranging in the studies of Schmarsow and Wolfflin (1886) that connect breathing and cardiac movements with spatial experience.

Neurons of empathy and implications

In 1996, the discovery of neural areas active both when you perform an action and when that same action is performed by others, made by a team of scientists led by Giacomo Rizzolatti, in Parma, on the F5 area of the frontal cortex of the macaque monkeys, opens the doors to the organic codification of the emphatic feeling as an instrument of cultural transmission and social cohesion (Rizzolatti and Sinigaglia, 2006).

We may sum up, as our interest is not addressed to the scientific-biological process, but to the obtained results and the foundations provided to us for our research in the field of art and architecture, in three main phases:

- The biological basis of empathy
- The key role of empathy in the creation of language
- The development of empathic language and the social group

In the first phase, in which Rizzolatti was followed by many scientists, we worked on defining the mirror-neuron “system,” called by the scientific circuits *neurons of empathy*, which, along with other areas of the brain, such as the insula, the superior temporal cortex and the medial prefrontal regions, form the so called “resonance circuit.” The conclusion we reached was that we are “programmed” to empathy and this makes us social animals. Moreover, it falters the biology-culture dualism that saw animals driven by instinct and man, instead, as a culture builder (Rifkin, 2010).

Starting from the widely shared assumption of care between adults and play (*homo ludens*) (Huizinga, 1939) as the most basic form of communication among social animals, we have come to define empathy as the means by which a gestural pre-linguistic language has developed as extensive engine of a gradually more complex gestural communication of which word is the last stage.

Finally, the development in primates (50%) and humans (80%) of the cerebral cortex, seat of mirror neurons, is directly related to living in gradually larger social groups. This development is in fact linked to the monitoring of the empathic stimuli in an increasing number of individuals. With the development of the communicational society, the language complexity and strength of the empathic species have gradually increased. This leads us to few but important considerations: If empathy is the aphasic language of cultural transmission that allows us to have and pass on the cultural knowledge necessary to live in social groups and is essential to social life, as it steadily grows along with the growth of the group, what implications has this in the studies of art and architecture that had well understood the emotional transmission but not the social one?

Key points

The *Einfühlung Theory*, as we have already said, is one of the most controversial and successful theories in the history of architectural criticism: from Art Nouveau to organic architecture, passing by the Futurists and the experiential branch in today’s architecture, not to mention primitive, rural or regional architecture, in any architecture, we can find some empathy related roots.

But the problems are at least three:

- To understand whether the physiological and psychological dual-component, until now applied to the concept of empathy, is adherent to new discoveries or whether speech should be re-calibrated.
- To understand if and how this new socio-didactic component is present and allows us to read as belonging to it architectures seemingly unrelated to the concept of empathy.
- To understand whether this new neuroscientific season of empathy can be fruitfully applied to architecture.

Architecture, in many times and in a multimode, has more or less consciously dealt with the *Einfühlung*.

Design and architectural field: focus on some remarkable experience since 1900 to today's information era

Force, motion and embodiment

The most interesting studies in the architectural field regard the concept of *lines of force*, which from Van de Velde comes up to Paolo Portoghesi. Van de Velde built the well-known definition of "line is a force" (1923, cited in De Fusco, 1964) when as a painter he begun to move towards non-naturalistic forms and ornamentations. With an expired interest in natural forms, Van de Velde imagined the possibilities of organic line with physio-psychological reactions that potentially the semantics of *Einfühlung* gave it (De Fusco, 1964).

A line. Ultimately derived from nature, it is abstracted into a controlled pattern. The artist Walter Crane stated that "Line is all important. Let the designer, therefore (...) lean upon the staff of line -line determinative, line emphatic, line delicate, line expressive, line controlling and uniting" (1892, cited in Tschudi Madsen, 2011).

In the works of Kandinsky and Boccioni, there is a long path that connects empathy to the *lines of force* as the element that springs from nature, draws a man as a natural being and designs architecture as movement.

