

INDUSTRIAL DESIGN -

just making
sure I
understood
it.

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ENJOY.

Industrail Design - Just making sure I understood it.
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LUND UNIVERSITY

**Industrial Design -
Just making sure I understood it.**

ABSTRACT.

Attempting to understand the true essence of Industrial Design, the factors that come into play to influence that understanding and one's basic outlook on the profession, opens up new potential, not just in the form of products or services but also in terms of mindset and mode of reflection.

This project marks the conclusion of my studies at Lund University. The aim of the project was to examine my thoughts and ideas about my future profession. Prior to commencing the project I felt the need to find out for myself exactly what I have learned during my training to become an Industrial Designer.

Looking back on all the knowledge and impressions that I have assimilated throughout these years of training – where do I stand in all this? It has been an incredibly enriching and instructive time at Lund University and I now feel a compelling need to reflect. This is the background to the arrangement of my project.

It could be said that I have attempted to step out of the world of Industrial Design, break it down into what I consider to be its various components, and then reassemble it. This document represents an account of this process. I will present what I consider to be the key factors in Industrial Design, which I have chosen to define as *tools, processes* and *the human being/designer*. Finally, I have delved deeper into the human being/designer element as this was the part I felt was discussed least during my training. In order to gain a better understanding of the human factor, I have described it as an attitude. In doing so, I have acquired a clearer picture of what the Industrial Design profession entails.

It is *my* picture and this work describes the role *I* have played in achieving it. I hope that you will find my text inspiring and interesting to read.

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INTRODUCTION.

On entering my final year of the Industrial Design Programme it felt as if the majority of my thoughts about Industrial Design were quite clear and self-evident. Despite this, I still felt that there was something lacking in the way I viewed Industrial Design although I had no idea what it could be. Even if various elements in the design process appeared clear and understandable I was not entirely sure about why, in different projects, I chose to design in a certain way whilst my colleagues opted for a different approach.

Two alternatives.

The project was to be my final project at Lund University at the Ingvar Kamprad Design Centre and based on my thoughts I was faced with two alternatives. I could do a project in the same way as I did previously; a classic design project, just like the other projects I completed during my training. A project along these lines would result in a tangible product and I would most likely work with the same issues and thought processes as previously. A possible problem with this alternative was that it would not be sufficiently challenging and that I would not come any closer to understanding what Industrial Design really means to me on a personal level.

A second alternative was to embark on a project where I attempt to identify what is lacking in my understanding of Industrial Design. This would mean embarking on a project where I was a long way from seeing what the result would be but on the other hand it would certainly not be

a classic Industrial Design project. Such a project would involve working in a way that had not been adopted previously. I would also need to visualize my results using tools with which I am unfamiliar and which I had not fully mastered. However, the project would be a far greater challenge and ultimately more rewarding than if I were to choose the first alternative.

Alternative two.

I decided to concentrate on the second alternative. An important reason for my choice was that I had a feeling that everything had already been designed – not just once but a hundred times. How many different variants do we have of the same product? And in just a few months there will be yet another new version out on the market; a new version that is probably identical in terms of function to its predecessor. Nowadays we consume design as if it were of no value. It is used in so many different contexts that sometimes it feels as if it has lost its true significance and value. Would it not be easier to programme a robot to design all the different variants of the same product? Is there any point in producing the same product but with a new design every six months? My feeling is that there are very few companies that are involved in taking design to a new level. What we have instead is companies striving to make a quick profit. In many cases it feels as if we design products in such a way that they can be discarded as quickly as possible and replaced by new products.

It is for this reason I call into question my choice of profession. At the end of my training will I end up at a company that simply produces without thought and where profit is the sole controlling factor?



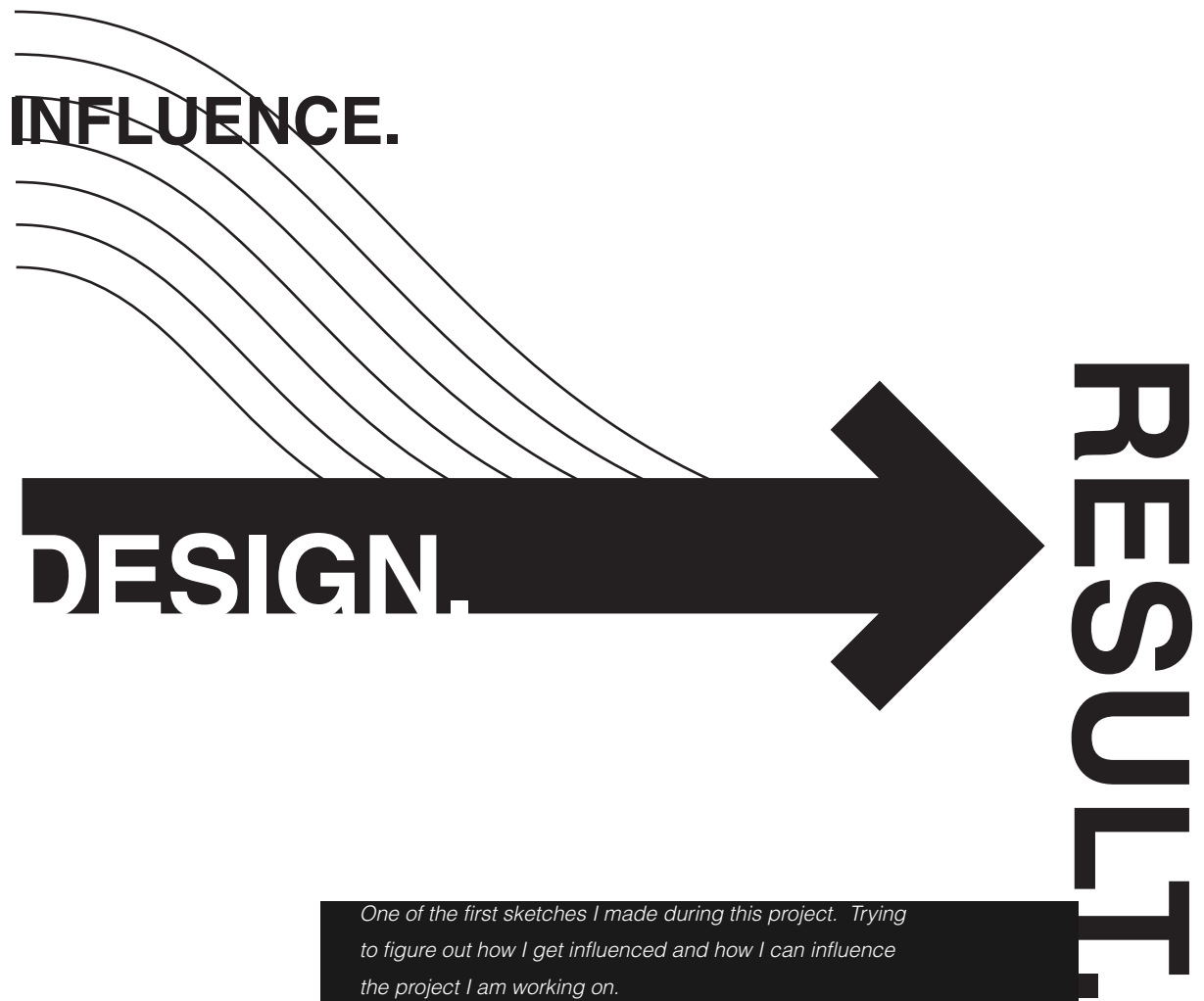
Tray design. (See background pages.)

GOAL.

The aim for me was to attempt to specify where I stand or define who I am in my professional role as an Industrial Designer. To understand the essence of what it is that makes me design in the way I do.

Understanding my role.

What I began with initially was to define exactly what my points of departure are when I design – why do I design in the way I do? Are all starting points or prerequisites in the process replaceable? Would the product function just as well even if I viewed it differently? What prevents us from simply replacing the designer with a robot capable of producing an infinite number of products? When I look at products on the market the impression I get in many cases is that it actually was a robot that produced them. Where and how in the process does the designer as a person influence the result?



One of the first sketches I made during this project. Trying to figure out how I get influenced and how I can influence the project I am working on.

PROCESS.

Line of action.

Two important approaches which I employed initially were to look back and reflect on what I had learnt and what I had come into contact with during my training. How do I see the various elements that make up this creative profession? It was equally interesting, however, to hear the views of other people working with creative processes. An important means of accessing other people's thoughts has been Ted.com. Ted stands for Technology, Entertainment and Design. It is a forum in which people working in these fields are invited to present their thoughts and visions in the form of short lectures. They are often specialists in specific areas. Following their lectures has been a means of probing more deeply into the different fragments I have worked with. It has been a means for me to share and compare my ideas and thoughts with others.

Elements.

At this stage I tried to identify everything which has in some way had an effect on me during my training as an Industrial Designer. Over a period of five years I have managed to acquire numerous impressions and a great deal of knowledge. This could take the form of questions and objects in Industrial Design that I have encountered or events which are in some associated with Industrial Design. I have encountered many different ways of viewing the same thing – including both questions and products – where the methods employed are neither right nor wrong.

