Design for Next Design.

Lorenzo Imbesi
PhD, Full Professor, Sapienza University of Rome, Italy
lorenzo.imbesi@uniroma1.it

Abstract: Design has always played a role in envisioning the next shape of the world. The nature of the process of transformation performs an important role in defining the shape through a complex network of interactions: any material and immaterial configuration is always an ongoing plastic phenomenon resulting from the combination of complex factors, details, properties, techniques, materials and of course people.

After the paradigms of industry and mass production, design is growing as a multifaceted activity, which is multiplying its products, tasks, and actors in order to face the challenges of next society and often exceeding the disciplinary boundaries of knowledge. Out of any utopian view of the future, design is getting back to look ahead of time in order to shape our material and immaterial world here and now. The shift brought by technology is declaring the emergence of the process in design in every form, where the designer assumes the role of facilitator for enabling the conversation between different disciplinary languages, and finally taking advantage of a wider collective intelligence.

Keywords: Compossibility, Rhizome, Collective Intelligence

1. Design for Next Compossibility

The philosopher Gottfried Wilhelm von Leibniz, who lived between the 17th and the 18th century, introduced the philosophical category of the “compossibility”: any individual can be described by its properties and characters, which at the same time entertain relations with other individuals. Such co-existence is not always easy and smooth, but may involve a number of conflicts and contradictions: nevertheless, they can generate an environment of compossibilities that is a space of individuals living together while developing a number of configurations.

After Leibniz, also Alain Badiou borrowed the same concept for explaining the creation of heterogeneous truths (Badiou, 1989), and Gilles Deleuze used it in Cinema II to explain the problem of future contingents, also pointing to several mutually contradictory worlds (Deleuze, 1985). Design is just able to draw such scenarios of compossibilities, through the creation of new artificial worlds, which may affect the real life and the existence of people.

The design project has always the power to conceive the small and the big changes in our society, through the modification of our environment and the creation of new artificial presences. These can
be the vehicle of new contradictions and issues, which design can still foresee in advance: it is the space of heterogeneous compossibilities which design has the chance to elaborate.

Out of the twentieth century big utopias encompassing an ideal global society, design keeps an applied approach to give practical solutions while privileging the now and here, rather than an ideal tomorrow yet to come. Again, it is the space of the compossibilities, where to experience the management of a common good and a collective well-being through the experimentation of alternative forms of production, business, work, community.

While having the future and innovation as the horizon, the space of compossibilities is the field of design research, taking care of the scenarios of the new discoveries, and studying the interactions and consequences of its solutions. Therefore, understanding what is design for next means exploring its space of relational compossibility.

2. Design for Next Complexity.

Along with the concept of compossibility, design is changing its role in our contemporary society along the crisis of industry and the systems of production. At the same time, Design turns to be a critical activity looking for innovation for the management of processes and strategic scenarios. Contemporary products come to be the result of complex projects, involving a number of expertise, skills and fields, while paradigms of industry and mass production cannot anymore explain the complexity and the plurality of the experiences connected.

On another note, Design has expanded its territories of action and developed its methods to the point to constitute complex and cross-border fields while introducing a vast collection of objects, inventive projects, as well as highly specialized research. The transition from the old twentieth century industrial design to the contemporary 360 degree Design has led to the multiplication and expansion of its fields of expertise. Design has to innovate constantly its tools and approaches in order to face every time a different scenario, in search of producing always new outputs on the line of innovation while redefining every time its tasks and boundaries.

These are new roles to discover, in-between material and immaterial factors, interaction and communication, service and product, experience and scenario vision, local and global, Design provides sense and direction to production, communication, interface, service, image, while reaching new challenges and playing new roles.

