



Cumulus Mumbai 2015:

In a planet of our own - a vision of sustainability with focus on water

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## Designing paradigm shift\*

The current semiotic shift towards sustainable design

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**Abstract:** « Designers are agents of signs and meaning and if they lack understanding of what they are doing and the impact it has on users, then they are nothing more than executors or a suggestion box »<sup>1</sup>

**Key words:** *sustainability, design for social innovation, critical design*

### Introduction

It is now more than ever the responsibility of the designers of deeply assuming and even trigger a variety of interpretations their work can engender. In our time “awash in information but starved of meaning, we allow the metabolic interaction between man and the earth to wither»<sup>2</sup>. Nowadays designers around the globe become more and more aware of their « meaning making » function and work according to research-based models that allow them to better express their fundamental role in tomorrow 's society.

In a congress of the Deutsche Werkbund in 1911 the German design prophet Hermann Muthesius asserted that “*Form* was superior to *Matter*. Much higher than function, material and technology is the *Form*. If the *Form* didn't exist we should still be living in a barbarian world”. For Muthesius *Form* indicates the essence of a concept in a post Platonic approach (for Plato the form was the *Immaterial*). The kind of Forms Muthesius referred to were abstracts “essential” shapes within a standardised production system. In 1938 Charles Morris (highly influenced by Peirce) introduced the behaviourist approach to objects through semiotics in the New Bauhaus by Moholy-Nagy by analyzing the fundamental role that symbols play in relation to objects, to persons and to other symbols. In the '70 the fathers of the Ulm School (Thomas Maldonado, Gui Bonsiepe,

Abraham Moles and later Klaus Krippendorf) regularly published in the Ulm Journal, better known as the Journal of the Hochschule für Gestaltung (HfG), setting the basis of the semiotic teaching in design and letting the discipline quickly evolve into a cultural analysis tool in its own right.

At the same time Roland Barthes popularized Social semiotics<sup>1</sup>. His approach highly influenced the '70 postmodern semioticians who claimed that "Form follows fiction", while radical Italians came up with "Form follows fun" and frustrated architects countered with "Form follows anything". It was the same time when the architect Robert Venturi asserted that "Less is a bore" by paraphrasing Mies van der Rohe's "Less is More" famous slogan of 50 years earlier. The idealistic orientation in design of the later Ulm school (especially of Krippendorf<sup>3</sup>) was just an aspect of the trend that long permeated every aspect of western thought. From Plato to Levi-Strauss the Form was regarded as a sign of truth and authenticity.

It was time for a complete change of perspective. During the '90 technology and science had become as complex as aesthetics was a hundred years before. That triggered a semantic turn where aesthetics guided technology while asserting the symbolic quality of products: « Function followed form » and design became a way of creating meaning and comprehensibility in a world of overfunctional chaos. The notion of « meaning making » which implies a variety of human factors (emotions, sensory, language, etc.) started to become crucial in product research while leaving apart a more authentic approach to Form.

John Thackara, one of the great voices of sustainability and cutting edge design expert, recently asserted that «The troubles of humanity did not begin with the industrial age, nor even with agriculture. Our problems began when we embraced symbolic culture and placed language, art, and number above other ways of knowing the world. Abstract and monophasic forms of perception separated us cognitively from a world filled with wild animals and uncertainty. Abstraction underpins a concept of progress in which the globe is perceived to be a repository of resources to fuel endless growth. Awash in information, but starved of meaning, we allow the metabolic interaction between man and the earth to wither»<sup>4</sup>.

It is now time for designers to clarify their position of meaning-makers and storytellers of possible futures where ecology and economy will create the place of a more resilient culture.

The Italian designer duo Formafantasma are one of the most prominent voices among these « meaning experts ». Their conversational projects always result in perfectly finished and beautiful objects capable of informing or alerting on themes such as historical

production methods, culture development or the social significance of traditional crafts. Their project *Autarchy* is one of the most emblematic : it invites a utopian, rural community to meet together and appropriate production again in a really simple way with basic materials. Their projects are often about DYT process, sharing information and communities.

The pioneers of « critical design » are with no doubt the British duo Dunne & Raby. About their activity the duo asserts « We plant little seeds in people's minds and then let them think about what those seeds might become ». The couple has been working together for 19 years with the aim of using design as a catalyst to get people thinking for themselves about how everyday life could be organized differently around technology, often revealing human dreams and anxieties.

The Exhibition of 2013 *Design beyond production* curated by Karen Vershooren of the belgian gallery Z33 in Hasselt also had the intention of adding critical reflection to the production of objects, services and information in our networked society. In the exhibition the focus was on the position of the maker or the worker, not on the final object. It showed that the different production systems are just but the reflection of the values and the norms of our society and proved how they influence the way we live, organize and think our lifes. The exhibition's ambition went far beyond a mere distinction between objects (Gegenstand) and things in the Martin Heidegger art<sup>5</sup>. The curator wanted to encourage designers to take a critical stand and wanted them to assume their political role and their enormous responsibility.

All the exemples I will use in the conference show how pragmatic the Forms of today designer's have to be if they want to embrace tomorrow's social challenges, far away from dangerous abstractions of the past.