I compressed these things into what I call elements. This could, for example, be the word 'inspiration'.

/STARS
/FORCED*
/STYLING
/TEAM
/INSPIRATION*
/INHOUSE
/RESEARCH
/MINDSET
/SOLUTIONS
/INNOVATION*
/TRENDS
/COPYING
/STARS
/CORPORATE
/AESTHETICS
/QUALITY
/BOSS
/REDESIGN
/LANGUAGE
/VALUES
/MORALS
/QUESTIONS*
/REASONS
/ART
/VISION
/GOAL
/PLAY
/KNOWLEDGE*

Elements that in one way or another has a connection to Industrial Design.

/FUN

What is inspiration? To me it is a special feeling, a feeling of excitement, and it can occur anytime during my creative process.

There are various methods that are commonly used when trying to find inspiration for a specific project. One method could be a passive search, where you flip through magazines or internet blogs. You look at things without any real goal in mind. Anything that in some way interests you can be useful. Something that I have noticed when doing this type of inspiration search is that sometimes it can have the opposite effect. Instead of being inspired I become uninspired and stressed by all the new trends and 'cool things' going on.

Another way of acquiring inspiration is to find it in your work. Spread everything you are working on out on the floor and combine the different bits and pieces into new constellations. By doing this you can find opportunities and new ways of approaching your problems.

I can also often find inspiration when I am doing something different. Working on a different project or really focusing on something else other than work. When I relax and really switch off a new, inspiring thought often pops up. You could say that sometimes you need to empty your head to make space for new things. Remember to keep a notebook in your pocket so that you can pick up all those inspiring thoughts.

I would say that I mainly use a small number of inspirational elements in my creativity. The first one is the feeling of excitement I described earlier. It can occur, for example, when I listen to what is currently my favourite song on repeat in iTunes. When I have finished a project I often end up with a unique playlist, which will always be associated with that particular project. The feeling can also occur when I see something that for me is a 'successful design'. It could, for example, be how the materials, construction and shape of the product are combined. My own work can also often inspire me and that helps me to stay motivated and curious.

We all find inspiration using different methods. I believe that it is important to try new methods and sources of inspiration and be careful not to get stuck in the ones you are already using.

BECK MODERN GUILT



One song on repeat as inspiration?

/KNOWLEDGE

This is one of the elements within Industrial Design that I like the most. By 'gain knowledge' I mean the way we in the creative professions can collect and combine knowledge.

As there are infinite ways of looking at design there are very few ways that are wrong. This gives me the possibility to establish my own opinion of the true nature of design. I can collect knowledge that interests me and combine it with my own ideas and knowledge. This gives me the opportunity to constantly make up new constellations of knowledge that can lead to new, inspiring ideas.

/FORCED

To be forced to do something you do not want to do will probably always be part of life. We can all agree that it is not the best feeling.

Although not yet a graduate I unfortunately have the feeling that many professionals in this business feel forced in the way they work. Of course are there many things that come into play when you force yourself into something you do not want to do. I believe that in the end it is up to you and if you want to change your situation you can.

The designers that I have met who are not influenced by this type of force are the ones who in my opinion produce the most successful designs. It is in their environment that I would like to work in the future.

/INNOVATION

In a lecture by Charles Leadbeater I heard him talk about what he calls pro amateurs. People who practise something on a professional level but without making a living from it. In the early '70s there was a group of people riding around the wilderness of California on bicycles. Frustrated with the bicycles of the time that did not meet their standards, they started to develop their own bicycles. Combining parts from motorcycles and bicycles they came up with the concept of a mountain bike.

What I believe Charles Leadbeater meant was that it was their love of riding in the wilderness that was the driving force behind this innovation, not the chance of making money. Of course some people saw the chance to make money but that was not the starting point.

When I look at different companies today and what they are producing it seems clear to me. The companies that give their employees the opportunity to explore ideas without constantly having to think about money are the ones that come up with new, innovative designs.

/QUESTIONS

Asking questions and being curious are necessary characteristics for a designer. Curiosity is the foundation for all new ideas. James Webb Young writes in *Technique for producing ideas*: “An idea is nothing more nor less than a new combination of old elements”.

What James Webb Young describes as old elements could be new elements to you. It is about being curious and asking questions. In this way you can gather such elements. Elements that can consist of anything from experiences to knowledge. Collect them and combine them in different ways to create new ideas. Nothing will come from a blank sheet of paper. Be curious, ask questions and the most exciting things can happen.

Elements, which do not necessarily have anything to do with Industrial Design but which in my world play an important role.

One could say that I have attempted to divide up different thoughts and ideas into manageable parts. I have examined the various parts individually and then attempted to link them and understand how they work together. An early realisation was that there is an infinite number of elements in my perception of the Industrial Design world.

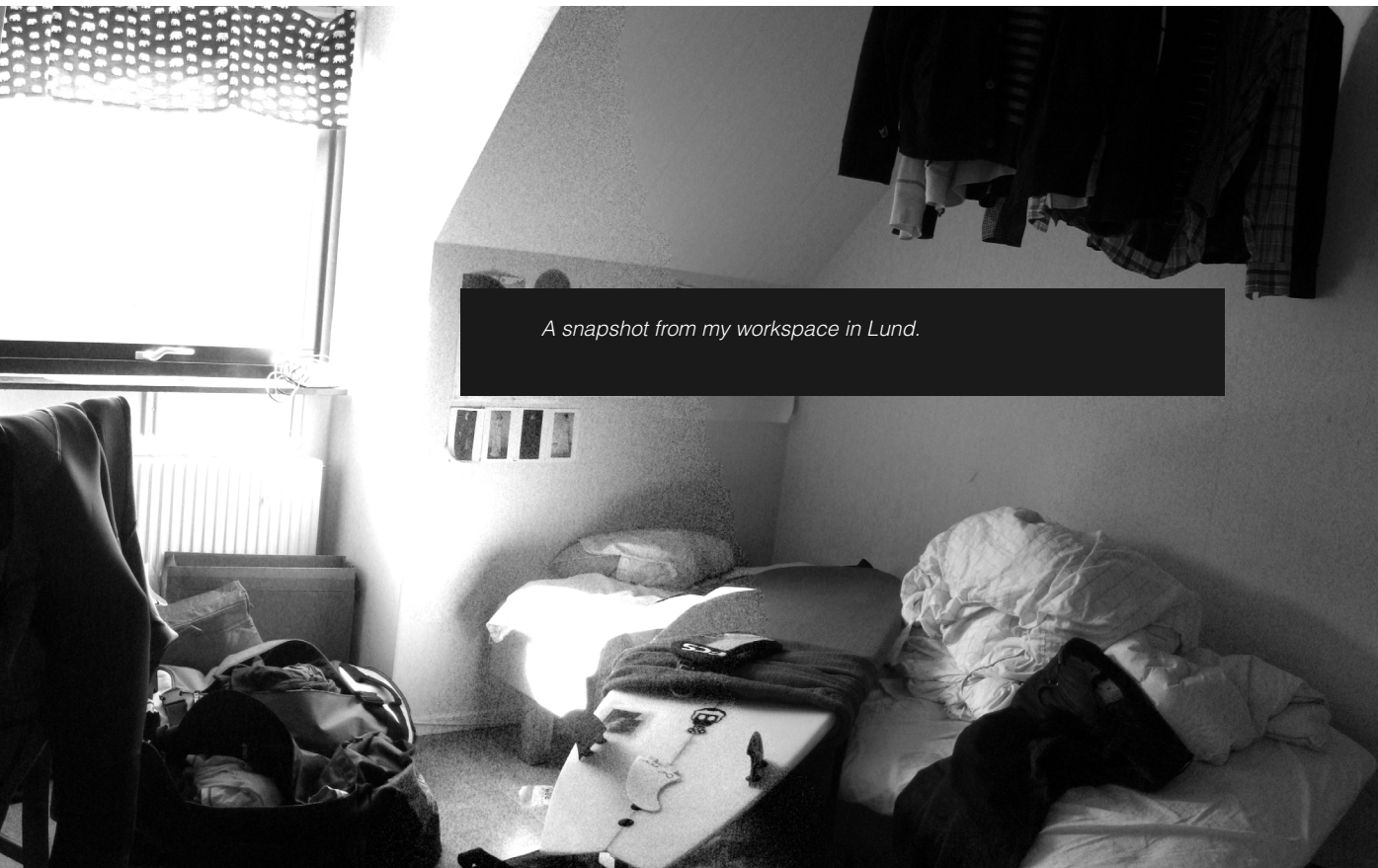
Instead of attempting to present an account of all these different elements, which I realized would be impossible, I wanted to understand what it is that makes me understand them in the way I do and why my understanding may separate from others.



My work flow.

It is obvious that the creative process does not always follow a straight line. Whilst on several occasions I arranged my work according to a classic planning model for a design project I quickly realized – paradoxically – that it was not the planned steps that ensured the project developed but the unplanned steps.