3. Design for Next Rhizome.

The concept of rhizome well explains the way design is moving crossing borders and fields. At this end, Gilles Deleuze explains the concept of rhizome against the western arboresous structures of knowledge: the rhizome is a tuber, a horizontal creeping root that runs parallel to the soil. While the structure of a tree grows from the bottom upwards, through one or more central branch from which departs the ramifications, design is able to develop rhizomatic connections in every direction without any fixed path. Each element of the rhizome can be connected with any other, while the tree has its parts always crossing in a given position. The rhizome does not contain points, but lines without a centre, whereas the arboresous structure is defined by points and positions.
Deleuze employs the metaphor of rhizome to explain how knowledge and thinking may include multiplicity, connectivity and diversity in its practice: rhizomatic thinking always proliferates in a decentralized and eccentric fashion, while being irreducible and free from any given centre. At the same time, while involving creativity, design thinking is characterized by flexibility that consists in examining different solutions to a problem; by fluidity, in other words, the frequency and ease with which a number of ideas are produced; by the elaboration and the adjustment of an efficient strategy in the resolution of a problem, weighing and choosing the available opportunities. Creativity, indeed, exceeds the boundaries of science and holds a privileged area in the artistic sphere: it is the fruit of intellectual ability and the basic traits of personality like aptitudes and interests and factors tied to temperament.

Gestalt psychologists consider the very nature of thought to be creative because it does not take pictures from reality, rather it gives an interpretation to it. Design thinking means to make connections between different factors within a perceptive structure in such a way as to discover new relationships, useful in finding the solution to a problem. Design research is rhizomatic in the sense that privileges lateral and unforeseen connections, always taking a different angle of view after a sequential logic, which may descend from obvious considerations. Then it can be a fresh, significant, and exciting way of looking at our artificial world, while innovating it.

4. Design for Next Process.

As a result, along with the overcoming of the new technologies in every sector, we can witness the implosion of the classic disciplines of design, which has an important consequence both in the approaches, as in the methodologies and knowledge itself. The boundaries are blurring also due to the collapse of the disciplinary concepts that once were the flagships of Architecture (such as the concept of 'scale'). The question already started to become critical when facing the huge mass production of the Ford T Model (just think about how this influenced not just the mobility of people, but the design of the built environment in North America, through its highways and shopping malls).

The liquefaction of the borders of the discipline is also due to the rupture overwhelming of the category of time on the one of the space. The emergence of the process in design in every form has given the chance of opening its borders, not just in the hermeneutic or semantic sense, but also more factually in the everyday perspective as a profession and an academic discipline. The organization of time becomes the main material to design: with the entrance of digitalization in every sector of production, it is not anymore the manipulation of the raw materials to be the main activity, furthermore the management of the relations between the different actors involved.

The designer becomes a knowledge worker who is dealing with signs and interfaces, but also the complexity of the organization and management of any process of transformation requiring creativity and vision. The action of designing itself is becoming indifferent to the shaping of the object to transform: form is still relevant, but it is just the crystallization of a number of activities coming together, where the designer assumes the role of facilitator for enabling the conversation between different disciplinary languages. Design becomes the science to make “tangible the intangible” connections between disciplines.
5. Design for Next Collective Intelligence.

As Richard Florida testifies along the rise of the creative class, the number of the knowledge-based professionals doing creative work has increased vastly over the past century (Florida, 2003). Therefore, still the design project plays a role in serving a broad demand of products, experiences and services for the economy and the society, but the designer resigned the role of the positive hero creating unique shapes for the salvation of society. He is not anymore standing in the middle of his office as the supreme professional creator of radical utopian worlds, rather he is networking with a number of different peers, while taking advantage of every chance is coming from the new media, and finally drawing what in a few years can be a real industrial model to follow. The designer is pretty much embedded in a real world, while accepting to play a role in its organization.

The designer seems to be never alone in his individual efforts, rather he finds himself to be part of a larger network along the organization of his work and taking advantage of a wider collective intelligence with the related cultural interactions. Pierre Lévy stands that there is an intelligence disseminated where people are and the ultimate goal of technology is broadcasting and connecting knowledge in order to share, valorise and collaborate globally (Lévy, 1999). As a result, each project that seems to be created from nothing, it is always the result of an open network of references that makes it a cultural product. Namely, it should be considered the product of a collective heritage, which has been somehow involved both in its physical and cultural construction, while integrating earlier creations as well as future perspectives, through practices of interpretation and processes of negotiation. If the physical ‘objects’ are in the background of the creative activity of the project, design itself becomes a service in a collaborative network of players, where every segment is helping to finalise the end result.

