Six decades – and six different roles for the industrial designer.

In Finland the role of the industrial designer has changed with time. When the professional practice of industrial design first started to form, the designer was a creator whose work was likened to that of the artist. In the sixties designers started to work in closer co-operation with the industry, and the designer became a member of a team together with the engineer and the marketing representatives. In the seventies ergonomics were largely discussed and in the eighties the issue of Design Management became popular. In the nineties brand building and strategic design became the focus areas, and in the new millennium design was seen as a means of innovation.

These new areas of design have created different roles for the industrial designer. The previous roles have not disappeared, they still exist, but the general area of work for the industrial designer has broadened. I will in this article consider which some of these roles are, reflect over the reasons that have caused the change and also consider what has been typical for the design rhetoric or discourse of each period.

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INTRODUCTION

The practice of industrial design in Finland is a fairly young discipline, and there is not much documentation or research on the historical development thereof. To picture this development path I will hence partly use the voices of the industrial designers themselves. Much of the material for this paper is collected through in-depth interviews with the individual Finnish designers[1]. Thus many of the opinions stated here are rather their personal views on the events than any commonly accepted pattern of this process. Due to this empiric material this article merely depicts Finnish events, but the general development path is largely similar in the other Nordic countries and other international counterparts. Some of these Nordic touch points are also considered in the article.

THE DESIGNER AS THE CREATOR

In the 1950's Finland was a poor nation recovering from the World War II, which did not receive any Marshall help and was forced to pay great war indemnities to the U.S.S.R. The war indemnities created the need of new industries and the industry structures in Finland developed strongly during this time.[2] The government and the local actors used design to emphasize the national identity and amend the poor economical situation.

Figure 1 The Chantarelle –vases, designed by Tapio Wirkkala in 1946, were shown and praised at the Milano Triennale in 1951.

At the time the expression "*Finnish Design*" was frequently used and further enhanced by individual designers such as Kaj Frank, Tapio Wirkkala, Timo Sarpaneva and Ilmari Tapiovaara. Design gained great success in international competitions, such as the Milano Triennales, and was extensively discussed in press[3]. Even though many of the

objects presented in the Triennales were industrially produced, they were done in very small series. Most of the products were tableware or artefacts in glass or wood, and several were produced by the Finnish glass-and porcelain companies; Iittala, Arabia, Nuutajärvi and Karhula. In these companies it was quite common to have a separate "art" department; where the designers created objects of art rather than utilitarian products.[4]

Typical for the discourse at the time of the Milano Triennales was the emphasis on nature as a source of inspiration and the creation of the mythical designer. The designer had almost full control of the design process; the designer got an inspiration, started sketching, designed the object and only then was the potential object presented for production. The designer was the creator and the artist behind the object; and part of the attraction of the product came from this charismatic designer. Therefore it was beneficial to depict the designer as an eccentric character with special qualities. During the Milano Triennales Tapio Wirkkala was, for example, promoted in Italy as *uomo naturale*, the man who ate flowers and wrestled with bears in the morning[5].

Still today, the myth of the individualistic designer is an approach that is fairly easy to get through in press. People tend to be interested in other people, and by depicting an interesting designer-character behind a product it gets more attention than one without. This is particularly used for a broad public with very little previous knowledge in design, and equally for the sources of information related to them. Many companies use this approach deliberately; by using a famous designer they increase the interest of the general public to their product[6]. Hence, some of the professional industrial designers tend to see this type of publicity with some aversion, and refer to it as "showing your wardrobe" or the objects "hero designers" in the interviews:

> "My former boss called them hero-designers – designers who do not necessary do good design but who frequently figure in press and have connections. They are good at promoting themselves, but sometimes the design they do is not good design at all. […] They frequent all sorts of social events and parade everywhere. And then your average designer, such as me, wonders how they have time with all of that. Don't they work at all?"[7]

In the late fifties some of these designers who had previously gained great success for their art based products moved into the area of industrial design. This was a time when industrial design was in its infancy in Finland, and only a few pioneers existed within the area. One of these pioneers in industrial design in Finland was Sakari Vapaavuori, who transferred from the art-department of Arabia to start designing sanitary equipment; toilet bowls and wash basins[8]. These products were equally part of the Arabia product range, but had previously gained very little attention from the design aspect and not been considered "Finnish Design" as such. An other early example of Finnish industrial design was the Solifer moped, designed by Richard Lindh[9]. Lindh was, in a similar matter as Vapaavuori, previously employed by the art-department of Arabia, and had designed several dinner services.