In the task of constantly attempting to structure the project I developed a growing interest in what form my design process takes and how I have learned to arrange it. During the third year of my programme I was an exchange student in Austria. During this year I adhered very strictly to the process which I had at the same time learned to use: a classic process built up using a series of steps, proceeding from initial idea through to production. The literature I used during this time included *Design basics, from ideas to products* (2004) by Gerhard Heufler. I also had the benefit



A snapshot from my workspace in Lund.

during this time of being taught by Herr Heufler.

By exploring the different parts of this process more deeply I attempted to understand which parts of the process are important, when they are important, in what context they are necessary and how they should be used to ensure a successful outcome. I realized that I could interpret these steps just as with the elements in different ways and that in certain cases I perceived them differently compared to the way I had learned as part of my programme.

At this stage I could also see that what I initially worked with (the elements) was constantly present and influenced my creative process and it was through these things that I could see what it really is that I am doing when I am being creative.



Portable x-ray. (see background pages.)

Why I design.

In order to proceed with the task of understanding my role as a designer I was forced to explain to myself why I chose to become a designer in the first place. I therefore drew up a list of all the reasons that came to mind.

Top of my list was the fact that I was attracted by the thought of solving the various problems facing a designer. This is linked to the fact that I often see ways in which things can be improved, such as making them more efficient or more aesthetically pleasing. Ideas often spring to mind about how I could manufacture new products using intelligent solutions. Frequently this takes place when striving to prove to people who do not believe in my ideas that they are wrong.

Perhaps the strongest reason for my choice of profession is the feeling I have when I create something. This is a feeling that exists within me when I truly believe in what I am working with. I feel a sense of security in what I am doing and I know that I am on the right path. This feeling comes to the fore, for example, when I have found a 'smart' solution to a problem and when I am very satisfied with how the design is developing. This is not a feeling where I can simply stand and wait for it to emerge. I need to induce it myself by actually working with the task. Often this feeling has in some way a dynamic effect, which means that at times I forget that I am working and the time simply flies.

There is another feeling that is important to me. This is a feeling of having succeeded with something; of managing something which I was not convinced I could manage. I would say that these two feelings are closely interlinked. If I work towards the first feeling then I can be quite sure that the second feeling will also emerge.

My reasons for choosing this profession are by no means purely egotistical. Being able to make people's lives easier and creating added value in the things I design are equally important. However, I believe that in order to be able to satisfy others one must in the long term also be up to satisfy oneself.

After I managed to convince myself about why I wanted to work with Industrial Design the question arose once again about the true nature of Industrial Design and what it is that guides me as a designer. Why do I make the choices I do when I design and what other factors influence me?

What is Industrial Design?

What is Industrial Design? I was struck by the worrying thought that I should know the answer to this question instinctively after being trained for such a long time in the profession. When I applied for the programme I read that “Industrial Design is about developing products and services in a creative way and where functional and aesthetic demands are presented with the user firmly in focus”.

When I meet someone who is not familiar with the subject of Industrial Design and explain to them what I am doing, the majority home in on the first word ‘industry’. They then ask: “Are you an engineer?”. Despite the fact that the second word ‘design’ is so common nowadays it often pales into the background when someone who is not familiar with the subject hears the phrase Industrial Design.

This caused me to think about what the phrase ‘Industrial Design’ actually means. To simplify the question I divided the word into its two components: industry and design.

*Bracelet for surfers, is this Industrail Design?
(see background pages.)*



What does industry mean?

Perhaps the reference books could offer some guidance? In the Swedish National Encyclopaedia, as in the dictionary, different meanings of the word are given depending on the context. My interpretation of the word 'industry' in the context of Industrial Design is that it involves creating something that will be manufactured industrially, i.e. not by hand, for a large group of users. This indicates that the word 'industry' must be regarded as essential in this context.

What does design mean?

Likewise, I looked up the word 'design' and its derivations from Latin and English. I find that in my context the word 'design' can be interpreted and used with the meaning "creating something which visually or in some other way mediates, for example, a form, a feeling or a function"

For me the word 'industry' feels obvious and easy to understand in the phrase Industrial Design whilst the word 'design' feels more complex and unclear. That is why I have chosen to focus mainly on design in this project. Of interest in this context, and something I will revert to later, is the relationship between the two words that make up the phrase 'Industrial Design' and what happens when the focus between these two words is shifted in different ways.

What is of significance when aiming to manufacture on an industrial basis something which is very functional, is of good quality and has lasting values? What factors influence me in my design and how can I utilise this to influence industry?



A watch concept for the fashion brand Puma. Is this Industrial Design? (See background pages.)



When I design.

Having come so far in the process I believe I know why I have chosen to devote so much of my time and energy to Industrial Design. In an attempt to come closer to understanding what influences my design I need to specify what it is that I do when I design.

Factors that must be taken into account.

What is needed to see an Industrial Design project through to completion? Based on the approach I have learned and seen one could say that there are two factors that need to be taken into account and utilized when designing.

The first factor is the *tools*, which are also what you learn to use first as part of your training.

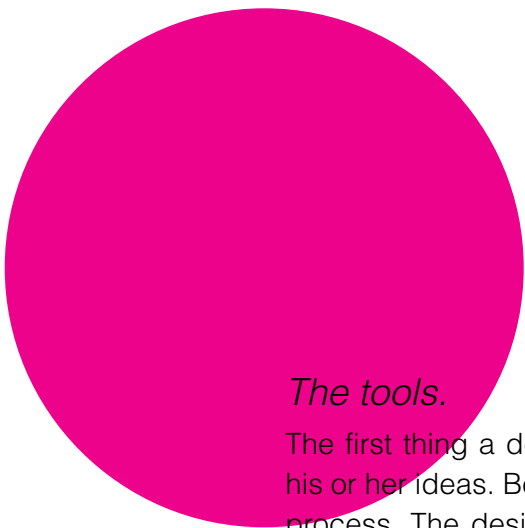
The second factor is the *process*, a process that helps you to structure and move an Industrial Design project forwards.

Both these factors are in turn made up of many different parts, some of which I will deal with below.

It is important to point out in this context that in order to succeed in a project I believe you ought to work as part of a team. In this project, however, I have chosen not to go into detail with regard to the role of the team as I needed to concentrate on understanding the role of the designer and more specifically my own role as a designer. I believe that by having a personal understanding of and a personal approach to Industrial Design and to the profession in general, it is easier to see in what way one can be part of different teams.

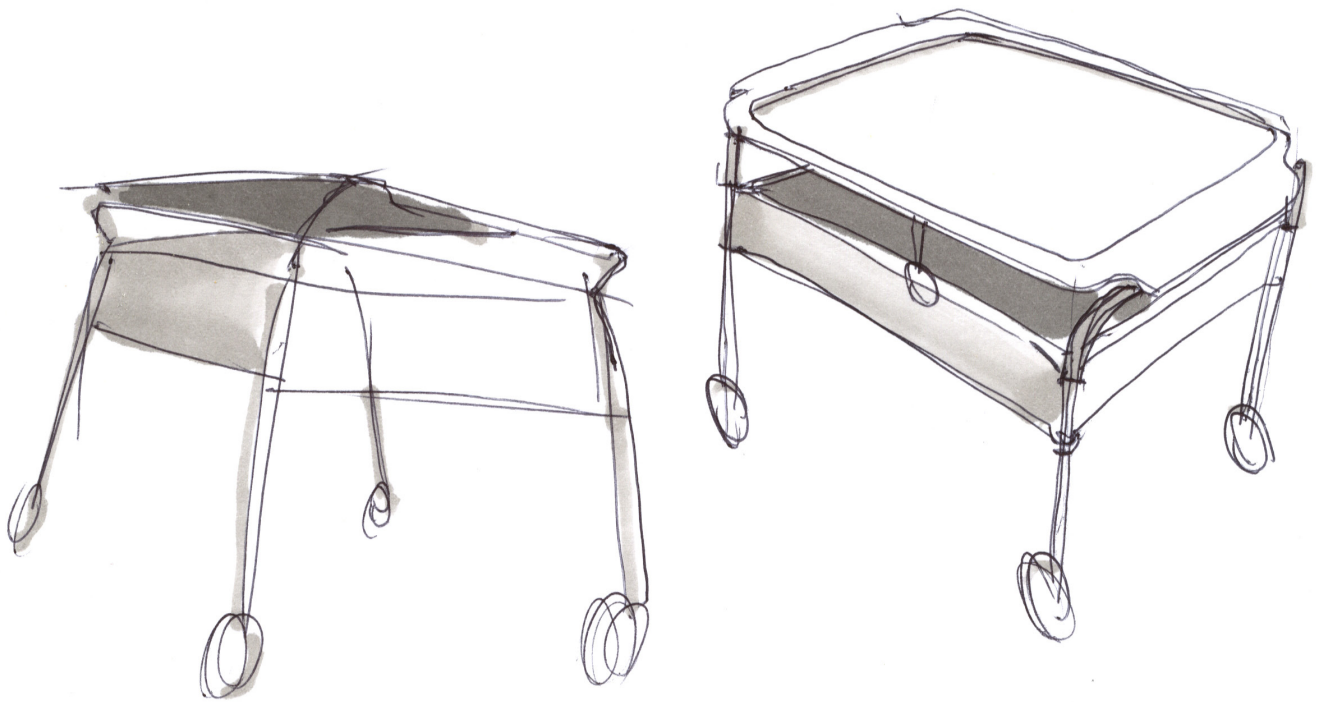
A lamp that is supposed to be moved around. Both tools and a process were needed when designing this lamp. (See background pages.)



