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This is to certify that:

**Valentina Auricchio**

has presented the paper entitled:

**INTERNATIONAL DESIGN GOVERNANCE: TOOLS AND METHODS FOR  
BUILDING AND MANAGING GLOBAL VALUE CHAINS**

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# INTERNATIONAL DESIGN GOVERNANCE: TOOLS AND METHODS FOR BUILDING AND MANAGING GLOBAL VALUE CHAINS

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## Abstract

In developing the curricula for tomorrow's designers one must keep in mind today's dynamic mutations at a global and local scale, knowing that they are both important for the effectiveness of future sustainable solutions [Manzini, E., 2007]. In this perspective, the education of design strategists must provide a broader view by offering multidisciplinary courses and "international knowledge".

This vision has pushed universities to enlarge their networks and connect with territories in order to give students and staff the opportunity to widen their horizons. Today, by forming design strategists capable to act in different geographical and disciplinary fields, universities have become important actors in supporting the international competitiveness of their territories and in building sustainable connections worldwide.

In order to develop future strategies in this field there is a need to form professionals capable not only to vision and build international connections, but also to manage them and to combine different social and market models [Margolin, V., Margolin, S., 2002]. This requires for the concept of "design governance" and the definition of new ways to form design strategist in this field.

Through previous experiences, the paper intends to describe the typologies of actions developed up to today and to stimulate a debate for actions:

\_at a local scale: through the development of international and multi-cultural educational programs which allow students to achieve a wider view of the differences between productive systems worldwide;

\_at a global scale: through the development of international networks which capture local specificities and build sustainable international value chains.

**Keywords** - Design Governance, Strategic Design, International networks.

## 1 INTRODUCTION

The complexity of today's global production and distribution systems requires an enlarged view of the role of designers and therefore of their education. Observing the changes within universities but also within the relationship between designers and companies, one can say that there are evident signals of change.

To give two examples:

\_within universities, courses such as "Internationalization" [TuDelft], "Globalization and Design" [Carnegie Mellon, Hong Kong Polytechnic], "Fashion for Global Markets" [Parsons], "Master in Man and Humanity" [Netherlands], we can observe that there is evermore a need for the development of a curricula which enables students to have a "global vision" of how international value chains work rather than only concentrating on the development of new products.

\_within the relationship between designers and companies, thanks also to the great importance achieved by design weeks and design fairs, the designer becomes the key player for exhibiting and selling products. Inside fairs and distribution facilities, one can observe that designers are the owners of spaces in which they invite companies (for whom they have developed products) to exhibit and not vice versa (see *Abitare il Tempo* in Verona, Italy). Therefore the designer becomes the strategist and manager also of the distribution process of companies.

This last point may seem obvious, however when looking at the role of a designer at a global scale, we can observe that there are many projects in which, thanks to the strategic vision of the designer, productive territories have been able to connect to global markets which they would have not been able to do on their own.

To reinforce this concept it is important to read some lines of the brief description of two of the courses mentioned above:

*“Designers must often plan for products that will be sold in markets around the world. As a result of global markets, design teams must conduct user research on markets in several countries simultaneously. [...] Designers must integrate global manufacturing and assembly and plan for global distribution products.”*

[Carnegie Mellon, “Globalization and Design” - <http://www.cmu.edu/esg-cat/pdf/CDS/cd.pdf>]

*“The objectives of the course are: to prepare the student to work in an international context (knowledge transfer and management of cultural differences); to understand the strategic product development aspects of internationalization (corporate international product policies, international marketing, outsourcing of production); to understand the integrated product development aspects of internationalization (global product realization, collaborative engineering); to develop an opinion on the role of the industrial designer in the context of globalization (fair trade, sustainability, developing countries, design ethics).”*

[TuDelft, “Internationalization” - <http://www.io.tudelft.nl/live/pagina.jsp?id=df68f841-26be-4404-88b2-5da372e363b0&lang=en>]

This debate becomes more relevant when talking about the education in the field of strategic design and in “design driven innovation” [Collina, L., Simonelli, G., 2004; Hytönen, J., Järvinen, J., Tuulenmäki, A., 2004; Verganti, R., 2003; Zurlo, F., Cagliano, R., Simonelli, G., Verganti, R., 2002; De Michelis, G., 1998; Manzini, E., 1998], an innovation process which is not necessarily linked to technology nor to market analysis, but which driving force is given by the determination of significant social changes through the combination of existing technologies and markets.