These first pioneers in Finnish industrial design were thus artist/designers who gradually transferred to the industrial realm. The role of the designer was then consequentially that of an artist, a creative and expressive person who had given form to an industrially produced product. This approach was at the time natural as the area in itself was new, and the public had hardly any knowledge of its existence. Hence the new service was marketed using the same tools that had proved so successful in the case of design for smaller series and international exhibitions; the personal charisma of the designer.

Tapio Wirkkala, who had gained great fame for his designed objects in wood and glass in the Milano Triennales, is another example of pioneering Finnish industrial design. He designed a ketchup bottle, electrical fuses, and toilet seats, all very mundane objects. He had worked several months in the design studio of Raymond Loewy in New York, in 1955-56, and wanted to implement their way of working to the Finnish industry[10]. In 1957 Wirkkala was appointed industrial and artistic designer for the Finnish corporate A. Ahlström that also the glassware producer Iittala, that he had previously worked for, was part of[11]. He then founded the A-studio, an in-house design organisation for the entire corporate, where the emphasis was on team work between both the different designers and the other units of the company. This was an early forerunner of the practice that become more prevailing in the following decade; the designers working in teams together with mechanics and marketing.

Figure 2: Electrical switch and wall socket by Tapio Wirkkala for Strömfors Oy, 1959-1965

THE DESIGNER IN A TEAM WITH MECHANICS AND MARKETING

In the sixties the debate of design being more than just the mere product aesthetics or styling flourished. Design was to be done together with the industry, rather than an aesthetical function or a designer name that was just added on to a completed product. The designers emphasised that they needed to come in earlier in the product development process and work tightly together in a team with the engineers and the marketing unit in a company. Design was perceived as just one part of the product development process, rather than a function the designer could perform alone. The first industrial designers were during this time hired directly to companies, where the end result of their work was no longer marketed with the name of the designer but with the name of the company.

In the beginning they faced the challenge of often being perceived as artists in industry, even if their own approach was closer to technical design. One of the designers describes how they were perceived in a large Finnish company:

> "We were industrial designers then, yes. Our title was industrial designer even if they called us artists in the [corporate] hallways. [laughs]"[12]

If the industry perceived the industrial designers as artists, in the traditional area of applied arts industrial designers were seen as very technical.

> ” So the rest of the school [the Central School of Arts and Crafts, the forerunner of the current University of Art and Design Helsinki] was of the opinion that we were silly and worked with engineers. But we did study mechanical technology and we studied these material technologies that were production methods that were taught in a different way. We read in books about production methods rather than did something ourselves in clay or cloth or thread.” [13]

As the role of the industrial designer was only forming, and very few companies understood the benefits thereof, the designers often had to convince the company of their importance.

> ”I saw an announcement in the paper that [company X] was looking for a technician [in 1966] to design truck cabins. And so I thought that this suits me. [laughs] That technicians tasks can’t be that difficult to learn. Then I went to apply and they thought that “I do not think so, what sort of an education is industrial design anyway?” […] And then [in the end] they decided that they would give such a designer- engineer a go.” [14]

This approach of industrial design as one part of product development is currently still the most prevailing and also the area in which most Finnish industrial designers work[15]. The groups with whom the designer works have grown from merely marketing and mechanics to encompass a broader set of capabilities, but the designers still see themselves as part of a larger group in a product development process.

> ”In the projects – it varies a lot who you have on the other side of the table or as a client – but quite often the designers work with mechanical engineers. […] Then there is some sort of a project manager and a program manager. […] And then there is, depending on the product, there might be some UI [User interface] –people. […] And then there are the hardware-guys, and mechanics. The ones who define what parts are to be included. Marketing.”[16]

The designers own capabilities are consequently also suited to work in a cross-disciplinary group.