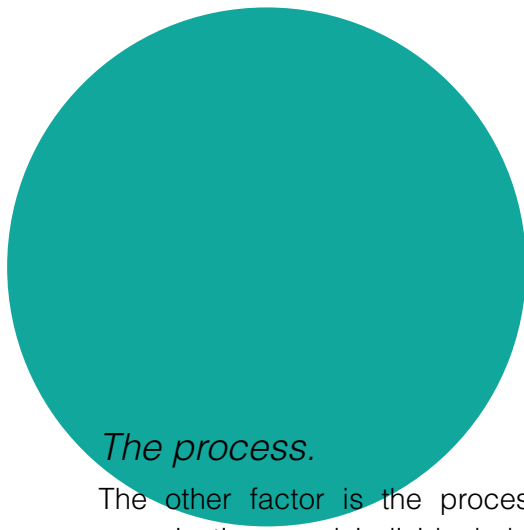


The tools.

The first thing a designer needs is tools in order to be able to visualize his or her ideas. Being able to visualize is a key element in every creative process. The designer needs to master these tools in order to be able to investigate the potential of a project by testing different combinations and in doing so develop one's ideas. The capacity to visualize is also necessary in order to communicate a project. There is an infinite number of approaches and as long as one can communicate one's thoughts then everything is permissible. One of the most prominent tools in Industrial Design is sketching techniques, whereby one can quickly create an image of an idea or mediate a feeling. It is also important to have a command of model building. Being able to make a model in paper, for example, in order to gain an idea of the scale or to be able to compare different variations is equally important. Many people today make use of the computer to create models that are as lifelike as possible in order to put across and sell an idea. These are just a few of the tools one learns to use as part of the training and which one ought to be able to handle efficiently as an Industrial Designer.



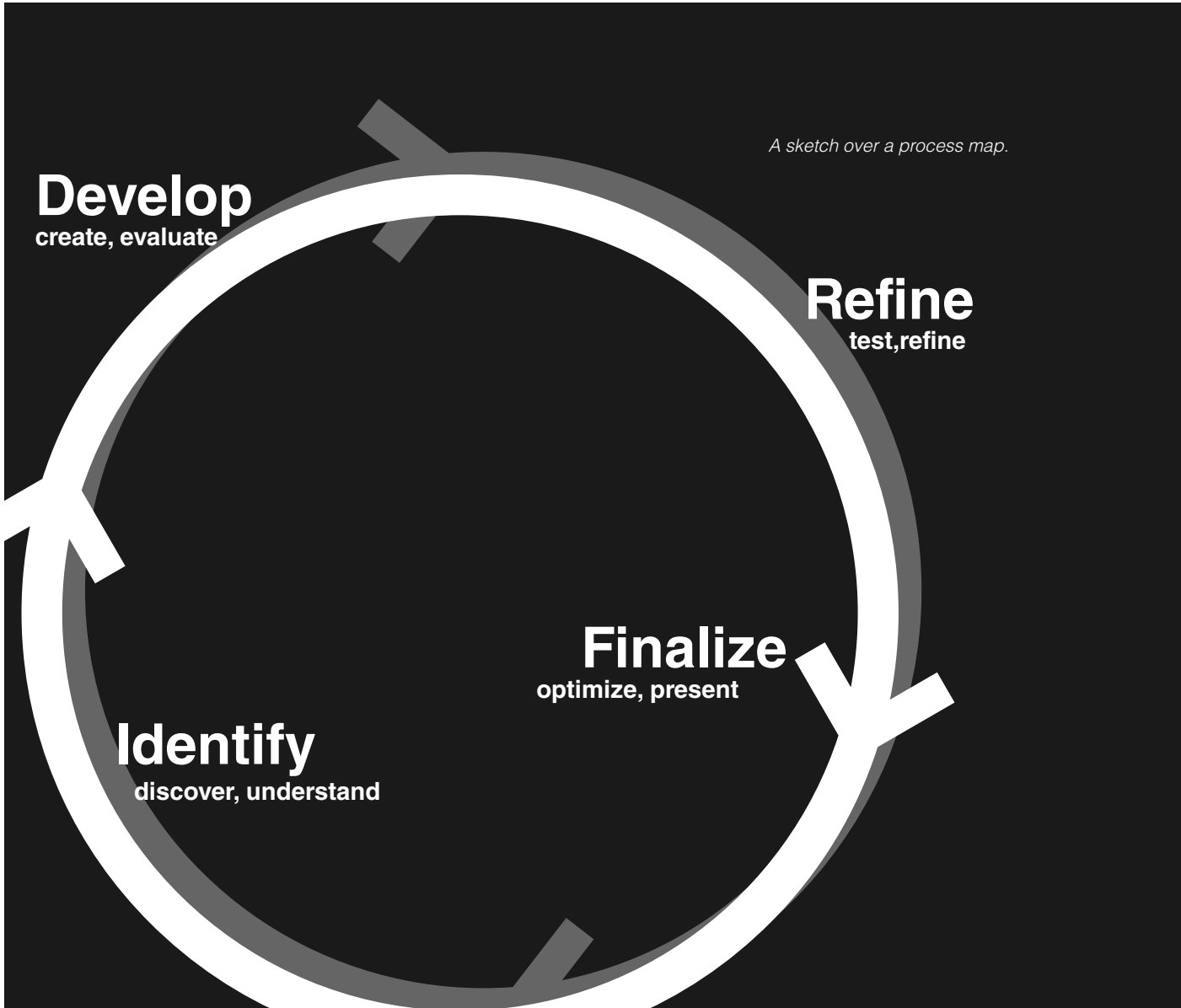
A furniture concept. Here using sketching to visualize the idea.



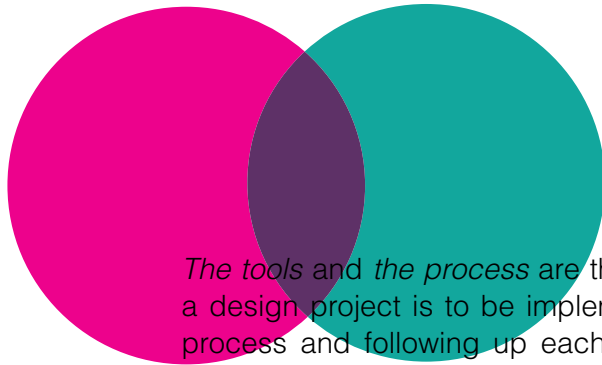
The process.

The other factor is the process. A consistent feature of successful organizations and individual designers is the ability to tackle difficult problems by using the process as a working method. Working with a firm focus on a process is therefore an important prerequisite if one is to see a project through to a successful conclusion. By understanding the significance of the different stages in the process it is possible to optimize one's choices and avoid making wrong moves. A process is seldom linear throughout and it is necessary to go back and retrace certain steps in order to move on.

The following pages show a sketch over the process which I learnt and followed in many of my projects. Based on (Design basics, from ideas to products (2004) by Gerhard Heufler).



A sketch over a process map.



The tools and the process are thus two factors which are unavoidable if a design project is to be implemented. Using the available tools in the process and following up each step is a basic prerequisite. One can visualize the process as a line with a starting point and a finishing point. Along this timeline, or sequence, I as the designer place the tools and methods which I believe could be of use in the project I am working on.

During the course of my training I have learned which tools are to be used and in which order they are to be used in order to reach the end point with the best result possible. There is an order in which different tools are to be used although there is nothing to say that this is the only right order. Nor is there anything to say that all the tools must be used. It is a case of understanding their importance, knowing which are more suitable and when they should be used. Which steps will move the project forward? Nor is it wrong to use the same steps or tools several times. Even if I describe the process as a line it is, as I have mentioned previously, often far from linear. It is therefore particularly important to know when and how one should use the tools, which tools should be chosen and at what stage they should be chosen.

In practice this is quite simple to understand and implement – you make use of the tools available and a process in order to reach a goal. So far everything feels clear and obvious. It is possible to program a computer to handle both the process and tools. But what would my role be if responsibility were assigned to a computer or a robot? I know that as a designer I make use of more than just these two factors when I carry out a project but what form does this take? What is it that allows me to see things in a one way and for others to see them in another way? How do I identify what it is that influences my design over and above what is self-evident, i.e. the tools and the process, and how can I then make conscious use of this in order to create an impact?



