

3.0 human being, new approaches in design process

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Abstract

The concept of *Human Centered Design* was born in the industrial society, when the individual and the relationship between his body and the objects were at the center of the project.

In the next digital society “the person migrates from the body to the screen” (D. de Kerckhove), and we started to talk about User Centered Design.

Today, in the *Network Society*, the user largely suffers the influence of the pervasive presence of technology. Technology becomes extension of the body, requiring further adjustments to the specific skills of digital natives. The interaction with digital devices change not only the gestures and posture of the human being but also its behavior.

D. Norman coined the definition *User Experience Design*, to combine and understand more comprehensively the various aspects involving the person-user.

These changes in design approach highlight the increasingly close relationship between the two elements. Actually we can distinguish and to become aware of our being person or user based on context, associating the first analog-real aspect, and the second a digital-virtual aspect.

However, the time at which the exponential evolution of technology will undergo the final surge is near (R. Kurzweil) with a consequent immersion of technology that will make coincide the person and the user, the analog and the digital, the real and the virtual.

The **boundaries** between the **body** and **technology** are no longer recognizable.

For the 3.0 human being will be required if the new design paradigms. The article aims to analyze a selection of case studies that represent significant **models of the new trends**, signals of a very near future, and to identify **new design approaches**.

From Human-centered Design to User Experience Design

Ubiquitous computing allows 2.0 human being to interact with different systems, simultaneously and everywhere, with consequent effects on the nature of social relationships, on communication, and on the itself 's consciousness.

The world as we know it is therefore undergoing an unmatched transformation where interaction sensors are for example able to translate body movements, even weak, or biophysical signals into gestural and sensory controls.

Very soon the boundaries between body and technology will no longer be recognizable and technology will be not only around the body but also inside it.

2.0 human being will turn into 3.0, the recipient of a project / process / service / experience, in his most complete new condition to be hyperconnected, with mind and body, within a ubiquitous, virtual society, more and more Ephemeral and intangible than now.

What will be the needs of this new human being hyperconnected? How do design paradigms changes?

The approach to the design process (from idea to project) has always followed, and also trying to anticipate, the evolution and revolution of our world. With the concept of Human Centered Design, human being in his most tangible physicality lived in the industrial society of serial production and ergonomics. The designer's eye was on the analog body.

Then with the advent of the digital society, the User Centered approach is added, where the user and the interface are at the center of the project, but the rest of the body remains in some way excluded. The Human Centered design paradigms are very different from the User centered design, and are therefore hyperspecific and one often does not include the other.

Only with the subsequent definition of User Experience Design has been able to combine and understand bilaterally the different aspects that involve the person and the user.

However, we came to the Big Data era, the augmented reality era and therefore the Network Society (or data-driven-society) era, so also this time the approach to the design process has to follow and anticipate the evolution and revolution of the our "new" world.

Through the analysis of six case studies we will see how this alignment and almost overlap (even not entirely) between person-user, between real-digital is revolutionizing and dictating the new laws of making design.

Signs of a not too far future.¹

LA CURA – S. IACONESI, O. PERSICO

Hacking images of your body and cancer to transform it into an open-source element as a source of both cure and global communication.



Fig. 1 A image of the cancer of S. Iaconesi posted on the open-source platform www.la-cura.it

¹ Da Empoli, G., Contro gli specialisti. La rivincita dell'umanesimo Dijk, J. A. G. M. van. (2012). The Network Society (Third Edition edizione). SAGE Publications Ltd. McLuhan, M., & Powers, B. (1996). Il villaggio globale. XXI secolo: trasformazioni nella vita e nei media. (F. Valente, Trans.). Milano: SugarCo. Schnapp, J. T., & Michaels, A. (2011). The Electric Information Age Book: McLuhan / Agel / Fiore and the Experimental Paperback (annotated edition edizione). New York: Princeton Architectural Pr.

“Okay, cancer, you’re not all, I’m more than just this. A cure, whatever it is, will deal with myself ... (...) There were many tips on how to treat cancer, but many more were on how to treat myself As an individual. (...)

Patrick Lichty, for example, produced a 3D sculpture of my tumor and sold it for sale on Thingiverse. (...)

And it’s not over here! Scientists, traditional medical experts, various researchers, doctors, all connected with me to give me advice. With all this information and support, I could put together a team of neurosurgeons, traditional doctors, oncologists, and several hundred volunteers with whom I discussed the information I received, something very important. Together, we have created a strategy for my care in many languages, according to different cultures. The most important thing of La Cura has been to become part of a truly connected and involved society whose well-being really depends on the well-being of all its members. This global performance is my open-source treatment against cancer. And I feel it is a cure for me, but also for all of us. “²

VOICE SCULPTURE – GILLES AZZARRO

I see what I hear, what the body says.