> ”the designers in my team are, at least according to my opinion, a hybrid between a styling designer, a mechanics designer and a project manager.”[17]

The original and eccentric designer has in many cases become an anonymous and diplomatic team player for the industry.

THE DESIGNER AS AN END-USER EXPERT

The early seventies were a time of great tumult in the Finnish industrial design field, with many political undertones to the debate. Again, designers wanted to be part of the process from an earlier stage, not only as a part of the product development process but in defining what the product should actually be. The debate was heavily influenced by the thoughts of Victor Papanek (1925-1998), who taught frequently in Finland and wrote the popular books *Design for the real world*[18] and *Turhaa vai tarpeellista?*[19]. The same period in time also saw the theorethisation of the professional practice, especially with the arrival of ergonomcis as a science. The main focus, both for Papanek with his consumption critical students as for the science orientated ergonomics, was to understand the person; the individual who was going to use the produced product in the end. In many cases this meant designing for groups of people with special needs. Especially discussing the design for children, the elderly and the disabled was popular. In a leaflet describing the essence of industrial design, published in 1976 by the Finnish association of industrial designers TKO, and looking back to the developments in the sixties, this approach is described:

> “We noticed that there are areas and groups of individuals that the designers have neglected, and whose needs have only insufficiently been taken into consideration (children, the elderly). The whole design discussions quickly got a larger context: the designers “responsibility” was discussed. The designers started to look for design matters were their professional skill would be used for solving true, social needs.”[20]

Henry Dreyfuss’ theories, expressed through his works *Designing for People* and *The Measure of Man and Woman*[21], also had a great influence on the Finnish industrial design discourse. Ergonomics and user understanding became a tool for industrial design to distinguish itself with a scientific approach from the other areas in the field of applied arts, which where seen as more arts and crafts based.

> “In principle all work was driven by ergonomics, all the projects we did. In that way it was possible to distinguish from the old tradition of crafts, by considering how a product was to be produced and how it was to be used. Anthropometry was of course an important part of this. Previously lathes had been produced so that the user had to be only 150 cm tall but with a distance of two and a half meters between his arms. [laughs] So we tried to make the products better suitable for the actual users.“[22]

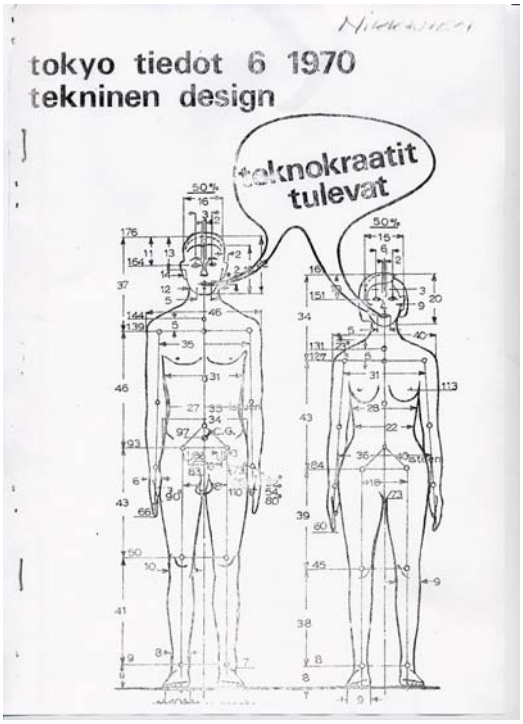

Figure 3: The cover of the Tokyo tiedot 6 1970–leaflet .

An good example of this approach is the special edition of the student union publication at the Central School of Arts and Crafts, “Tokyo tiedot” from 1970 (6/1970) which was a dedicated issue presenting the education of industrial design for the rest of the school. At this point industrial design had been taught for almost a decade and it profiled itself towards the other curriculum through its scientific-based approach. The

department was at this time called *Tekninen design* (Technical design), rather than industrial design. The cover of this publication depicts a man and a woman in the spirit of Dreyfuss' *Measure of Man and Woman*, and in a bubble they say "*teknokraatit tulevat*" (the technocrats are coming). Methods and science were the tools that were to be used in designing products and the aim was to design products that were based on user needs and proven measurements rather than on artistic intuition. The leaflet describes this approach: "*the most eye-catching in the education of technical design is its emphasis of methodology. Because of the coordinating role of the industrial designer their way of working with a complex design problem can not be merely intuitive, as some still seem to believe.*"[23] The notion of the designer as a co-ordinator of a development project in the industry seems to be a quotation of Tomas Maldonado and the HfG Ulm-school[24], who is also directly cited and mentioned in the leaflet. The main emphasis was thus on the scientific approach rather than on artistic intuition or creative thinking.