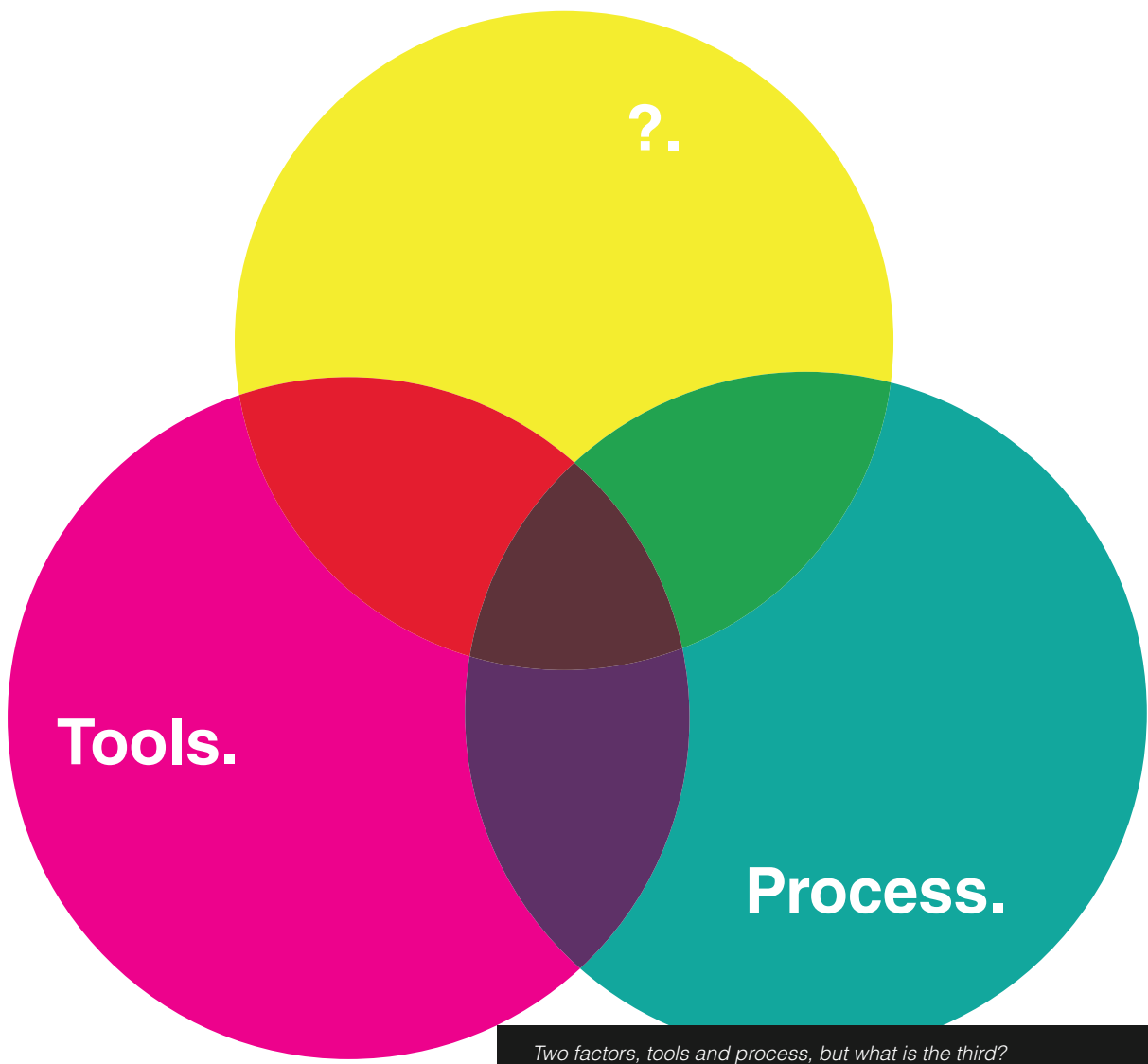
A couch with storage possibilities. What else than tools and a process did influence this design? (See background pages.)

Two factors, tools and process, but what is the third?

Something is lacking in the 'equation'. As I mentioned previously anyone can learn the first two factors. Nor should it be a problem getting a computer to implement them. After examining the *tools* and *process* factors I understood that something equally important is missing; something which is seldom or never spoken about. This is where 'I' (or 'the human being') come into the picture. As a human being I am an equally important factor in the 'equation'.

"Embracing the diversity of human beings we will find a sure way to true happiness" - Malcolm Gladwell. This quotation states, as I see it, very simply and very well that we are all different and that we must utilise this to the full. In a profession where there is nothing specifically right or wrong and where no mathematical equation predetermines the end-result, human characteristics have an important role to play. As different individuals we differ from each other and in particular from the increasingly sophisticated but regimenting computers.

If it is the case that the human being is the third factor then what does this imply? What is the human being's specific contribution to Industrial Design?



The human being.

At this point I could describe who I am, as many of the questions which I posed initially are about me personally and the factors that influence me. However, in strict terms it is not about me personally but about what we have *as people* and what *we* are influenced by. I moved on in my work with questions such as: why do we view different things in different ways? What is it that makes each person unique? These questions rapidly grew in number and became increasingly difficult to answer.

After reading *Filosofiens historia* (The History of Philosophy) (1943) by Gunnar Aspelin and parts of *Vårt hotade hem* (Our Home under Threat) (1982) by Rolf Edberg, I understood how important philosophy is in our development as people. I attempted in a philosophical way to combine thoughts and questions about life with thoughts and questions about Industrial Design. Does this have any link whatsoever to Industrial Design and, if so, how does it affect us when we design?

The way in which I have chosen to describe what I arrived at takes the form of a number of different *attitudes*. It is about attitudes which to a varying extent exist in each of us, regardless of whether we are designers or not. These attitudes are based on experience, thoughts, views, emotions and so on. These are something we have acquired in life and really do not have anything to do with Industrial Design – they are simply a natural part of our existence. However, I believe that these attitudes have an important role to play in all creative contexts. It is these attitudes that set us apart from each other and are the reason why a computer cannot replace us and do our work. I believe that the degree to which these attitudes exert an influence varies from one person to another. Personally, I feel that these attitudes are very important in my creativity.

I understood now how these attitudes affected me in the way I viewed on Industrial Design. How these attitudes for example influences me in the way I looked at the 'elements' I talked about in the beginning.



Attitudes based on experience, thoughts, views, emotions...

Attitudes of the human being.

With the aid of 'the attitudes' I will attempt to explain what it is that makes us unique as designers and which thus, at best, means that we design in a unique way.

As I only have myself as a starting point I have chosen to make a list of the attitudes which affect *me* in my creative process although the list is far from complete. I believe that these attitudes can be interpreted in different ways depending on who you are, how you live and how you view the world around you. During the course of my work I have also realized that all these attitudes are linked in one way or another and that there is an infinite number of opportunities to combine them. Certain attitudes have given rise to questions which I have then been able to answer through another attitude and so on. It also happens, after discussing an attitude with someone else and reassuring myself that I had understood the meaning, that I changed my opinion after having looked at a third attitude. I thus discovered quite quickly that even if the attitudes are related the links between them are in a constant state of change. The attitudes affect each other, which has meant that in many cases I have changed my opinion in different respects as the work has progressed.

Even if the attitudes *per se* are related or are based on each other, the most important thing in this context is how you link them and actively use them in your own personal design process.

From my list of conceivable attitudes I have chosen a number which I have exemplified briefly. The same could be done with several more. However, this is something which everyone must do personally as you must use your own attitudes, or the ones you accept, as a starting point.

/CONSCIENCE
/FEELINGS*
/ENVIIOUS
/NEED
/FUN*
/FEAR
/ANGST
/CURIOSITY
/EMOTION
/FUTURE
/CONFIDENCE
/AMBITION
/MOOD
/MOTIVATION
/RELATIONS
/DEMANDS
/HONESTY
/HISTORY
/VALUES
/INSPIRATION
/FRIENDSHIP
/CARE*
/SATISFACTION
/SECURITY
/VISION
/LOVE
/TRUST
/EXPECTATIONS*

*Attitudes by which I try to explain
the third influencing factor.*

/FUN

“Make sure you have fun now, when you are done with school it is not going to be that much fun anymore” – a friend at a design studio.

Is fun something that always needs to be there? What happens when it is not fun anymore?

/FEELING

What do my feelings have to do with it?

The word 'feeling' can be used in many different contexts and it could be that it has very little to do with Industrial Design. For me 'feeling' is of major significance in everything I do and in particular when I do something creatively. It is a feeling of exaltation, which could also extend to an almost trance-like state. As I stated previously in the section about why I chose to become a designer, I feel this exaltation when I believe in what I am working with and feel secure in what I am doing. I know what I want to achieve, I find 'smart' solutions to problems which arise and I experience how the design process is developing. This feeling does not occur of its own accord – you cannot simply sit back passively and wait for it to occur. It occurs when you are working and it often has a dynamic impact, allowing the work to flow to such an extent that you could quite easily lose sight of the fact that you are actually working.