Also Mendelsohn, rather, especially Mendelsohn, with his wonderful compliance with Einstein's theories, realizes that the curved universe is permeated by energy moving through lines and grids that form the living matter. John Wheeler once summarized *general relativity* as "*matter tells space how to curve and space tells matter how to move*" (1973, cited in Wheeler and Ford, 1998) while Bruno Zevi (1972) said "*The energetic creation of space is the genetic reason of each act of Mendelsohn's design [...] the mass breaks, pressed by an explosive inner strength.*"

Moreover, starting from the Greek *έντασις*, until motion capture, man has always empathically felt the uniformity of matter, energy matter, lines and movement in the whole universe. "The movement generates the form, the form generates the movement. Every point, every line, every surface, every body, every shadow, every light and every color are forms generated by movement, which in turn generate motion. *Pain and pleasure, love and hate, repulsion and attraction, are forms of the mind generated by movement*" (Wingler, 1987, p.97).

Furthermore, the writings of Lipps and Worringer were the inspiration for many architects and artists, from Endell to Kandinsky (Pinotti, 2011).

Additionally, during the historical period after World War I, we can say without a doubt that there was a bloom of thought about line, movement, and empathic feeling. Just think about a figure, that of Johannes Itten, charismatic but often relegated to a position of historical-critical subordination for his extravagant behavior due to the strong influence of Eastern philosophy, meditation, and Zoroastrian religion. Itten endorses the most

convincing theories of the Art Nouveau period related to Van de Velde's *lines of force*, covering them, however, with the mystical afflatus that had characterized them as pulsating tangle in Gothic architecture and strictly connecting them to the newly formed Freudian psychoanalytic theory that a few years before had led to the theory of 'Es' or unconscious ego, binding to the romantic philosophical schools that had rediscovered the material body as an instrument of knowledge.

In his *Vokurs*, students were invited to gather in meditation doing breathing exercises to then spring into action and draw with both hands moving lines on canvas or paper. As written by Itten himself in 1964, in the book *Design and Form*: "To execute the following exercises it is necessary to choose a very flexible, expressive medium which *reacts immediately to the slightest motion of the hand*, such as India ink brush..." (cited in Dearstyne, 1986).

This type of exercises are an example of expressive work based on the listening of the corporeal intellect. The aim is to translate in the gestures of the creative act one's own pre-reflexive sensory-affective condition, thus creating intuitive abstractions of an imaginal kind. The reflective processing and the prereflexive component are therefore undividable and essential to making the emotion corporeal (Alessandrini, n.d.).

This very close bond shown in Itten between movement, strength and emotion, is a recurring theme of the Modern and marks a new multiple and fourth dimensional visual point *from the inside*. The phenomenon of discretization (Saggio, 2010) that breaks the perspective frames of the vision of reality, the centripetal system of space conquest, are present in Itten's research and are linked on one side to Boccioni's "uncontrollable" man (Larcan, 2006), whose movements, rather, whose lines of force are nothing more than the manifestation of the dynamism innate in the figure, which makes the individual's vital force overflow, burst, explode, crystallizing it in thousands introflected freeze frames, and, on the other side, to the Russian current of the modern movement, in the figure of Jakov Černichov.

In his "*Construction of the forms of architecture and machinery*" of 1931, Černichov speaks of the functional complementarity of strength and construction, explained in various forms. The fourth and last is precisely the strength of the dynamics which is defined as the subtle union of complex events operating in our mind with a coordinated way that gives us the opportunity to try a higher form of emotional feeling (Cohen, 1986).

Returning to the contemporary years, in Giancarlo Priori's book "*Sympathy for things*" on the designer Paolo Portoghesi, the architect's work is explicitly linked to the concept of *Einführung*, after all implicitly underlying much contemporary design.

"The constituent element of all his compositions is *the line*. Portoghesi's works do not primarily consist of masses or spaces, but of bundles of lines which unify and separate, fan out and come together, curve and straighten, extend and rise" (Priori, 1982, p.7) [fig. I].

"The *sympathy for things* evokes the concept of *Einführung* that discovers, analyzes and expresses the symbolical relationship which is established between the observer and the natural object. This theory includes at the same time its opposite: the perceived object



Figure 1.

The constituent element of all his compositions in the line. Portoghesi's works do not primarily consist of masses or spaces, but of bundles of lines which unify and separate, fan out and come together, curve and straighten, extend and rise.

