DESIGNING THE DESIGNER: THE RESPONSIBILITIES OF EDUCATION IN THE NATIONAL/REGIONAL SYSTEMS OF DESIGN

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ABSTRACT
This paper discusses the role that education has in the shaping of the professional designer in the broader context of national and regional systems of design, i.e. in the varying constellations of the main actors and stakeholders that define the possibilities of the existence of design. The paper is a co–production of the work of both authors: Mollenhauer’s doctoral work analyzes –among others– the "Finland Design System" in order to generate a matrix which can finally be applied in other contexts like Latin America, specifically in Chile. For her, Finland represents a mature "System of Design" where the necessary elements of “Design–driven Innovation System” –actors, actions and projects– complement each other in an efficient manner. The education is here supported by the University of Art and Design Helsinki (UIAH) which is a key player in the whole Finnish design context and which had a seminal role in producing the basic agendas for the national design policy. Korvenmaa has analysed the Finnish context from within but has also been actively engaged in shaping the Finnish national design policy and its implementations. Accordingly, he is both an evaluator and an actor aside from an informant for Mollenhauer. He is also responsible of critically adjusting these conclusions against the historical and present–day conditions of his country.

Keywords: System of Design, Design–driven Innovation System, National Design Policy

1 INTRODUCTION
1.1 Education’s role within Chile Design System yesterday
On distant realities, like Latin American countries, specifically in Chile the ethical and political role of Design has not given its best yet. Design in this part of the world is still relegated from the “decision–making” levels and all the actions related with technological, economical and social development.

The Chilean case –between 1968 and 1973– was an experience that would have changed the history of the Chilean System of Design. In this process Education of Design played as a key agent and it would have had an important role if the whole process would had had success. In 1968 a big and important process of change affected the Educational model in Chile. The School of Applied Arts of University of Chile disappeared and was re–structured as the School of Industrial Design. It was located at Valparaiso, the main harbour of Chile. At the same time, Gui Bonsiepe, –a German designer– was hired by the International Labour Organization–ILO to work at Chile. His mission was applied for the first “National Design Policy” for Chile and its “Programme for SME’s assistance”. He contacted the School of Design at Valparaiso and he started to work creating both the ‘Industrial Design Bureau’ within “Technological Research Institute of
Chile” and the “Design Projects and Development Bureau” with the purpose of taking care of the necessities of the community through research, teaching and social applications achievements. So education and state become connected through Design commitments.

After the military coup d’etat in September 11th, 1973 these projects disappeared and with it any possibility that Chilean Design would have an active role on Chile’s technological, economic and socio-cultural development. Since democracy returned in 1990, Metropolitan University of Technology (UTEM) has made efforts trying to place Chilean Design in a strategic position inside government institutions related to technological, economic-productive and social development again. After almost 17 years working—with not enough success—, we believe that now it is time to look to other realities, those that have been successful in this purpose, because still today Chilean Design and Education of Design do not have an active role within technological, economical and socio-cultural country development [1]

1.2 Education at UIAH as a reference for Chile Design System today
At the present time in Chile, the actors of the National Innovation System (NIS) have been discussing the new law of Science and Technology and its implementation. In this context, the Chilean Design System has not been invited as an actor to be part of this innovation process. Design has not been considered as an important and useful discipline and profession. Design and designers don’t have a relevant position in the decision making processes within strategic levels and are permanently kept away from Industry and SME’s sectors and, therefore, far away from technological and economical development of those sectors.

In the other side of the globe, the Finnish System of Design has been considered within Finnish NIS since 2000. Design is an active agent and it is part of NIS, through Design 2005!, the Finnish National Design policy. But as we will see education has been playing an important role within NIS and policy-maker process. Therefore, if we have the capability to understand how education has improved technological, economical and socio-cultural national development, we will change our current strategy. If we can learn about ‘best practices’ done in other milieus we will have the chance to improve the weaknesses of our System of Design in Chile. The core question about why Education of Design at University of Art and Design Helsinki (UIAH) can be considered a good reference for us will be answered by 1) a brief summary about UIAH’s participation within the National Design Policy as an ‘actor’, and 2) a short analysis about UIAH’s participation as an education actor within Design-driven Innovation System today.