What happens if I do not have these feelings anymore?

/CARE

I do care and I care a lot about the things I do. What happens when I do not care anymore?

/EXPECTATION

Everybody has expectations and my expectations are always high.
Remove all my expectations - what will the result be then?

The importance of these attitudes.

There is no real discussion about these attitudes, how they affect us and, most important, what influence they have on our design. What role do they play and how do we relate to them?

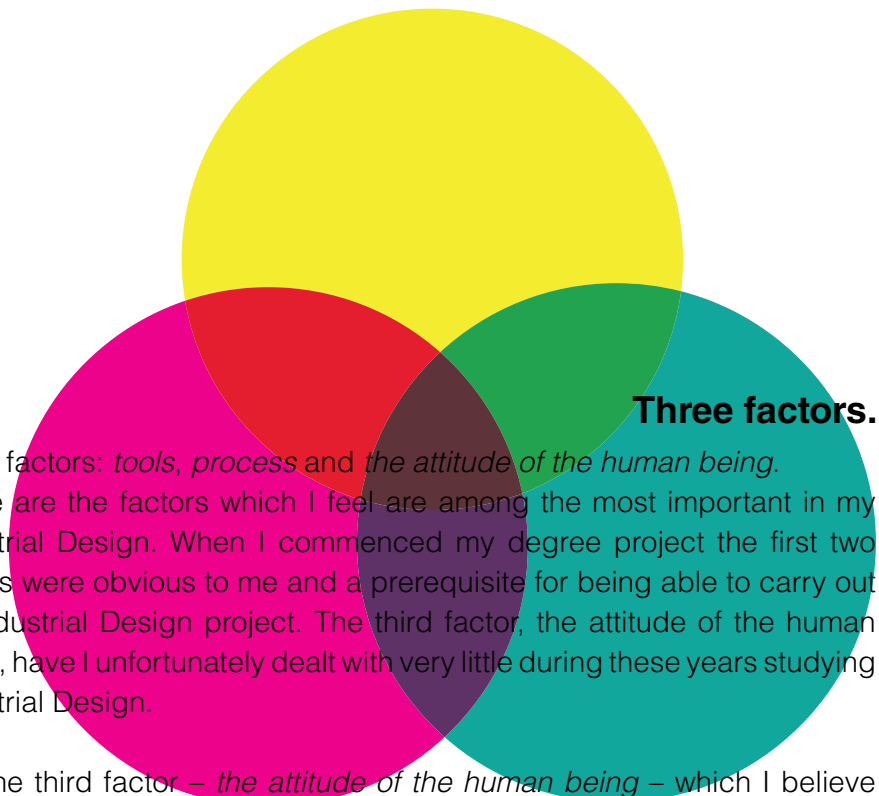
The fact that attitudes have an important role to play in the profession is for me self-evident. Without them the products would no longer have any personal qualities. The design would then lose its emotional and personal values and as designers we would cease to question what we do.

I not only see these attitudes in myself. I can also see them clearly in my fellow students. The attitudes I have chosen to include on my list are simply a small number of all those that influence us, consciously or unconsciously. They reflect issues and thoughts which all of us have been faced with to a varying degree even if this takes place on different levels and if some people perhaps choose not to be influenced as much as others. Going in and working consciously with attitudes could be easy for some and more difficult for others. I am, however, convinced that it is these attitudes that determine why I design in one way and someone else designs in another. In other words I believe that they have a very important role to play in the designer's creative process and they must therefore be addressed.

If our attitudes affect us in our creativity – what is our relationship to them and how do they relate to the other two factors, i.e. the tools and the process, which make up my image of Industrial Design?



Being influenced and inspired by these attitudes I know that anything can be possible. Here creating a paint booth in the garden.

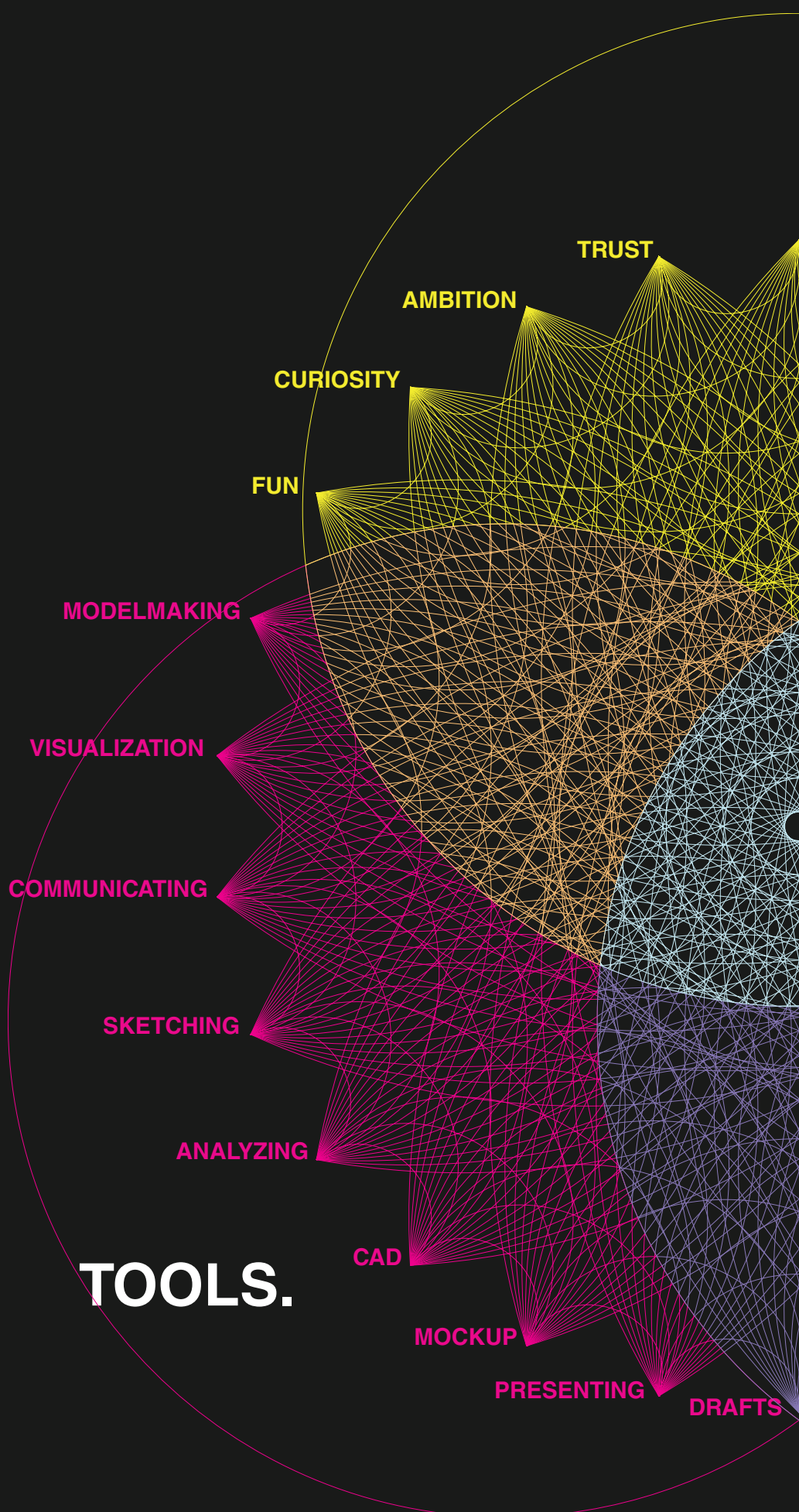


Three factors: *tools*, *process* and *the attitude of the human being*. These are the factors which I feel are among the most important in my Industrial Design. When I commenced my degree project the first two factors were obvious to me and a prerequisite for being able to carry out an Industrial Design project. The third factor, the attitude of the human being, have I unfortunately dealt with very little during these years studying Industrial Design.

It is the third factor – *the attitude of the human being* – which I believe influences how I view the different steps in the design process and which tools, or elements, I regard as important or less important and how I use them. This is what guides my choices and interpretations and where what I create becomes unique and cannot be replaced by anyone. I believe that the attitudes of the human being are always important and must be included in the image of a creative profession.

Although all three factors are of importance individually, the interaction between them also has an important impact on the results. I believe that the results are affected and are different depending on how one chooses to weigh them up against each other.

On the following page have I tried to illustrate how these three factors interact with each other.



TRUST

AMBITION

CURIOSITY

FUN

MODELMAKING

VISUALIZATION

COMMUNICATING

SKETCHING

ANALYZING

TOOLS.