Source: [Moschea, 1974-1989] n.d. [online image] Available at: <
<http://www.gophoto.it/view.php?i=http://www.atlantedellarteitaliana.it/immagine/00016/10686OP2024AU17177.jpg>>
[Accessed 10 April 2013].

endows the perceiving subject with the model and the scheme of a given psychological process. In this way the observer experiences again, through the interior imitation, the perceived object: it is a question of formal *Pathos* which is in harmony with nature and which places the produced object in the forefront" (Priori, 1982, pp. 50-51).

Also in the book *Olandesi Volanti (Flying Dutchmen)*, published by Testo&Immagine in 2002, the perceptual world of the *Einführung* is connected to line through the work of architects dedicated to movement like Oosterhuis and Bouman, and that, taking the threads of a current flowing from Invernizzi's Casa Girasole, with Fagioli and Carapacchi, Aldo Rossi (Theatre of the World), Herron (Walking City), attributes to these works the words of Ruskin, "*This is what I call living architecture*" (cited in Jormakka, 2002).

However, if Oosterhuis (2007) speaks of "*single detail*" of the architectural object, that is architectures that are designed-programmed on a single parameter, e-motional hyperbodies, his work, dropped in Information Technology, becomes reductionist there where the term e-motive [fig.2] is very far from any emotional involvement.

More interesting is the work carried out by the architect Juvenal Baracco [fig.3], which, mainly in the field of academic experimentation, recalls the bergsonian concept of Embodiment, bodily experience, proprioceptive knowledge, as essential cornerstone of design. Through a process that lasts for the period of training, he starts from the design of a body copy mannequin to get to architectural perception and design of complex buildings.

Emotional transmission

Another important branch of empathic design and architecture, closely tied to Information Technology, is, without a doubt, the one that exploits the possibilities not of movement and corporeal mimesis, but of emotional communication between objects, architecture and men.

The 'man' has as primary home the 'nature' and where nature entering architecture the man understands the language (Prestinzenza Puglisi, 2011) (Matassoni A. and L., 2013). Not surprisingly, the revolutionary Ronchamp evokes a cave for the mystery of faith, for meditation, for the internalization. A place where the lost man of the post World War II finds the primordial womb, the refuge. The cave. Le Corbusier speaks to the man and does this through an emotional language. In his work *Vers une architecture* he says "The architecture is a fact of art, a phenomenon that elicits emotion, outside of the problems of construction, beyond them. Construction is to take on: the Architecture is to move" (Le Corbusier, 1923).

Zaha Hadid, speaking of the not yet built MAXXI, said "It's about giving life to a space in a variety of ways that offers people pleasure, fun, comfort and well-being similar to those experienced in a landscape" (Giuliani, 2002).

Alice Rawsthorn (2009), famous reviewer of the New York Times, explains the new frontiers of design in her article "*The Demise of Form Follows Function*." "One possibility is what techies call 'human interaction systems.' An example is g-speak, which is now being developed by Los Angeles-based Oblong Industries as a means of operating computers through physical movements and gestures, rather than keyboards and mice. Think of how Tom Cruise "controlled"



Figure 2.

The emotive house is fully industrial, flexibel in programmability, demountable, innovative, places domotics in an onther spotlight but will be general applyable in the near future.

Source: ONL (Oosterhuis_ Lénard), 2002. *E-motive House* [image online] Available at: <<http://www.oosterhuis.nl/quickstart/index.php?id=348>> [Accessed 10 April 2013].