Figure.1 Jug and water container "Craftica" for Fendi made with animal bones and bladders by Formafantasma.



Figure.2 "Charcoal vessels" for filtering water for Vitra by Formafantasma.



Figure.3 Copper water purifier J.&L. Lobmeyr by Formafantasma.



Figure.4 Models of “bioliberals biocars” by Dunne & Raby. Their open-source approach enables people to play with their design in an autonomous way.



Figure.5 “Between reality and the impossible” project by Dunne & Raby . Future scenario where people will have artificial external organs to better adapt to the increasing impoverishment in terms of nutritional value of the urban environment.



Figure.6 “Scénari'eau” by Anne Laure Gautier. Domestic water fountain for drinking water.



Figure.7 "Atmos" by Arturo Erbsman, an atmospheric lamp that uses condensation of water to diffuse light.



Figure.8 "Clepsydra" by Arturo Erbsman time measuring lamp.



Figure.9 "Cumulus" by Arturo Erbsman - cloud storage lamp.



Figure.10 "Polar Light", human conception, men intervention by Arturo Erbsman.

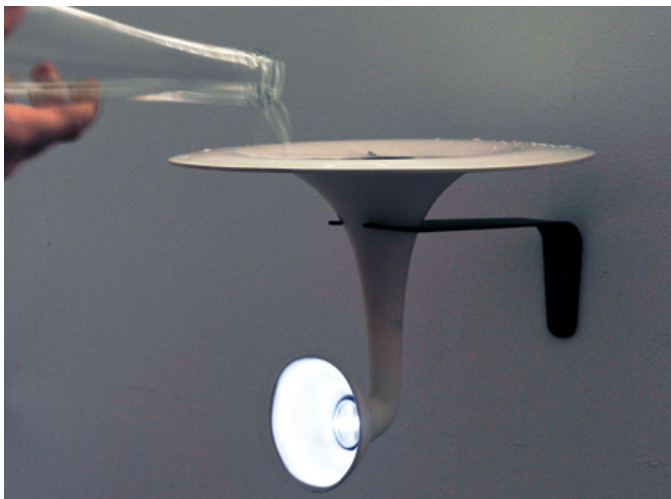


Figure.11 "Luciole" by Camille Gregoire. A series of little LED lamps working with special water batteries.



Figure.12 "Wat" by Manon Leblanc. A LED cordless lamp powered by water.



Figure.13 Mobile cabinet-making workshop by Will Shannon. It allows the production of papier mâché cabinets and furniture



Figure.14 "Aqueduct" by IDEO is a bike with a reservoir for filtering water



Figure.15 "Cloud Factory" by the design researcher Marie Luce Nadal. Her System allowed her over the course of her travels to catch clouds and reduce them to extracts in order to make them reproducible at will



## Conclusions

The role of designers has to become more educational. They must be capable, thanks to a pragmatic semiotic clarity, to help the society understanding the meaning and the functioning of today's material and immaterial world. In the words of Paola Antonelli, senior curator of the Department of architecture and design at MOMA NY : « In its "Hello World" role, design can help to translate those leaps in scientific knowledge into things that could make our lives more efficient, enjoyable and responsible"<sup>6</sup>. It will then become the responsibility of people to differentiate between the tangible world and the representations that flood it. In our modern world, where the lines between reality and fabricated reality continue to blur, a more holistic semiotic view and a sense of ecological responsibility could provide designers and people in general with the ability to dissect, interpret and create our increasingly complex surroundings in a more meaningful way. "Craft", a word once much derided, will take on magical properties. It will be the marketer's shortcut to authenticity, to more credibility. To do so we need to redescover and adopt the richness of ancient practices and that of other cultures whose aesthetic relation to the biosphere are constantly enriched by perceptual diversity and empathy with living systems in general.

## References

\* The term "Paradigm shift" was introduced for the first time in 1962 by Thomas Kuhn in his book "The structure of scientific revolution". In the book he described the periodical change of worldview in the scientific world. In my paper with this term I would like to document the change of attitude of designers that shows their increasing responsabilization and their role as fundamental agents of meaning making in tomorrow's society.

<sup>1</sup> Bernard Darras, 2011, Article « Design and pragmatic semiotics », #3 Art+Design/Semiotics, Paris College of Art

<sup>2</sup> Roland Barthes, 1967, « Elements of semiology »

<sup>3</sup> Krippendorf and Butter , 1984, Article « Product semantics : Exploring the symbolic qualities of form » by, Innovation, the Internal Designer Society of America's (IDSA)

<sup>4</sup> John Thackara, 2013, Article « Desert of the real », Design Observer. In the same article John Thackara quoted the philosopher John Zernan as main inspirational source. Ivan Illich wrote in 1971 that our culture started to go off the rails when monks stopped reading texts aloud to each other and became solitary scholars in 1120.

<sup>5</sup> Bruno Latour, 2004, Article « Why Has Critique Run Out Of Steam? » "The handmade jug can be a thing, while the industrially made can of coke remains an object. While the latter is abandoned to the empty mastery of science and technology, only the former, cradled in the respected idiom of art, craftsmanship and poetry, could deploy and gather its rich set of connections."

<sup>6</sup> Alice Rawsthorn, 2013, « Hello World : Where Design Meets Life »