> "Ergonomics was then taught by this ergonomics group from the Finnish Institute of Occupational Health. There were physicians and engineers in this group. Quite a few of us then were immensely taken by it, we suddenly realised that it was exact knowledge and based on the human being. And humans are the ones we design for." [25]

During this time several research projects were initiated, and many student projects in industrial design were about defining what a product should be rather than actually designing it:

> "I think the rise of industrial design was much to do with the fact that we realized that there are others… that there are other starting points to a design development process than just the products form and appearance. […]we tended to ponder about these things more and more and search for the eternal truth. I think it hindered the actual getting things done many times. […] In the end it came to the situation where no-one dared to do anything before they were absolutely sure what they were going to do. At least at the department of industrial design there was a time when everybody feared to fail and to experiment that they just thought about these issues in theory and then the actual designs where never done but on paper."[26]

The issue of ergonomics and usability has not disappeared from the area of industrial design; on the contrary, it gained an even more pronounced role with the arrival of computers and electronic displays on products. As the products became more complex, the usability issues grew increasingly important. Many designers were needed for designing these user-interfaces, and a new area of industrial design; user interface design, formed. In many cases the first pioneers in this area experienced a similar initiation period as their colleagues had done when they first entered the industry in the early sixties. One user-interface designer describes how she was met when se first started to work in the area of usability and user-interface design:

> "our Head of Product Development said [in 1993]: "You are an industrial designer, why do you want to do this? Then I had to explain to him that an industrial designer does this and this and…"[27]

Usability and end-user understanding then became the starting point for all successful industrial design[28].

THE DESIGNER AS A CO-ORDINATOR

The designers had in various degrees seen themselves as co-ordinators between professionals from various fields since the 1960's. This notion of the designer as a co-ordinator gained an even broader appeal in the 1980's, as the theories of Design Management gained larger attention in the Finnish design field. The designers wanted to participate, not only in defining what a single product should do or how it should be designed but even on a larger scale of product co-ordination. Several conferences were held on the issue, both internationally and nationally[29]. Designers saw themselves as interpreters between both the end-user and the different units within a company, such as marketing and engineering; and their task was to co-ordinate. The goal was a uniform product portfolio, were all products that the company produced were to be perceived as coming from the same company. This evolved into the role of Design Managers.

According to Peter Gorb *Design Management is the effective deployment by line managers of the design resources available to an organization in the pursuance of its corporate objectives*[30]. The most classical types of Design Managers are thus those who manage other designers (in a design agency or in a corporate design function) or manage strategic design issues, such as the product portfolio and design roadmaps in a large corporate.

Design management today differs somewhat depending on if is done in a design agency or within an in-house design organisation of a large corporation. In the design agencies the most typical case of design management is that of the managing director. Most Finnish design offices are very small[31]. The vast majority of the companies consist of only one or two people. In these cases the designer performs managerial tasks besides other design work. When the company has more than three employees there is usually a designated manager. In most cases this is a designer by background and who still performs other design tasks to some extent.

The design manager in a design agency thus has, besides the traditional tasks assigned to design managers mentioned above, also the task of running an, usually fairly small, company. This includes acquiring new customers, creating and developing the strategic business approach of the agency, and managing customer relations. Many of these design managers identify themselves rather in this general manager role than in the orthodox design manager role.