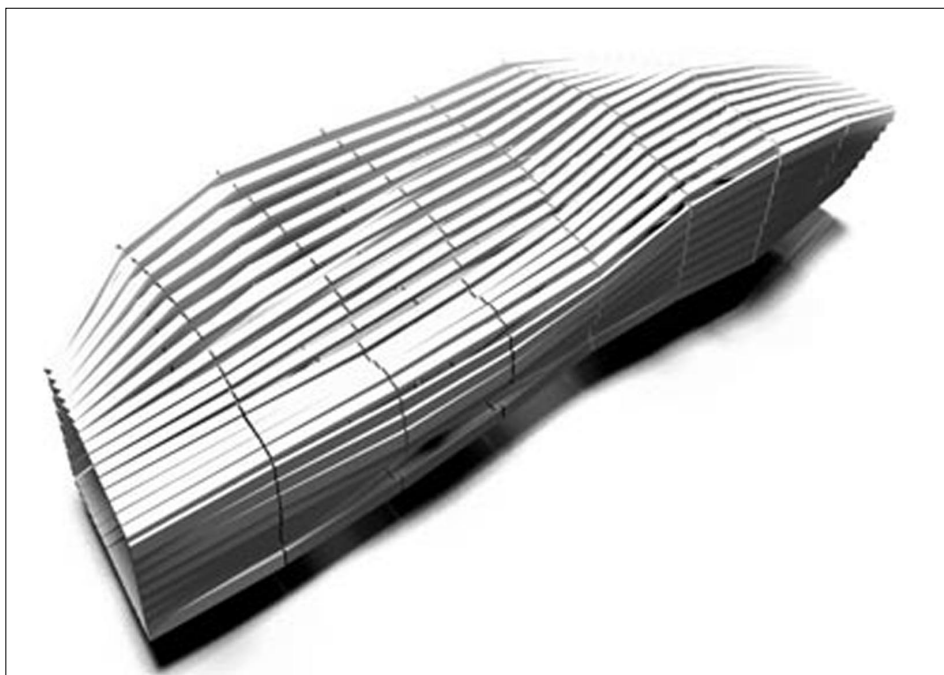
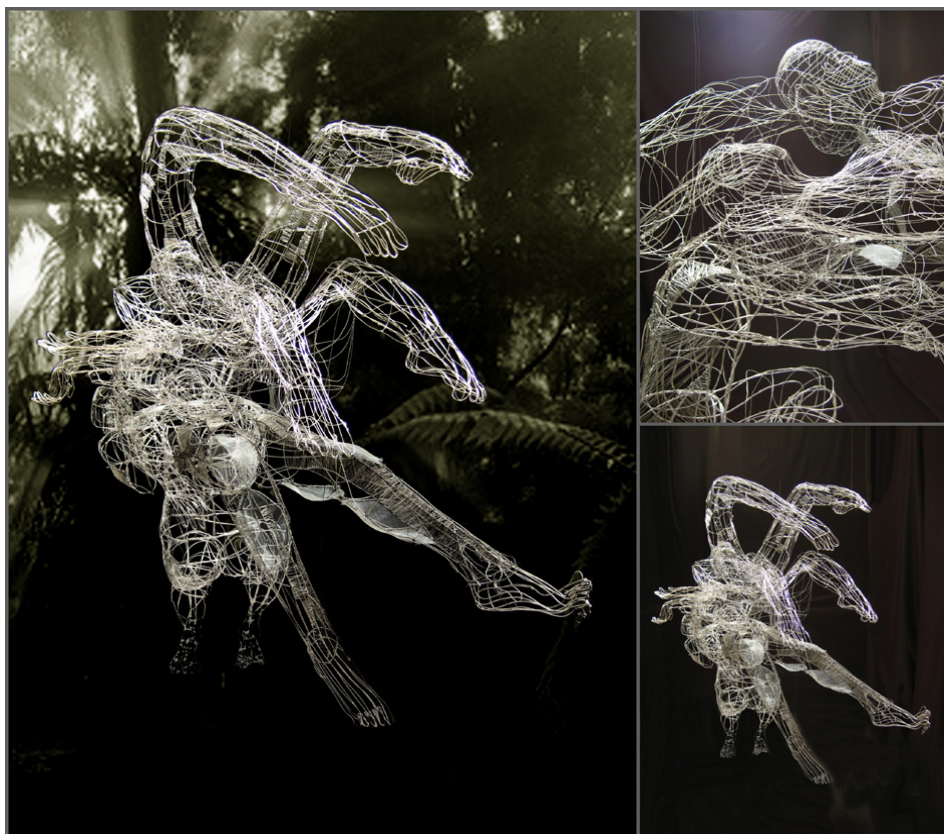


Figure 3.

Imaginary shelters, mental landscapes, metaphors, and design experimentations in the teaching method of the architect Juvenal Baracco. He unravels an interesting empathetic training throughout the five years of the course in architecture starting from the neurological ability of proprioception to recreate the dummy of own corporeal shape and make it a planning operational tool and the esthetic parameter of ownership of space.