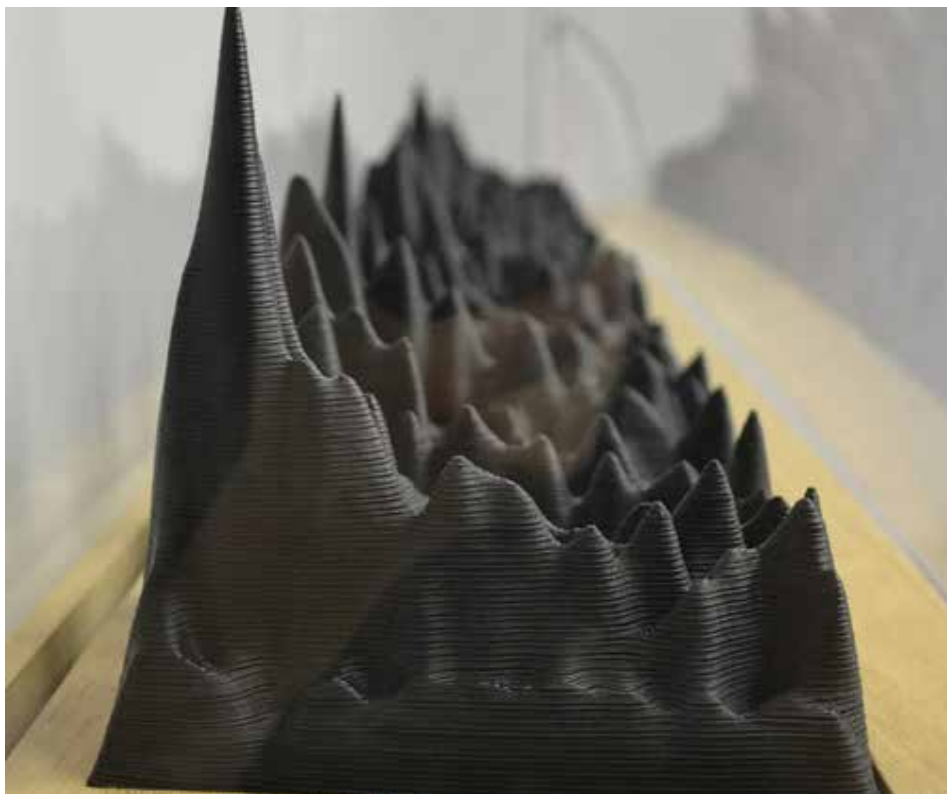


Fig.2 On June 18th, 2014, Gilles AZZARRO was invited to the White House to the first Maker Faire White House to present the Work “ Barack OBAMA - Next Industrial Revolution “ to President OBAMA.

²An interview of S. Iaconesi for La Repubblica.

The speech of B. Obama printed in 3D.

In this case study technology makes what is proper of the person from an analog and real state to a digital state. We can explore with this project the relationship between digital and emotion, empathy, feelings. How do the lines and structure of the sculpture match the emotion the body might have when pronouncing those words?

A visualization that makes the insecurity of the voice and then of the person visible, where the fragmentation of the sculpture breaks.

GIF LOGO FACEBOOK - MATT NAVARRA

Digital postures



Fig.3 frame of Matt Navarra's gif

This gif illustrated by Matt Navarra has quickly become viral through various social networks. Exemplification of what D. Kerchove maintains that man moves from body to screen not only through thought and perception of himself but also physically.

Technology is conditioning our body and creates new poses that fall into our normal daily postures, so it goes literally towards technology.

And how will these postures change when technology is integrated into my body?

RUNTASTIC

Body generates digital data



Fig.4 Screenshot about the Runtastic App.

The running app that monitors the course and the sport performance. This app contains and can tell how flows of moving bodies move in the city, their habits, uses and consumption of the territory and the city they live in. It can also tell how the body uses the territory of its own city, even improperly. What are the areas in the city where more people are running? At what time? What age? How often? This can answer many questions in disciplines where body flows and therefore people are fundamental, such as architecture, and urban planning where you plan for the city and its citizens.

THE FELTRON ANNUAL REPORT – NICOLAS FELTON

Body generates analog data



Fig.5 Information Visualization's of Felton Annual Report, 2005

In 2005, N. Felton published a very detailed Annual Report, which chronicled the minutiae of his life, the states he'd visited, the music he'd listened to, his weekly work:play ratio, and much more, in a series of elegant charts and graphs. It was a fascinating study of personal data tracking and a gorgeous piece of design, all based on information drawn from his memory, calendar, photos, and Last.fm data.

Compared to *runtastic* where the body generates data unconsciously in this project, data generates consciously and through programmed monitoring. From this comparison you can delineate the differences between conscious data generation and unconscious generation, and how you can use your body or body of the person / user of the project and its daily routine activities to know, understand, design, and study.

This confirms how in routine the life of the person / user are hiding crucial elements to understand where the design can interfere.

SELFIECITY- LEV MANOVICH

How selfie can tell about a city and its trends, its flows, timetables and cultures.



Fig. 6 Information Visualization's of the Selfiecity project; focus on London.

The project investigates the style of self-portraits (selfies) in five cities across the world. Selfiecity investigates selfies using a mix of theoretic, artistic and quantitative methods, present findings about the demographics of people taking selfies, their poses and expressions. Rich media visualizations (imageplots) assemble thousands of photos to reveal interesting patterns. The interactive selfieexploratory allows you to navigate the whole set of 3200 photos. Finally, theoretical essays discuss selfies in the history of photography, the functions of images in social media, and methods and dataset.

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