> "If I am totally honest I am more of a general manager at the moment. That sounds dreadful, doesn't it, to be a general manager of a small company. [laughs] But based on what I actually do that is what I am." [32]

When running a design agency one of the main focuses for the design manager is always to acquire new projects and to ensure that they are in line with the company strategy. The design manager in a design agency thus aims to create as much work for the agency as possible, whereas the design manager in an corporate in-house design function quite often tries to restrict and prioritize the amount of work expected to be performed by his or her staff. An in-house design manager describes the difference between running a design agency and managing an in-house design function:

> "Of course design management is done in design agencies. But their design management is leading the organisation that produces the design service, and that differs from ours immensely. In principle they have to serve all sorts of customers. In a way they have the same functions as we do but the way they work is very different because we have this house here, and this is

> the house we work for. We do not need to do account managing, and actually no marketing of the services we do at all. Basically we just are here and try to survive with all the work that is thrown at us all the time. [33]

Hence the design manager role in an in-house organisation differs somewhat from that in the design agency. The in-house design managers themselves see the biggest difference in the fact that they do not need to sell their own work to their own organisation in the same way that a design manager for a design agency usually aims to find new clients. The variety of clients that the agency encounters is also assumed to be broader than in the case of in-house design where the client is always the same company.

Even within in-house design organisations the design manager role can manifest itself in different ways. If the internal design department has less than five members, which in Finland is almost always the case, the design manager role typically consists of the two main areas of focus; the design manager co-ordinates the design roadmaps and guidelines (external/corporate-wide functions), as well as manages the finance and personnel issues of the design function (internal functions). This corresponds very well to the traditional definition of the role of the design manager previously described by Peter Gorb and Robert Blaich.

> ”It is a very broad field of work. In product design my role is to direct or comment the work of the designers, be they external or internal. I haven’t done any own design projects from start to finish in a few years now. But I have a directing and supportive role. And then there is always resource management, having subordinates. Then there are the tasks that are related to leading a team and managing a cost center. All sorts of issues concerning budgets and salaries… […] discussions about personnel development and things like that. Then there is the development of processes, design processes and communicating them to the organisation. There is a need for a lot of communication to many directions. Co-operation in many directions. […] Product programs, mechanical people, people from production and sourcing, Marketing people.” [34]

An exception to this Finnish average size of internal design functions is Nokia, where the mere scale of the organisation has caused different types of design management[35]. Some design managers have a role focused only on personnel management; others have no personnel responsibilities but focus solely on the design development and roadmaps of a certain product area. There are design manager roles where the main focus area is one part of the design process as well as positions were the supporting role becomes more apparent. Model making or concept design can be seen as examples of the former and colour and material development or trend research of the latter. These roles vary through history but examples could for example be to manage a particular style category (like the premium style), a category of products (like mobile phone enhancements in general) or a line of products, such as car accessories (a sub-set of mobile phone enhancements). These roles typically do not contain that much actual “product design” work, but the designer represents their particular area in all meetings, co-ordinates the work and makes the definitions of the design tasks for this area. Generally the styling of the products is then done by either external or internal designers.

Some of these designers clearly see these as design managerial roles. Others say that they “take care of” a certain issue or “are responsible of” a certain area but they still question whether their work can be seen as design management or not. The word co-ordinate figures in their speech quite often. In many cases the “management” for these individuals, and thus also the word “design management” is used for their superiors, or the formal design board, who have the final decision on design issues. The reluctance of using design management as a word describing their own work is hence related to the fact that managerial tasks appear on several levels of the design organisation and the term “design management” quite frequently is seen as the top level of design management in the company. Despite this there doesn’t seem to be any other word for this type of activity in use either, so most designers in this position just tend to describe what they do, use design management but with an additional supplement describing their own area, or they use the rather generic term specialist (or senior specialist etc). One of these designers aim to describe whether he considers his own work design management or not:

> ”it’s just project management. It could be any other type of project management. I’m just the guy who represents design in this group of people who manage the project. There are similar guys for Hardware and Software and Marketing and so on. Guys like me who take care of their own area.[36]

Here the identification of these individuals is often twofold – both to the design functions as well as to the other middle management functions of the unit they work for.

Recently even other forms of design managers, such as brand and design management consultants have started to appear internationally[37]. This type of service, provided by a consultant in a design agency, is appearing in Finland as well. These individuals do not need to be design managers, but they provide design management services or brand design services to external companies[38].