Source: Leon, 2011. *La Hydra de Lerna* [image online] Available at: < http://www.gophoto.it/view.php?i=http://basicobaracco.files.wordpress.com/2011/08/img_2430zww.jpg#.UZk6y-MotU4x> [Accessed 10 January 2013].



computers remotely in the 2002 movie “Minority Report.” The students at the Rhode Island School of Design did that this spring in experiments with g-speak. Another option is to swap physical means of controlling technology with voice recognition systems, which are already used in some devices, or pure intuition. San Francisco-based Emotiv Systems worked with the IDEO design group to develop the Epoc, a headset that enables you to play video games by monitoring electrical activity in your brain. It literally reads your mind through 16 sensors, which then relay your instructions to the console. “People are always ready for new or better or more sophisticated experiences, digital and physical,” said Kara Johnson, a material scientist at the IDEO design group. The role of the designer is to make them simple and meaningful.”

Without going far, the *Blinkenlights Project* in 2001 [fig.4] transformed Alexanderplatz into an active screen using messages coded in lights by a computer, while the MoMA tried to put together all these new “isms” in a great exhibition titled “Talk to me” in November 2011, with 194 projects [fig.5].

Paola Antonelli (2011), Senior Curator, says “‘Talk to Me’ explores the communication between people and things. All objects contain information that goes well beyond their immediate use or appearance. In some cases, objects like cell phones and computers exist to provide us with access to complex systems and networks, behaving as gateways and interpreters. Whether openly and actively, or in subtle, subliminal ways, things talk to us, and designers help us develop and improvise the dialogue. The exhibition focuses on objects that involve a direct interaction, such as interfaces, information systems, visualization design, and communication devices, and on projects that establish an emotional, sensual, or intellectual connection with their users. Examples range from a few iconic products of the late 1960s to several projects currently in development including computer and machine interfaces, websites, video games, devices and tools, furniture and physical products, and extending to installations and whole environments.”

“I communicate, therefore I am” (Antonelli, 2011) is definitely one of the most important statements of our contemporary world, from everyday objects you don’t expect anymore the bare function for which they are bought, but an inborn communicability.

Certainly the world of the contemporary architect can not ignore the need for representativeness and emotional communicability sought by the user at every level. And you can not even ignore the level at which we have already arrived in the planning of “living” objects with the aid of graphical interfaces, diagrams and home automation smart programming.

The new buildings of today are already the Tamagotchi of yesterday. Interfaces, emotional involvement, automation. An interesting example, among others, is the IKEA universe. Interesting for endless reasons. The sale not of design products, but of emotional environments [fig.6], both in the catalogue and inside the store, the customization to which the user is driven, who is able to create, through furnishings that are cheap just because they are highly industrialized and serial, hyper adaptive environments, flexible, thanks to modularity, and personal, in fact, thanks to the range of possible solutions, all compatible with each other, makes IKEA an example of an empathy-based company.

The website management is also interesting, which provides for Anna, the virtual assistant, with the graphical interface of an IKEA salesgirl, complete with smile and uniform,



Figure 4.

On September 11th, 2001 the famous “Haus des Lehrers” (House of the teacher) building at Berlin Alexanderplatz was enhanced to become the world’s biggest interactive computer display: *Blinkenlights*. The upper eight floors of the building were transformed into a huge display by arranging 144 lamps behind the building’s front windows. A computer controlled each of the lamps independently to produce a monochrome matrix of 18 times 8 pixels.

Source: Fiedler, 2003. *Blinkenlights, Berlin - Alexanderplatz* [online image] Available at: <<http://www.archdaily.com/296275/media-architecture-oscars-awards-announced/blinkenlights-reloaded-alexanderplatz/>> [Accessed 10 January 2013].



Figure 5.

Talk to Me explores the communication between people and things. Whether openly and actively, or in subtle, subliminal ways, things talk to us, and designers help us develop and improvise the dialogue.

Source: Anne Helmond, 2011. *Talk to Me #moma* [online image] Available at: <<http://www.mobypicture.com/user/silvertje/view/10456960>> [Accessed 20 April 2013].



with which you can literally interact. The emotional contact developed by the company is impressive, since it brings, among other things, to a cultural fusion that makes you perceive the industrial giant as “close”, “positive”, “trusted”. With the obvious catalogue exceptions from country to country, IKEA has developed a housing *κοινή* and at the same time a potentially unlimited particularization.