CAD

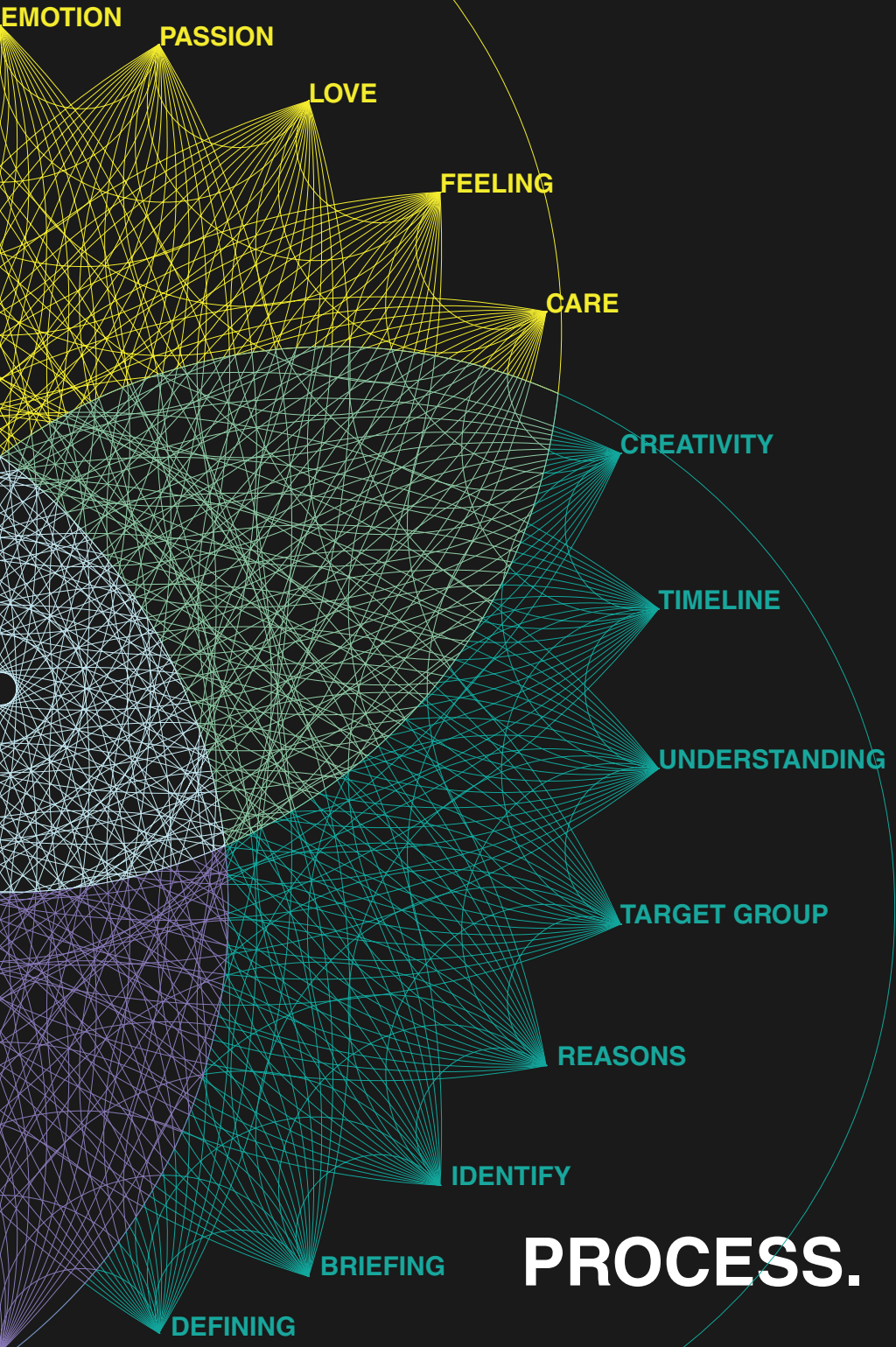
MOCKUP

PRESENTING

DRAFTS

*The interaction between
the factors: tools, process
and the human being.*

HUMAN.



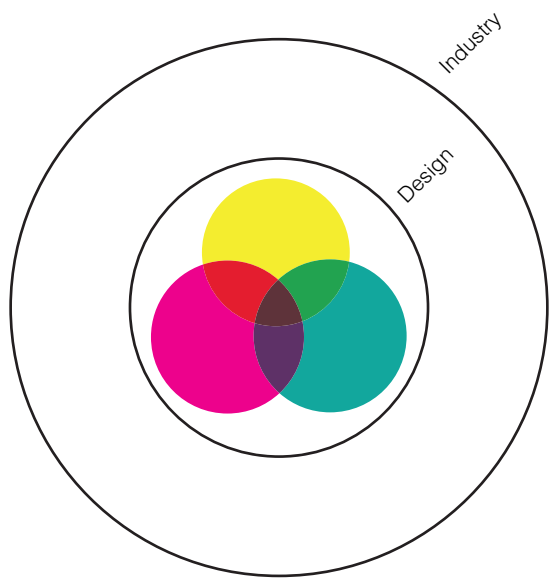
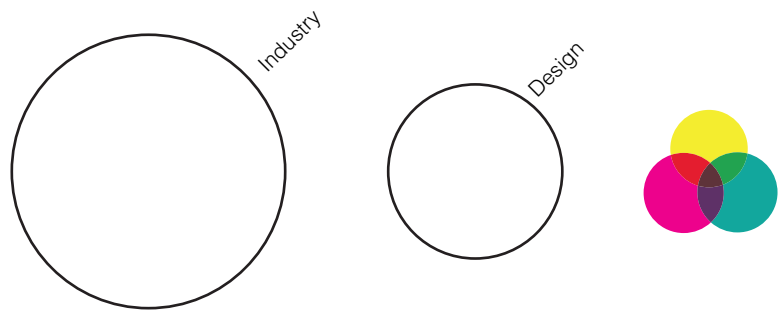
PROCESS.

Relationships between the different parts.

In total, it is all the different factors, and the infinite number of parts that make up those factors, which in different ways interact and influence each other.

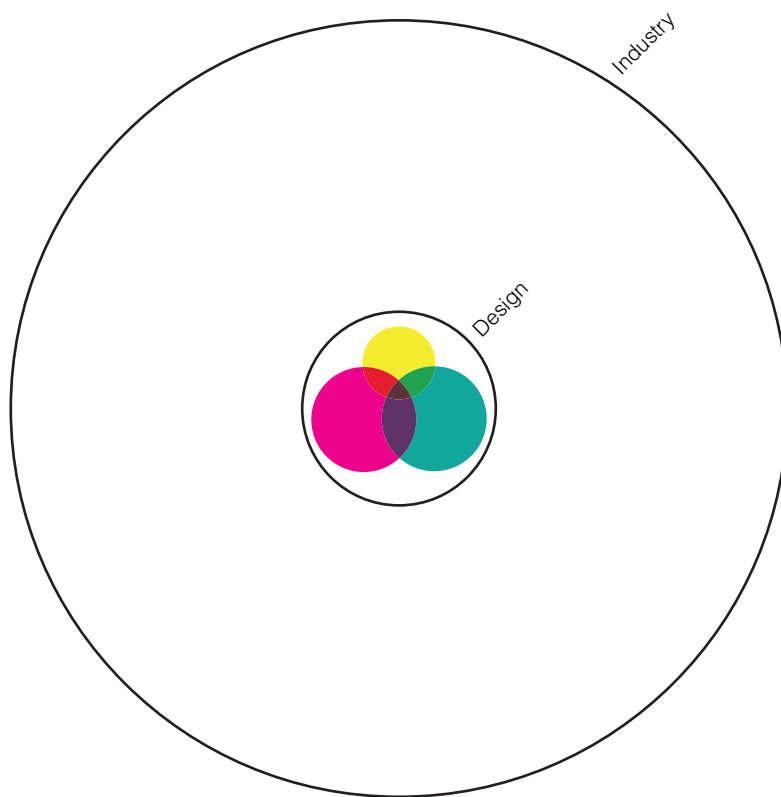
Depending on how one weighs up the different factors and parts against each other, the result will vary. In reality, there is no right or wrong in this context. It is more a question of knowing *what* is happening and *in what way* one can exert an influence. I believe that when greater emphasis is placed on a certain factor or part the others will change and the result will be influenced.

How does now the three factors, tools, process and human connect with the design and industry part?

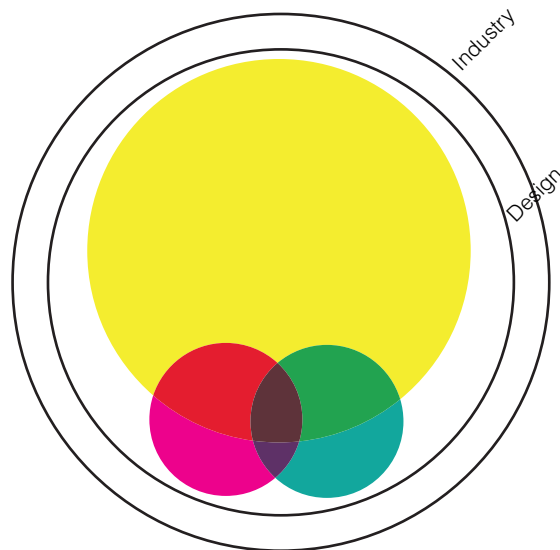


Together they shape my picture of Industrial Design. Now depending on how one chooses to weigh them up against each other I believe that the result will change.