Today the design manager role has thus become broader than its original definition in the late 1980’s, and includes several areas of work besides the management of design resources in a company. Design Management evolved from creating a coherent product portfolio to a broader view on corporate strategy and brand experience.

THE DESIGNER CREATING EXPERIENCES

With the arrival of the nineties the importance of brands grew for companies. At the same time design and design management broadened to encompass not only the product portfolio, but the entire end-user experience of the corporate and its brand[39]. The industrial designer was to ensure this brand experience, or total experience design, for the customer. This meant that the designers wanted to be part of the strategic planning of everything from the very first concept to the last retail solution. [40]

Robert Blaich emphasises that design management is not merely the assignment of the normal administrative chores to a manager but also the role in identifying and communicating the ways that design can contribute strategic value to a company[41]. The design manager, according to Blaich, operates at dual levels; promoting and identifying the strategic role of design in the corporation while coordinating day-to-day operational interface with relevant colleagues. During the late nineties the term *strategic design* was frequently used. This discourse of strategic design in Sweden was portrayed in Christina Zetterlund’s: *“Design i informationsåldern. Om strategisk design historia och praktik.”* [42]. In Finland several initiatives, such as the *“From Design Services to Strategic Consulting”*-report[43], were initiated in order for the designers to participate earlier in the corporate decision making; as early as in the

defining of the corporate strategy. This discussion coincided to a large extent with the rise of the IT-industry and the boom of the e-economy. Even though the industrial designers have aimed for the biggest possible profits for the company since the very early stages of the professional practice, it is only recently when this discourse of strategic design has become more pronounced. As the world was already perceived to be filled with products, the new way of differentiating one product or brand from another was not to only focus on the product itself, but on the entire *experience* that was created for the user of the product.

A design manager for a smaller in-house design function describes his tasks and responsibilities:

> ”I am responsible for the design functions; industrial design or product design. Then there is graphic design. Spatial design; fairs and shop interiors. These three might be it – if you look at the end result we do all of them. Or then you could of course grandly call it brand experience. [laughs]”[44]

An example of this approach of “total experience design”; of the design effort comprehending the entire experience from first concept idea to last retail store detail was the Nokia 7200. It was marketed as:

> “Incorporating a "total experience" design philosophy, the Nokia 7200 offers fashion-centric consumers coordinated Style Pack's to "dress up" their mobile. […]To complete their coordinated mobile ensemble, users can download matching wallpapers and screensaver graphics from www.nokia.com/shop.”[45]

Figure 4 The Nokia 7200.

Figure 5 Marketing material for the Nokia 7200. The product itself is not shown, but for the product detail as a background and the enhancement of the product (the headset). Most visible is the potential experiencing customer.

The focus was on getting the customer tied to a brand on an emotional level, rather than to buy a product merely for a functional need. The futurist Rolf Jensen painted the picture of markets that targeted emotional needs in his book *“The Dream Society. How the coming shift from information to imagination will transform your business.”* The most important raw materials were not to be coal, oil and steel as in the age of the industrial worker, but this new era of the symbol analyst thrived on knowledge, pictures and stories[46]. Nike, with tribes of followers tattooing themselves with the corporate “Swoosh”-logo, was seen as an ultimate example of customers’ brand commitment[47].

THE DESIGNER PUSHING INNOVATION

With the turn of the new millennium the economic situation cooled and the competitive situation became fiercer and even more global. Phenomena, such as the transferring of industry labour to countries with lower employment costs, frequently referred to as the China-syndrome, figured in the press. The general fear was that these other countries would prevail in the race of competitiveness. The solution to this situation was to be *new innovation*[48]. Richard Florida saw the power of innovation and diversity in a society in his *"The Rise of the Creative Class: And How it's Transforming Work, Leisure, Community, and Everyday Life"*[49]. This creative class was seen as the true competitive advantage for a society; one with which the race of cheaper labour cost would be won.