6. Design for Next Post-Industrial Society.

Here comes the need to analyze and map the change that contemporary post-industrial societies are bringing into the creative professions, while developing new tools to understand the cognitive products which come to be more immaterial, informational and virtual.

Design research is challenging the disciplinary fields to understand the hybrid knowledge which is growing “in-between”. Strategic design, service design, experience design, design orienting scenarios, brand design, design for social innovation, urban design, stage design, design for sustainability, critical design, interaction design, sound design, game design, packaging design, biodesign, public design, food design, are just few of the new hybrid areas coming from the merging of design into other fields of enquiry (such as anthropology of techniques, sociology of science, economy, marketing, socio-semiotic, cultural studies, knowledge economy, cybernetics, cognitive sciences, and so on).

Any young designer cannot anymore aim just to being a designer, moreover he has to take a position in the new markets of labour and to understand the interdisciplinary profile he may develop for his own career. Here comes the need to investigate the specializations which are multiplying in Design and which are increasingly more sophisticated and contextual, blurring one each other without close and rigid divisions. Understanding the new creative professions means looking into the plurality of languages and methodologies, which interact and make the design field even more pervasive and articulated. It is a rhizomatic exploration of a disseminated net of theoretical and methodological
contaminations, which Design is experimenting, so implying the development of new professions to be considered in detail in their approaches, methodologies, tools.

Here are three areas where design is facing the next challenges, from the need of survival of remote populations, to the scientific research supporting design, to the next dystopian scenario coming from big data.

6.1 Design for Next Survival
Arturo Vittori is an Italian artist, architect and a designer, whose work is internationally known for merging cutting edge technologies together with ancient traditions resulting in projects on the edge between Art and Science that answer our society’s most urgent needs. His project Warka Water is answering to the lack of access to safe water, which is globally leading to poverty and conflicts, so giving an alternative for rural populations.

In-between architecture and design, it is a vertical structure designed as a passive system to collect water from the atmosphere, so providing an average of 100 L of drinking water every day. The project is designed to be built with simple tools, so to be owned and operated by the villagers. When a small rural community adopts Warka Water, it can lead to impactful change in a variety of areas, including the community’s education, economy, society, and agriculture, as well as impacting the environment.

6.2 Design for Next Materials
Materials are increasingly becoming at the center of innovation, and are subject to innovation themselves. They occur in the creative process not only supporting design, but inspiring and driving product innovation. Next future material innovation relies in de-materialization and becoming thin, light, invisible.

Anna Pellizzari is the Executive Director at Material ConneXion Italia and is introducing the new roles of materials for design, capable of changing the next products in terms of performances, manufacturing and visual impact.

6.3 Design for Next Datacracy
Big Data is the next big challenge for design and will remain that way for a long while. Its effects have only begun and are more visible in Singapore than anywhere else. Derrick De Kerckhove was the Director of the McLuhan Program in Culture and Technology and is the author of The Skin of Culture and Connected Intelligence. Derrick is taking Singapore as a case study to depict the next future scenarios of big data: the city was a third world mess 30 years ago, it’s now a world capital and a major international trade centre, thanks to the determination of its first prime minister, Lee Kuan Yew who installed a kind of democrature, a ruthlessly enforced but effective rule of law. His son, Lee Hsieng Loong, calling upon MIT’s top Big Data experts is now pushing the envelope to the level of datacracy. Considering that, owing to serious issues of security and smart city efficiency, Singapore is showing the way of the future for all major cities of the world, what should design thinking do about it?
7. Conclusions: Design for Next Knowledge.

Design is developing as a structurally open field, which is at the same time flexible and has no fixed rules or inner need to be defined too rigidly in its various divisions. While practising cross-fertilization, Design has an extensive capacity, allowing us to perceive the most diverse and unexpected connections. But always in the context of its irreducible anthropocentrism that makes Design being an interface between the outer and inner world of subjects.