2 THEORETICAL AND METHODOLOGICAL FRAME
There are two core concepts that we have to manage in order to understand how and why the Education of Design in Finland could be considered as a reference. The first – ‘System of Design’– is referring to the whole of relevant actors and their relationships that support Design for operating within a community, country or region [2]. Design System as a tool makes possible to identify and visualize stakeholders, their connections and performance, drawing and giving boundaries to specific and delimited activities driven by Design regarding technical, economical, social and cultural requirements.

The second concept “Design_driven Innovation System” is based on the first one: it should function as a sub-system interwoven into a broader National System of Innovation, System of Design and Economical & Productive System. In this way Design can
draw strength from major national and regional actors in politics, economy, culture and education when you identify and validate those projects where the innovation process is driven by Design as a strategic discipline and profession. It means that innovation processes are led by System of Design at the same time that are directly connected with System of R+D+I as well as Productive & Economic System. The Design-driven Innovation System model is basically supported by a) six kinds of ‘actors’ or stakeholders come from Governmental, Education, R+D+I, Profession, Industry and SME’s, promotion levels; b) four kind of ‘actions’ as Laws or rules, Policies, Plans or Programmes, Funding tools; and four kind of ‘projects’ driven by Industrial Design classified as ‘basic research projects’, ‘applied research projects’, ‘education projects’ and ‘promotional projects’ [3].

![Figure 1 Model of Design-driven Innovation System (D_diS)](image)

The need and possibility to learn about other successful experiences have led us to work over a methodology expressed by a matrix –built as an instrumental model– that can be applied in order 1) to map a specific ‘System of Design’ and analyze, in one hand, how this local ‘System of Design’ is cooperating within its own National Innovation System and in the other, how this local ‘System of Design’ is cooperating within its own Productive and Economical System; 2) to draw the ‘Design–driven Innovation System’ of this country or region applying this instrumental model looking for: actors (or stakeholders), actions and projects where the innovation process is driven by Design; and 3) to look for best practices that can be considered a good reference for others who want to improve.

The backgrounds and building process of this matrix started with empirical findings come from a study of cases about Design–driven Innovation benchmark between Lombardy and Catalonia performed during 2005 [4]. After that –in 2006– more information about “best practices” was collected from Portugal’s System of Design. Finally, in order to configure an ‘ideal’ model it was necessary to look for a really developed System of Design. During second part of 2006 Finland was chosen for its commitment. Moreover this matrix is an outcome based on the analysis mixing two examples from different sources 1) Bonsiepe’s matrix about maturity of Design within developing countries [5]; and 2) the ‘metaphor of the table’, comparison about four core elements of Finnish Design and its supporting legs: education, the profession, promotion and memory.

### 3 UIAH’S ROLE WITHIN FINNISH DESIGN-DRIVEN INNOVATION SYSTEM

#### 3.1 UIAH’s role within System of Design’s history in Finland

In 1996 the Finnish National Fund for Research and Development (SITRA) – a NGO’s that works for common good and parliament– invited a group of design–related persons to discuss about current condition and future of Finnish Design. Key questions dis-

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1 R+D+I: Research, Development and Innovation
cussed there were: if design had in the Post–War decades been an integrated factor in creating wealth and quality of life so could it again, in a different context, do the same? What is the condition of the different operation areas, professions and institutions related to design and how do they function together? How to build a renewed competence level through education? In 1998 “Muotoiltu etu I ja II”\(^2\), first design survey achieved by Pekka Korvenmaa and its outcomes –suggesting the integration of Design within National development– were ready [6].

Suggestions were accepted and the Ministry of Education used the SITRA document as basis for their work and set an official working group to start the process. Other institutions like the Ministry of Culture, Trade and Industry and Foreing Affairs became interested too. Then the first National Design Policy was asked to a group of expert leading by Pekka Saarela\(^3\). This group become from different sectors: public, business, industry, design system, community.

Then the Design community started to work around the first National Design Policy for Finland. Again, Education –represented by UIAH– was leading the process. In June 1999 a draft was presented and one year after, in June 15\(^{th}\) of 2000, Design 2005!, the first National Design Policy was approved [7]. The “Round Table”– an informal discussion group with a heavy–duty representatives from public and private sectors– was set up to generate ideas of how to implement the programme during 2002 to 2004. From this moment Finnish Design and Designers have been anchored in the broader political, economical and cultural as well as ethical issues pertinent in the function of the national innovation system being tightly connected to the main stakeholders in research and r&d.