On a national level in Finland this quest for new innovations lead to a change in the research- and technology policy from a technology driven focus to a new phase, frequently referred to as the *national innovation system*[50]. The aim of this notion of innovation system was to enlarge the concern of the policy to encompass all parties that had a part in the process of producing or using new research results. It was thus possible to create a larger social discussion of what the industry development in the country was to be, and equally to interlink it with its international counterparts. During this time design issues gained a vastly wider importance than when the focus was on technological development. The design ideology coincided well with the idea of innovation; of looking at things with a creative mind and finding new solutions.

When creating the Finnish design policy, the notion of a *national system of design* was cunningly aligned with the notion of *national system of innovation*. In 1996 Sitra, the Finnish National Fund for Research and Development, invited a group representing various areas of design to discuss the question of whether design could again play a prominent role in industry and this national system of innovation[51]. As a result the report *Muotoiltu Etu I-II. Muotoilu, teollisuus ja kansainvälinen kilpailukyky*. (Designed Asset I-II. Design, Industry and International competitiveness.), written by Pekka Korvenmaa, was published[52]. Another initiative that was as a basis for the Finnish design policy was that of the National Council of Crafts and Design of the Arts Council in Finland (working under the Ministry of Education). The Council suggested that Finnish design needed development and its position was to be ameliorated. They took the initiative to formulate a Finnish Design policy in 1997, much based on the previous research report. Pekka Saarela was commissioned to write this report, which then was the foundation for the national policy programme of design *Muotoilu 2005! (Design 2005!)*[53] and published in 1999. It was to a large part a vision of what the Finnish design system should be in 2005. It clearly defined the impact that this policy should have both in the matter of quantity and quality of Finnish industrial design. The quality suggestions where based on the idea that design should

become one of the main factors in competitiveness and design was to be part of the national innovation system. The report then gave concrete proposals for action of how these goals could be achieved.

The National Technology Agency of Finland, Tekes, took part in the design policy program by initiating their own design programme. The Industrial Design Technology Programme, DESIGN 2005 (2002-2005), was launched early in 2002 with the intention of making industrial design part of the (often technology driven) companies competitiveness. This was exposed through the (sub)title of the program: *Industrial Design - technology's counterpart in competitiveness.* The pronounced aim was to raise the standard of design research and make use of design expertise in corporate product development and business strategy and to develop the services provided by design firms. In the programme promotion material the main promotional thesis was *"Design brings added value for companies"* and the aims were described as follows:

> "Recognizing the end user's needs and expectations and generating innovations based on them are becoming increasingly important parameters for success. […]By using design more effectively it will be possible to give Finnish industry a competitive edge that can respond better to the latest global challenges. Harnessing new areas of design expertise, such as user experience, for business operations and for generating new types of business is of crucial importance here. The most successful major international companies integrate social and cultural expertise into global product development."[54]

In this trend of seeing design as a driver for innovation Finland was merely following international examples[55]. Internationally a recent product that was most frequently referred to as "re-inventing the industry" was the Apple iPod –music player, first launched in 2001[56]. As a design agency Ideo was often referred to and benchmarked in several national design enquiries, as well as Tom Kelley's book *"The Art of Innovation. Lessons in Creativity from Ideo, Americas Leading Design Firm"*[57].

The designers wanted to be part in this discussion, and a part of the team that was to create the corporate vision with which this increased competitiveness was to be established. As one design-service provider describes how they now see their area of work in companies:

> "It is more likely that we arrive to a situation where they [the corporate] want to change. They can't quite articulate why they want to change or in what direction this change should be. When there is a clear vision of what the company aims to be within five years this type of action proposals are easier to formulate. […] my role is more, I would say, to bring a design-insight into this, so that we could arrive to those solutions that would best support this change that is required."[58]

How this newest role for industrial designers will affect the products and the corporate profits on a larger scale is still to be seen. Many companies have participated in these programs aiming for innovation through design, such as that initiated by Tekes, and the results thereof should be visible shortly.