Social instrument

After all, there is no doubt that architecture is emotional and this is bestowed on society. Just think of the interventions related to the *Favela Painting Project* in Rio De Janeiro, which, thanks to the recoloring of Santa Marta’s favelas (2010), have succeeded in emotionally communicating with the residents, who have collaborated in “taking care” of the urban environment [fig.7].

Same goes for the English “Idea Stores,” authors of the not only urban, but also social re-development of Tower Hamlets, London’s East End town, thanks to, among other things, transparency and color (Muscogiuri, 2009). Color and empathy. We are not saying anything new, as we can already talk about color feeling in Klee, reader of Worringer and Lipps.

Talking about the social component of *empathy*, how not to look at the studies on the *Disney Concert Hall* of Daniel G. Geldenhuys (2008), at Department of Art History, Visual Arts and Musicology, University of South Africa, who speaks of “*Empathy is not the sole preserve of human beings, and that a city or buildings can also relate with empathy to people and the environment. The Walt Disney Concert Hall, designed by the architect Frank O. Gehry in downtown Los Angeles, is taken as primary embodiment of such empathy. [...] Walt Disney Concert Hall as an act of architecture and work of art, where the macro and micro design have lead to an intelligent strategy of hybridization and inclusiveness. Gehry has in his ingenious design of the theatre complex managed to draw many differences together, allowing various cultures and art forms to meet, thus giving empathy a new meaning.*”

So what are the new empathic frontiers? How does a designer work? Where does he go? Towards motile architectures? Towards talking architectures? Towards socially shared architectures? And where does the discovery of an empathic biological basis lead?

Research outline

First we must split empathy in *Learning Aimed Transmission* and *Emotional Transmission*, concepts born from the discovery of empathy as a means of knowledge transmission (*substance*) through an aphasic language of emotional involvement (*medium*).

Architecture, for its extreme visibility, has always been the subject aimed at transmitting messages related to society. Yet, its correspondence with the society in which it is built includes architecture among the empathic means of knowledge transmission. But to human development, is the new knowledge necessary or can we consider as empathetic those architectures carrying inside them the so-called architectural archetypes?

This was the first consideration that made me call *empathetic*, in the *Learning Transmission* subgroup, the architectures which bring new and eternal values. It is clear that an evolu-



Figure 6.

Emotional environments and particularization potentially unlimited of IKEA.

Source: [IKEA Catalogue]n.d. [online image] Available at: < http://onlinecatalogue.ikea.com/IT/it/IKEA_Catalogue/> [Accessed 20 April 2013].



Figure 7.

Using a flexible concept of colourful rays which can easily be expanded, they made a design for the houses around the square and part of the street, including the local Sambaschool.

Source: Haas & Hahn, n.d. santa-marta-pano-large [online image] Available at: <<http://www.archilab.org/public/1999/artistes/noxa-16fr.htm>> [Accessed 20 April 2013].

tionary biological means such as empathy can not exclude cultural archetypes, working for the sum of knowledge and not for subtraction.

The architectural archetype is not the *tout court* architectural construction, but the underlying emotional concept. The archetypal house is not a hut, a cave, a fence, but the underlying information data of sociality, the gathering of the group around the fire, as to make Antonino Saggio talk about Dolmen as primitive home (cited in Garramone, 2013).

Whether we are talking about new values or archetypes, we are definitely part of a series of socially shared information. This brings us to the part of pattern classified as *Emotional Transmission*. In designing a highly emotional architecture is important, in a logic aimed at defining empathy, the subject-object relationship and therefore the reaction of the spectator.

Emotions being equal we can have an architecture that makes explicit the mental landscape of a society, new or archetypal, and therefore also becomes didactically empathetic, or we can have an extroflexion of the architect's mental landscape, that we can more correctly call poetic. If this mental landscape expresses a series of values, needs and ideas of a society, giving it a somewhat codification, an interpretation, we have the eversion of the spectator's mental landscape and therefore of society. Instead, the introjection of the spectator in the architect's mental landscape, does not meet the requirement of transmission of a social value. Clearly the spectator's consent and participation become essential as well as his involvement and the immediacy of the language that transmits knowledge, are essential requirements of the biological inheritance of culture.