Then the National Design Policy needed a new survey about Industrial Design and how to coordinate aims and funding tool within the Industrial Design Program, so a new survey was done within UIAH by Designium, the new centre of Innovation in Design at UIAH. Two different programmes and funding tools come together in order to produce an umbrella covering both theoretical issues and actual product. Both are:

1) Industrial Design Technology Programme 2002–2005 supported by TEKES–the National Technology Agency. A total budget of € 27 million for applied research done by R+D and Technological Transference Centres was given. Money comes 50% from Ministry of Trade and Industry (TEKES) and 50% from enterprises. During the period 2002–2005, 17 projects were done and they have an open competition. From the whole 8 projects were developed by UIAH and its centres MUOVA and Designium.

2) Research Programme for Industrial Design 2004–2007 is an interdisciplinary programme, which is supported by Academy of Finland There are € 2 million for basic research done by 5 Universities (from State). Money comes entirely from the Ministry of Education. During the period 2004–2007, 8 projects have been done. From the whole projects, 3 projects are developed by UIAH.\(^4\)

### 3.2 UIAH’s perspective about Education of Design

In the past and at present time Education of Design in Finland is considered a core element within the Finland Design System. In the metaphor of the table, education is represented by the University of Art and Design Helsinki (UIAH) as a key player in the

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\(^3\) The report was compiled by Pekka Saarela. He was then the head of Centre for Extensive Studies at UIAH, now he is Head of Administration at UIAH.

\(^4\) Information on the program can be found via the SITRA website: www.sitra.fi
whole Finnish design context and which have had a seminal role in producing the basic agendas for the national design policy. This role has been played from UIAH’s teaching programme, where students are guided to work with a wide point of view about what a Design project is. Master’s and doctoral students are always connected with the ethical and political roles of Design, learning by doing, how Design becomes more and more involved within highest level of Politics and Strategies of Innovation Policy. For UIAH, Education is not only about technological and economical requirements, but also about ethical, social and cultural issues. UIAH’s design projects are about:

- Collecting the historical patrimony through Finnish Design History research projects
- Promoting and support Design Research and Design_driven Innovation by Centres as Muova or Designium.
- Transferring Design Culture connecting with others discipline by teaching and research through “International Design Bussiness Management–IDBM” an interdisciplinary degree programme between UIAH, Helsinki School of Economics and the Helsinki University of Technology.
- Developing knowledge through research from University to community like the ‘Shaping the professionalisation of Design’ project.
- Assessing National Design Policy results within Designium.

UIAH has played a role not only about transmission of Design Culture regarding teaching mission, it also has enabled the communication between the context of Design and other spheres of economic social and cultural activities. Those facts allow us to conclude about a wide typology of Design Projects. This typology shows the important role played in the past as well as in the present time. UIAH, as one supporting leg for Finnish System of Design, was founded by ideological aspects of the art and craft education; still today UIAH going on supporting National Design System through 21st century.

4 CONCLUSION

The Finnish system of Design could be considered as an advanced system. According with the Design_driven Innovation System matrix, Finland has its Design Actions System complete (Rules, Policy, Programmes and funding tools) to support the System of Design. This has allowed to Finnish Design System achieve a well–positioned situation, being a good example about a high–level Design maturity. Education as one of its “fourth leg” represented by UIAH have been directly connected with professional sector development and also keeping and promoting cultural patrimony of Finnish Design through teaching process. It is not a coincidence that the first study about Design that was the base for next step in National Design policy–maker process was published from UIAH. Korvenmaa in the first phase, and Saarela in the second one, played an important role. Both of them coming from education sector and set together technical, political and ethical considerations as the main focus of National Design Policy. But this was not enough to improve the situation of the Finnish Design System. It was necessary to shape those professional designers, and UIAH’s–as education agent– took care about those ethical and political issues. It is not to be forgotten that, while Design policy is a matter of rhetoric, Education is a matter of actions.

Today UIAH continues to play a key role through its teaching programme and research projects. UIAH is working at the same time shaping the future professional designers through its MA programmes, as well as shaping the future professionals for Design research through PhD programmes. We hope that UIAH goes ahead in the same direction,
going on representing one of the best Education of Design reference for other distant Design Systems as is the Chilean case.

REFERENCES

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