In addition, the proper way project design operates is interdisciplinary and is out of the strict logics of the fields, playing out that kind of "thinking differently" from which innovation occurs. This is precisely for its character of being a boundary or border field, which captures and uses knowledge and techniques from other disciplines, carrying them into everyday life and translating them into next world, real and virtual artifacts, communication, as well as developing our next society to live in.

References

Bell, D. (1973) The Coming of Post-Industrial Society: A Venture in Social Forecasting. New York: Basic Books.

Badiou, A. (1989) Manifeste pour la philosophie. Paris: éd. Seuil.

Castells, M. (1996) The Information Age: Economy, Society and Culture. Vol I, The Rise of the Network Society. Oxford: Blackwell.

De Bono, E. (1992) Serious Creativity. Using the Power of Lateral Thinking to Create New Ideas. Des Moines: The McQuaig Group Inc.

Deleuze, G. (1985) Cinema 2. L’image Temps. Paris: Les Editions de Minuit.

Deleuze, G. Guattari, F. (1980) Mille Plateaux. Volume 2 of Capitalisme et Schizophrénie. Paris: Les Editions de Minuit.

DRUCKER, Peter F. (1993). Post-Capitalist Society. New York: HarperCollins.

Foucault, M. (1966) Les Mots et les Choses. Une archéologie des sciences humaines. Paris: éditions Gallimard.

Foucault, M. (1969) L’Archéologie du savoir. Paris: éditions Gallimard.

Foucault, M. (1970) The order of things. New York: Pantheon Books.

Florida, R. (2003) The rise of the creative class: and how it’s transforming work, leisure, community and everyday life. New York: Basic Books.

Gilmore, J. H. Pine, B. J. (1999) The Experience Economy: Work Is Theater & Every Business a Stage. Boston: Harvard Business Press.

Gorz, A. (2003) L’immatériel: connaissance, valeur et capital. Paris: Editions Galilée.

Imbesi, L. (2010) No More Lonely Heroes. From the culture of project to spread Creativity. In: VV-AA. (eds.), Designer: careers and professionalization. Bruxelles: De Boeck.

Imbesi, L. (2010) Hybrid in Design. Design as a Cultural and Collective Process. In: Borderline - pushing design over the limit, Conference Proceedings of Cumulus Genk Conference. Katholieke Hogeschool Limburg, Media & Design Academie.

Imbesi, L. (2009) Design_Studies: Design in-between Theories and Project. In: Design Education 2050, Icsid Design Education Conference Singapore 2009, Section Future Epistemology. Temasek Polytechnic, Singapore.

Imbesi, L. DESIGN POWER. (2008) Design cognitariat at work in the organization of the knowledge capital. In: Design Thinking: New Challenges for Designers, Managers and Organizations,
Conference Proceedings of the International DMI Education Conference. ESSEC Business School, Cergy-Pontoise, Paris.

LEVY, Pierre. (1999) Collective Intelligence: Mankind's Emerging World in Cyberspace. New York: Basic Books.

Lyotard, J.-F. (1984) The Postmodern Condition: A Report on Knowledge. Minneapolis: Univ. Of Minnesota Press.

MAIONE, Giuseppe. (2001) Le merci intelligenti. (The Intelligent Goods). Milano: Bruno Mondadori.

RIFKIN, Jeremy. (2001) The Age of Access. New York: Penguin Putnam.

Rullani, E. (2004) La fabbrica dell’immateriale. Produrre valore con la conoscenza. (The Factory of the Immaterial. Producing Value through Knowledge). Roma: Carocci.

TOFFLER, Alvin. (1980) The third wave. New York: Morrow.

Touraine, A. (1969) La société post-industrielle. Naissance d’une société. Paris: Denoël-Gonthier.

About the Author:

**Lorenzo Imbesi** is an Architect, PhD and Full Professor of Industrial Design chairing the Design Unit at Sapienza University of Rome. He is a member of the Executive Committee of EAD since 2011 and a member of the Executive Board of Cumulus Association.