Therefore, in order to answer to the new "isms" within the vision of society, the architect creates a mental landscape, an explanation key of the mental landscape of society, through the use of a *breakthrough aesthetics* (Saggio, 2010) as to the previous one, with the aid of an active instrumentation and only thanks to that, possible through new scientific discoveries.

In the second part of our model, we take the classical division into physiological and psychological interpretation of the phenomenon of *empathy*, considering the content and therefore the medium of empathic communication. To understand how the physiological aspect is the content of information, we take Van de Velde's concept of *lines of force*, as the anthropomorphic architecture from Vitruvius and onwards (Viollet-le-Duc, Thiersch, Matila Ghyka) seems less interesting.

In today's *data era*, the lines of force find both an astonishing and precise correspondence, as vehicles of information, data, images, and even emotions, in the form of computer *network*. In this sense, as virtual highways, they themselves become information and then content. To the emotional component, the medium of information surprisingly matches the concept of the *knot*, which is represented by *sculptures-architectures*, and by the complex scenographies of buildings and public places, in the best sense of the word. These knots do not only serve as urban-social attractors and therefore emotional catalysts, but within the network, knots represent the interchange of information, which are empathically perceived and placed back in circulation after social exchange.

Figure 8.

The deformation of the object extends to the constant metamorphosis of the environment which responds interactively to the visitors to the water pavilion via a variety of sensors that register this constant reshaping of the human body called action.

Source: Frac Centre, 2007.
Fresh H2O eXPO - Water pavilion and interactive installation, Neeltje Jans, Hollande
[online image] Available at:
<<http://www.archilab.org/public/1999/artistes/noxa16fr.htm>> [Accessed 20 April 2013]

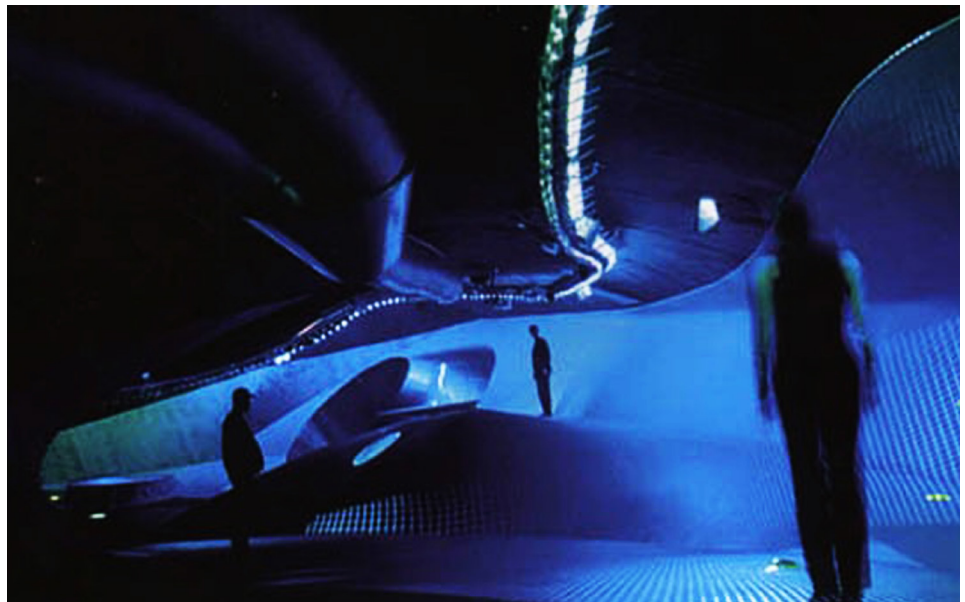
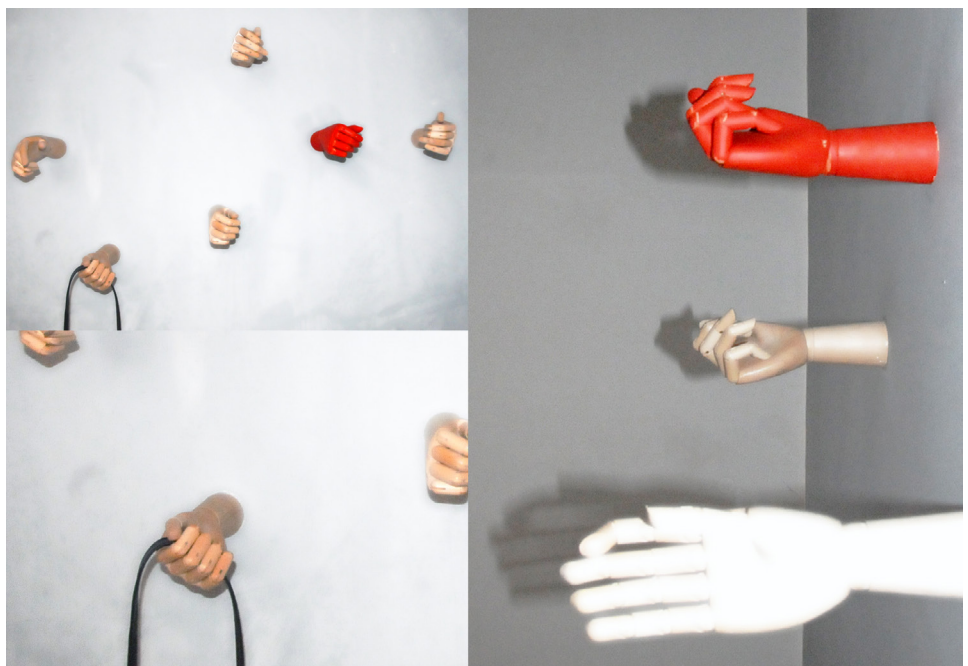