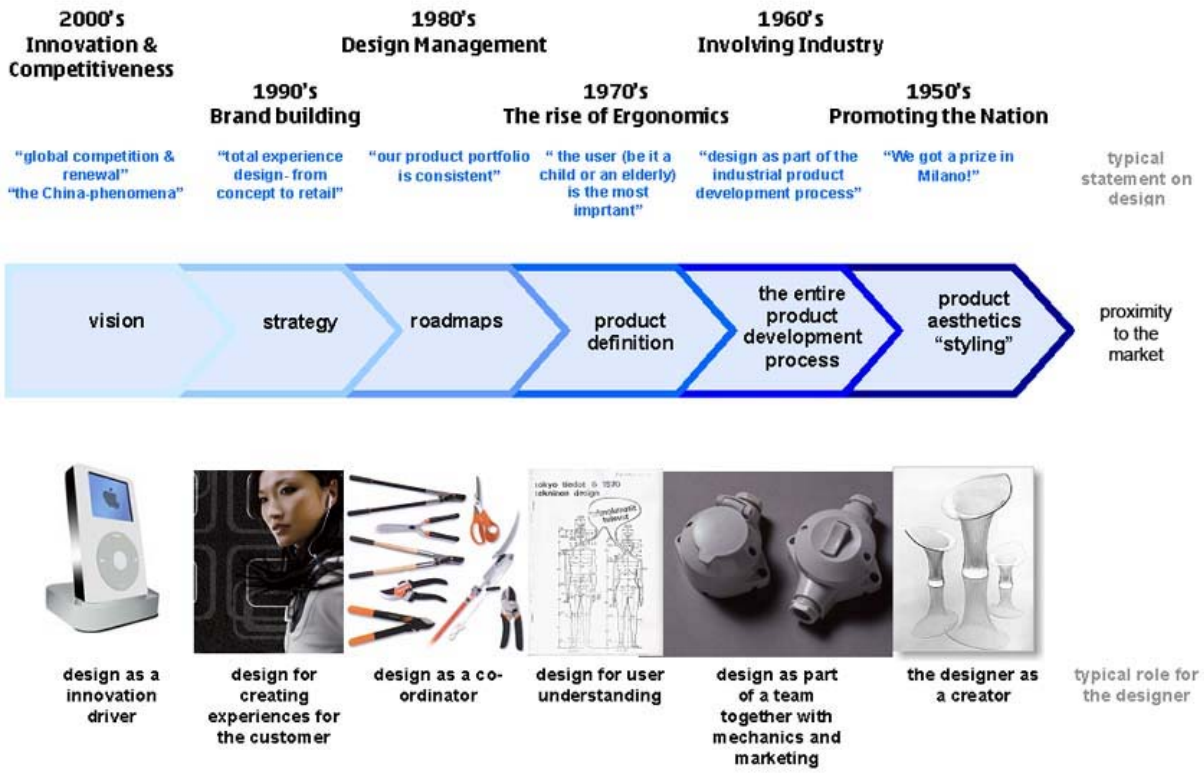

Figure 6: Different roles for the designer and typical statements on design.

NATIONAL EXAMPLES AND INTERNATIONAL TRENDS

Even though the examples in this article are Finnish, the general development path has been very similar in the other Nordic countries. In Denmark the design policy *Regeringens Designredegørelse* was published in 1997, in Norway *Design som drivkraft for Norsk næringsliv*was published in 2001 and in Sweden *Förslag till nationellt program för design som utvecklingskraft inom näringsliv och offentlig verksamhet* was published in 2002[59]. All Nordic countries have their own iconic product examples, but the development path is stunningly similar. In a Swedish example, the picture cavalcade could consist of the Scandinavian Airlines identity program by Stockholm Design Lab for a "total experience design"[60], Volvo as an example of late eighties design management[61], a user-friendly breadknife by Ergonomidesigngruppen[62] and Sigvard Bernadottes Margarethe-bowls[63]. It would not be difficult to imagine similar examples from the other Nordic countries or even of other design aware countries internationally.

CONCLUSIONS

The role of the industrial designer has changed and broadened during time. The economical situation and the current political atmosphere have always affected this development. As the amount of designers has grown, also the potential working positions thereof have grown.

As one of the designers describes his role:

> "I do not do any project work any more. I define the product categories together with marketing and mechanics. And then I do the [corporate X] design direction. *We* [the designers] are the ones who create it." [64]

In every decade the designers have actively strived to participate in the development process in an earlier stage, and also to increase their own impact on this process and business in general.

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33. Designer interview 30.1.2003; A.

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