When, for example, costs, manufacturing methods and time are assigned too much significance, there is a risk that the design will be of subordinate significance and the part in the process where I as a designer have the potential to influence will shrink. The result could in all probability become a hastily designed product which with a small budget can be brought quickly to market. It can reach many people and generate a great deal of money but it will probably only exist for a short time. Perhaps it could be a cheap product which is easy and cost effective to manufacture but which lacks added value and which is disposed of and forgotten after a short time. The potential of the designer to create and exert an influence could in this case suffer.



If the industry is assigned too much significance, there is a risk that the design will be of subordinate significance and the part in the process where I as a designer have the potential to influence will shrink.



If too much emphasis is placed on the third factor there is a risk of losing the link with the industry. I believe if this is taken even further the product being created moves more and more towards art.

When instead far too much emphasis is placed on the third factor – the designer’s attitudes – with the aim of increasing the designer’s influence on the design, then finances, manufacturing methods and time limits risk getting in the way. If you allow your attitudes, such as love, conscience, expectations and so forth, to become too prominent there is a risk of losing the link with industrial manufacturing. The product would then have a narrow target group. If this is taken even further the product being created moves more and more towards art.

I believe that the important thing is to strike the right balance between the different factors in order to achieve the best result possible. By “the best result possible” I mean a result that is not only satisfactory for the market or the customer but also for the designer.

If I was to succeed in striking such a balance, I could also as a designer feel that I have the opportunity to develop and be challenged in my profession and at the same time achieve a successful result. The balance can be different depending on the nature of the project. In some projects, for example, it could be perfectly appropriate, in order to achieve the best results, to tone down the designer’s attitude in relation to industrial demands. It is a case of finding the optimum balance in each project.

In the introduction I stated that I had an impression that too many companies focus on designing and manufacturing products that can be disposed of as quickly as possible and replaced by new products. Naturally this does not in any sense apply to all companies. There are companies that examine their products critically; companies which attempt to find new solutions and which priorities features other than a quick profit. A company I believe has struck a good balance in the relationship between these different factors is Patagonia. Patagonia is a company founded by Yvon Chouina. I arrived at this opinion after reading Chouina’s book “Let my people go surfing (2005)”.

RESULT.

Value.

How do we decide whether something is 'good or successful' design?

It is case of attempting to understand how to strike a balance between all these factors so that added value is created, both for the user and for the designer. Highly successful products are those which can ensure their value increases over time; products with quality that can live on for a long time and which even acquire added value. Being able to use and rely on a product over a long period is also a true value.

By utilizing qualities such as these to build up and create trust on the part of the user is something I feel is extremely important.

What in the past was a rule for the lifespan of products is today more of an exception. There is a feverish need to constantly upgrade a product to a new version regardless of whether it has new functions or in any other way creates added value for the consumer. Such a situation is in the long run untenable, both for us as designers and for the consumers of the world. We ought to create the kinds of values that can make the product recyclable and capable of being used again, maybe in a different way.

It could, however, be an advantage in order to increase production that products have a short lifespan. The dependence of the welfare system on consumption is a discussion that falls within the field of economics and is not something I intend to go into here.

By basically recognizing the different factors that influence us as designers and our creativity we can control them more easily. We can choose when and in what way they should influence when we develop a product. This will in turn lead us as designers to create added value, not only by reaching decisions which mean that as designers we can feel satisfied with our role in the process, but also for the consumer and ultimately for our planet.

Morals.

I have noticed that trends in Industrial Design often change. We have of course become much more aware of the effects of our decisions as we can see more and more the impact our level of consumption is having on our planet. And yet we continue to design products at the same rate without reflection. We are enticed to buy new things and to relegate slightly older but still fully working products to the waste bin. We continue, as if in a hamster wheel, without reflecting on what we do.

As a prospective designer you could end up in a state of confusion where at times it might appear as if you had learned to use the tools of the devil. You can become very easily influenced by what is around you and in order not to lose market shares compared with your competitors you are lured into designing new variants of the same product and following the same path as everyone else. With such an attitude, however, products are not manufactured for the right reason and consequently the results will not be good either.

Insight.

On the one hand Industrial Design is a field that must be approached professionally and with distance. Being able to distinguish between work and leisure is an important part of this. On the other hand, Industrial Design can be so much more than just a profession. In certain cases it could be a lifestyle where you choose to involve many different parts of yourself, going beyond purely factual know-how.

I have now come to the realization that *I wish to work and live* with Industrial Design as I love creating and improving things. I want to be able to exert an influence by changing and designing, both functionally and emotionally, products which other people need and want. By attempting to form my own perception of the true nature of my relationship to Industrial Design I feel that my attitude to my profession has become clearer. I have a better understanding of what is important and less important to me and my attitude to different working situations in the profession.

When you understand your role in the process and you can see the links, new opportunities will be presented, not just in the form of products or services but also in your way of thinking. It is no longer as important to be the best at mastering different tools or designing our products. It is more about how we choose to tackle the problems presented to us. Knowing how to use the tools available in the process in order to produce a product or service is a basic prerequisite. It is our capacity to solve problems that arise during the course of the work that determines whether we will succeed or not. It is about adopting a broader perspective – demonstrating a desire and an ability to learn.

One of the most important cornerstones, which I have only mentioned fleetingly before, is the team. As part of this work I have chosen to try to identify my own role as a designer although in the long run it is not so much about me but about the team. Without a team the design process for me is almost futile. It is through each other that we find new paths and build on each other's ideas. You can develop and grow more quickly through collaboration. But to understand how you are influenced and by what, you must first understand your own role. It is up to me to choose how I will be involved. It is by understanding and finding a balance that I can exert an influence and allow myself to be influenced. In doing so I believe I have come closer to Industrial Design and that I have done so with greater insight.

Element cards.

The main result is how, throughout these months, I have been able to gain a broader understanding of my role in industrial design and which I have described in this document. The second result is a collection of cards containing aspects of what in some cases can be a part of Industrial Design. Aspects and elements that can be used as discussion material, not only in the context of a group but most importantly for yourself. It contains some of the things that I was struggling with this term. I have tried to simplify these cards and the aim is to see how you can integrate your attitudes and understand where and how they affect you and your work.



“understand”

“knowledge”

“innovation”

“inspiration”

“diversity”



“aesthetics”

“vision”

“me”



**Take a moment to reflect and think about where
you stand and where you want to go next.**

**Everything new we do or create is only a
constellation of old knowledge and experiences.**

What is innovation to you?

What sources do you use as inspiration?

We are all different, how can this be utilized?

Do you have your own?

What is your vision?

Who are you in Industrial Design?

CONCLUSION.

Five years.

Five years as a student at Lund University at the Ingvar Kamprad Design Centre.

Not only have I learned an incredible amount about Industrial Design I have also learned an incredible amount about myself. What can be read in the course literature is only a small proportion of all that I have acquired in my time at the Ingvar Kamprad Design Centre and at Lund University. I have no doubt whatsoever that Industrial Design is a profession that requires a great deal of love and commitment.

In bringing my studies to a conclusion by attempting to acquire a basic understanding of the various factors that influence us I have acquired a deeper understanding of who I am and what I want. I understand that it is up to me as a designer to choose the path I want to take, to focus on the parts/knowledge that interest and fascinate me and to combine them in my own way. The good thing about a creative profession is that it is seldom about right and wrong. Being able to create in this way, my own new constellations of ideas and knowledge means that the profession will never become tedious.

Even if the opportunities are unlimited I now realize how much it is about responsibility. Industrial Design is a powerful tool that can be easily abused. As designers we must nowadays be prepared to be involved more actively in influencing what we have around us. After watching Annie Leonard's film at www.storyofstuff.com, a film about how far we have come along the road to destroying our planet, I acquired further insight into how important it is that we take our responsibility seriously.

What I will take with me after completing this final project as part of my degree is that it is much more than just knowledge that influences my creativity. Having the courage to extend your boundaries and challenge yourself is vital if you are to develop and not lose your motivation. I now also understand how important it is to have the courage to call into question what you are working with and the way in which you work.

Everything that I have attempted to describe in this document I believe is necessary, not only to avoid becoming tired of the profession and feeling that what I am doing is monotonous but also – and equally important – in order to develop and bring my thoughts and ideas to a new level.

Concluding remark.

This is my account of how I see Industrial Design today. In the future it will be different – that is what makes Industrial Design so appealing.

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All illustrations, photos and products in this report are made by me except CD cover "Beck - Modern Guilt" on page 17.

THANK YOU.

Industrial Design - Just making sure I understood it.

Thank you for reading my diploma documentation in Industrial Design.

I take this last moment to thank not only everyone that have helped my during this diploma project, but also everyone that have influenced me during these five years.