Figure 9.

Han(D)ger is a e-motional hanger. The hands move, embrace, grab clothes. Never equal, leaving gestural messages, make up a history of research and empathy. *Han(D)ger* communicates with the man and it makes itself medium of communication between the various inhabitants of the house.

Source: Arlotto, 2013.
Han(D)ger, E-motional hanger. Designed by VM Ideas Factory [online image] Available at: <<http://vmideasfactory.weebly.com/>> [Accessed 20 May 2013].



The concept of *network* and *data era* finds solid theoretical basis in the philosophical argumentation of Gilles Deleuze and Felix Guattari (1993), who introduce the concepts of geography of knowledge and *rhizomatic society*, which is nothing but a horizontal networked society where new knowledge and new places of learning emerge. Kari Jormakka (2002) speaks of this when he writes, referring to Deleuze's language, of the visitors' "becoming water" as they come into the Fresh Water Pavilion of the NOX Architects [fig.8]. A visit to the Sayamaike Museum of Ando in Osaka leads to the same feeling.

Conclusions

So, can we imagine a new architecture? And if these architectures, computerized totems of a computer network, were talking architectures, moving architectures, however able to interact with the human emotionalism, with the aphasic mind, through inputs dictated by brain imaging technologies? If architecture possessed an empathic mapping, a virtual soul?

If we could make ours the information flow turning outward our neural network, making alive the world of *Blade Runner*, or even better, of *Strange Days*? If architectures would respond not only to the environmental stimuli (heat, cold, ventilation, rain, and so on) but also to the emotional ones? If E-motive architecture became emotional-motive architecture? [fig.9]

If there was no longer any mind-body-architecture-landscape distinction but we moved all in unison, not in a fake and sugary emotional drift, but in an extremely complex computer network, in a swarm where men and community, public and private space, nature and architecture, progressively lose their thresholds to achieve an organic hyper-rationalism, where rationalism means efficiency, economy, ecology and democracy, welfare, social sustainability.

Do Androids Dream of Electric Sheep? The answer is obvious. In 1968 Philip J. Dick already had responded negatively. Inquiring about what is human and what is not, in a futuristic Metropolis. As in the Modern world the glass emptied the building, even man today empties his skin. It now becomes transparent surface, the threshold disappears again. Tendons become lines of force, the same elastic material which creates the canvas of the universe. Body-mind, fragmented body in motion, corporeal intellect: emotion emerges through physical and mathematical ways. But emerges. And the threshold disappears. Between man and machine as we did for machine and city, now between man, architecture and territory. Men dream of electric sheep. But they are also the ones who dream.

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