One of the main tools for disseminating the culture of design driven innovation to foreign territories has been through technology transfer operations which do not strictly concern the transfer of machinery or production processes, but which aim to enable local communities to reach new markets through innovative development processes. Through a bottom-up approach, these actions aim to give communities the capabilities to research partners internationally and to be competitive on the global market [Rifkin, J., 2000; Sen, A., 2000].

## **2 DESIGN KNOWLEDGE TRANSFER PROJECTS**

Technology transfer operations in the field of design are stories which talk about designers involved in activities in territories far away from their usual working habitat, travelling in order to develop research projects which aim to build “bridges” and connections defining new international value chains. The common aim of designers involved in these projects is to identify strategic partners which can positively contribute to adding value to the network. By developing these projects, *metaproject* research is used to identify territorial specificities which can add value both in terms of quality and culture. Design strategists determine and plan synergies between project necessities and productive excellences which have a cultural value linked to their territory and high productive quality attributes.

Through the development of “bridges”, the designer triggers design communities both at a local and global scale. The ability of the designer to build connections and to act as “glue” between producers and consumers is not a new factor. Designers are constantly communicating with different actors both when working for an individual company and acting as a facilitator (mediator) between productive territories. In this context, designers must have *hermeneutic capabilities* in order to interpret different languages and build a *common language* to push the system towards innovative solutions. [Zurlo, F. 1999]

## 2.1 Building sustainable international value chains

In a globalized world, the opportunities to build new connections, networks and value chains has increased with respect to the past. This phenomenon has also been facilitated by the development of communication and information technologies which allow a fast exchange of project data eliminating past physical barriers.

The level of cultural contamination which occurs within global projects is difficult to analyse and study, however one can observe that the abilities of designers to interpret the needs of clients and to transform them into tangible solutions must be also supported by the capability to interpret cultures – to capture values, signs, traditions – and translate them into suitable solutions (socially, politically and economically sustainable solutions).

Therefore, in brief, the aims of these projects can be divided into two main streams:

- \_support the democratization of access for companies worldwide;
- \_encourage a kind of globalization which is guided by the exponential growth of cultural relationships.

If the aims of these projects are the *democratization of access* and the *exponential growth of cultural relationships*, how do designers obtain these goals and with what theoretical background?

The definition of “sustainable solutions” in this context is not merely linked to an ecological view, but it mainly refers to social design theories. However, as also stated by Victor and Sylvia Margolin (2002), up to today little thought has been given to the structures, methods, and objectives of social design and less in the field of social issues linked to the management of international design projects.

Nevertheless, there are some concepts that have been developed and that can be taken into consideration as starting points in order to understand the different factors that should be talked:

\_the first is the definition of cosmopolitan localism [Sachs, W. 1992] which determines the capability of a territory to “combine *rootedness* in a place with affiliation to a larger community [...] It cherishes a particular place, yet at the same time knows about the relativity of all places”. This condition, which seems to be evermore a reality rather than an utopia, is the starting point for building sustainable connections between territories. In fact, it pushes us to reflect on the role of design in planning international relationships and in particular on determining win-win strategies in which all actors involved in the product development can participate without losing their identity.

\_the second is the definition of *geodesign* [Boeri, S., 2006] which determines the importance of geographical and political aspects of product development. Through this vision, all products have a geographical and political DNA which goes from defining the actors involved in the process, starting from the first concept development, to production, to distribution, to consumption.

With these two concepts, it is possible to build a first theoretical background in which design strategists can define international value chains through the evaluation of cultural, productive, economical, political and social values of each single territory and determine hybrid cultures of design, production and consumption.

## 3 DESIGN GOVERNANCE

In order to develop design tools for the development of international networks, it is necessary to shift our point of view from ‘considering the value chain as the *context* of research’ to considering the value chain as the *subject* of research’. This means that the DNA of a product can also be designed by designing the whole system of actors that give birth to the product (designer, producer, distribution, consumption) [Manzini, E., 1999].

The research of partners becomes part of the strategic design process and designers can contribute to the internationalization of companies not only through the traditional tools of product development but also by supporting the search of new partners and the governance of global value chains.

If this is possible and if it can already be observed as a reality that is occurring, then there is a need for the definition of a design ability which is capable to manage global value chains, a *design governance*.

To design and manage international value chains it is necessary to have an overall vision of the international dynamics, not only economical, but also social. As the Indian say 'a chain is never stronger than the most weak of its rings', one can say that to be able to identify *strategic rings* of a chain is crucial in order to reach new markets and develop suitable products.

According to Rolf Fehlbaum "geodesign is like a menu which allows you to order whatever you need from whoever is able to give it to you [...]. Today there are no more local projects nor local productions [...] everything is available all over the world, you can connect with any competence in any part of the world [...] this allows products to open up to a vast expressive territory and identities which is probably unique in human history".

### 3.1 Internationalization and globalization

What has changed and why is there a need for a shift of perspective?

The first reflection that must be done is on the difference between the term internationalization – intended as the expansion of economical activities in international territories – and globalization – intended as the integration of functions at an international scale.

According to Gary Gereffi (2005) there has been a shift from *long distance trade*, mainly dealing with import/export of goods from one country to another, to transnational corporation – TNC, mainly dealing with the new distribution of labour at an international level and therefore the development of global value chains. Therefore there has been a change from an international commerce based on goods (trade in goods) to one based on processes (trade in processes).

Why should this interest designers?

According to Palmisano (2006), today innovation can not be assigned to '*single inventors*', but it is a combination of different factors such as: how services are supplied, how industrial processes are integrated, how institutions and companies are governed, how knowledge is transferred, how public policies are defined and how the different actors participate and take advantage of the system.

In this new scenario, the governance of international value chains has become a strategic element for innovation. Understanding how to build and manage international networks can also be a tool for enabling social innovation and sustainable development solutions. Institutions who are capable to develop governance abilities can become strategic actors for the internationalization of their territories enabling productive realities to connect with partners abroad and reaching new markets.

## 4 CONCLUSION: FUTURE IMPLICATIONS

As mentioned in the first paragraph, there are some examples of design courses which teach young designers what has been defined as "international knowledge". This term has not been quite defined yet, however, from the topics expressed throughout the paper it is clear that it does not only have to do with international exchange programs nor with international classes. The term "international knowledge" indicates the need for specific studies which enable young designers to have a broader view of the opportunities and consequences of decision making in a world in which we are all connected. However, the definition of such education must undergo further studies in order to better define the theoretical arena.

From experiences collected, it is quite evident that in order to achieve "international knowledge" it is necessary to develop "international experience" (on field). This intuition comes mainly from the fact that faculty members who have decided to undertake a design course in this field have been generally people who have a personal interest in international matters and in most cases they have also developed several design projects at a global scale.

The aim of this paper is to highlight this need and to stimulate an international discussion on the responsibilities of design educators in this field.

## References [Arial, 12-point, bold, centred and capitalize the first letter]

- [1] AA.VV., 2006. I tre mondi del geo-design: sette opinioni a confronto, DOMUS, n° 891, pp.18-121
- [2] CHAPMAN, J., 2007. GANT, N., Designers (ed.), Visionaries + other stories. A collection of sustainable design essays. Earthscan, London
- [3] GEREFFI, G., 2005. The global economy: organization, governance, and development. Smelser N.J., Swedberg R., editors, The handbook of Economic Sociology, Princeton University Press
- [4] GEREFFI, G., HUMPHREY, J., STURGEON, T., 2005. The governance of global value chains. Review of International Political Economy p. 78–104
- [5] MANZINI, E., 2005. A cosmopolitan localism. Prospects for a sustainable local development and the possible role of design. ME.Design. Il contributo del design allo sviluppo locale. SDI Design Review, n.2
- [6] MANZINI, E., 2004. Design As A Tool For Environmental And Social Sustainability. Design Issues in Europe Today, The Bureau of European Design Associations - BEDA White Book, ed. By Stuart Macdonald, The Publishers, NL
- [7] MANZINI, E., 1999. Connettività e coproduzione del valore. Il ruolo del design strategico. document, October
- [8] MARGOLIN, V., MARGOLIN, S., 2002. A 'Social Model' of Design: Issues of Practice and Research. Design Issues, Vol. 18, No. 4, pp. 24-30
- [9] PALMISANO, S. J., 2006. The Globally Integrated Enterprise, Foreign Affairs, vol. 85, no. 3, May/June, pp. 127-136
- [10] RIFKIN, J., 2000. L'era dell'accesso. La rivoluzione della new economy, (orig. tit. The Age of Access) Mondadori, Milano
- [11] SACHS, W., 1992. The Development Dictionary. Wolfgang Sachs. London, Zed Books
- [12] SEN, A. K., 2000. Development as freedom, Anchor Books/Doubleday
- [13] SIMONELLI, G., ZURLO, F., CAGLIANO, R., VERGANTI, R., 2002. Innovare con il design, Il Sole 24 Ore, Milano, Italy
- [14] VERGANTI, R., 2003. Radical design-driven innovation: the secret of Italian design. Design Management Journal