



HDK – Högskolan för design och konsthantverk

# SUB TERRA

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Iron and Steel / Public Space

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Essay:	15 hp
Program and/or course:	Iron and Steel / Public Space BA3
Level:	First Cycle
Semester/year:	St/2016
Supervisor:	Tobias Birgersson
Examiner:	Heiner Zimmerman
Report no:	xx (not to be filled in by the student/students)

## Abstract

Essay: 15 hp  
Program and/or course: Iron and Steel / Public Space BA3  
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Examiner: Heiner Zimmerman  
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Keyword: xx

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Aim: To convey my inner experiences of iron in an artistic projection.

Goal: To create sculptural work in the form of an alcove.

Method: Experimentation through forging and welding within controlled techniques.

Result: A new understanding of the placement and direction of my artistic practice.

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## Introduction

In this document I will be describing my thoughts, actions and progress regarding the conception and realisation of my BA exam project. The leading thought behind this project is to create an artistic sculptural work in the form of a hollow space, an alcove. The subject matter of this work is the result of my introspective relationship to the material iron. It in itself forms the basis of the inspiration for the work. I will describe how this relationship came into being and how it transforms during the time leading up to the exam work as well as during the exam work itself. I will describe the creation process and my thoughts as they unfolded during this period. Thank you for taking the time to read this report!

## Background

Over the course of the last few years, starting with the autumn term of 2013, I have been working with a sketching process that focuses on a specific manner of joining and forging pieces of steel within a controlled range of techniques. The work is inspired by both the visual and emotional impressions of cave structures, rock formations, natural and ancient stonework. This sketching process has produced a body of work with a coherent, yet varied range of expressions, and forms the basis of the visual aspect of my project.

Functionally, the project will be aimed at creating an alcove that can be inserted into a building as an architectural detail.

The original cause for me to formulate this project, specifically the alcove structure, is the fact that I have been inspired by a wide range of (ancient) historical buildings. These vary in type of culture and time period, but generally have something in common to me. The commonality lies, I believe, in their use of decorative elements to create a non-linear narrative. This narrative communicates something of their values. For a large part, the buildings that have inspired me have a religious or spiritual connotation.

What interests me about the alcove as a feature or function in a building is that it provides an opportunity to create a sort of miniature environment. Although it is part of the larger whole of a building, it can give a new and concentrated experience partly separate from its context. Within the structure something can be framed and presented in a spatial manner.

I would love for our environment to inspire a feeling and process of wonder, perhaps the similar kind of amazement one can feel when walking through nature. In my view, this feeling of wonder has the potential to set in motion positive and transformative processes within the spectator. This view is shared by practitioners of anthroposophical and biosculptural and organic architecture. In these disciplines, architects attempt to find and emulate the formative forces of matter and incorporate it into their work. Although I do not find myself in agreement with the entirety of their aesthetic practice, the general strain of thought is very attractive to me, and I have developed a mode of perception that often intersects with theirs.

Looking back at my initial experiments that can be included into the line of work that I am pursuing with this project, I have gained some insight into what drives me to continue with it. I will attempt to explain it.

When I look at the external world and am confronted with a substance or object, say a stone, I am immediately confronted by its material qualities. I can see its colour and shape, feel its texture, temperature and weight, etc. All this can tell me a lot about this stone. These impressions come across as very definite and real. However, from my perspective, there is something there that cannot quite as easily be found through the senses, and yet I feel something to be there. Something is alive within and about this stone. The same counts for a handful of water or many other things. There seems to be a world that external senses can only touch like a hand touches the reflection of a mirror. At times however, impressions can be gleaned. They present themselves as shadows of form and movement or suggestion in thought. For the purposes of this document I will call these impressions reflections of the "living nature" behind a thing. Consider it similar perhaps, to Plato's Form when he speaks about an ideal, never physically existing but real at some plane. The comparison is not very correct however.

That brings me to iron. It is difficult to relate the connection I feel to this material. As a child of ten I was on a camping vacation somewhere in Sweden. While at the campsite I saw a pillar of smoke in the distance, coming from behind a hill. I went there on my own and discovered a large garbage dump where a small fire was burning. Still on my own I gathered all sorts of scrap material and covered the

fire in such a way as to create a furnace. I then found myself a large, flat faced stone and dragged it to the fire. Then a smaller stone that fit my hand as a hammer. I scavenged some pipe and made a fan from some cardboard to stoke the fire with. This way I had made a primitive forge, and got to work on the pipe. I spent the next few days there working.

With this story I mean to relate how integral a part of me working with iron is. I had never seen a blacksmith in my life at that time, yet instinctively I desired to work with it, and understood how to achieve it. And yet my closeness throughout my life also blinds me to it. The perception is lessened because the interaction is normalized.

It fascinates me. It challenges me to understand it. As I put my hand on the mirror it at times shows images, seemingly desiring to be put into shape, but the images are often just beyond my grasp. There seems to be a living force within the material desiring to be put into shape.

Here I find the approach that I feel I have to take differ from the approach of many artists. There are of course countless artists that deal with a spiritual content in their work. Anselm Kiefer, an artist who I admire, uses a huge amount of references to occult lore and alchemical associations in his work. From the use of occult symbolism to symbolic use of materials, such as lead, for example. Here I attempt to take a different road. Instead of using what -conceptions- we as humans have formed around a symbol or a substance, valid or not, I try to only use the -perceptions- that I receive from the material to shape my work, imperfect though they might be. In this there is a reverse kind of impression left in the work.

## **Aim**

What I desire to achieve with this project is to try and achieve some level of success in conveying the experience of iron that I spoke of in the background. The ephemeral qualities need to be somewhat understood and projected artistically in order to communicate them.

To be truthful the intention has changed over the course of the project. It has shifted from a focus on an architectural function as an aim in itself to using a more architectural shape to provide an experience. The main importance of the project is an artistic presentation of an inner experience, and an investigation that can lead to my own further understanding of this material.

The object that I wish to present can only provide a single angle of approach to a very three-dimensional question. Therefore it is not to be taken as a wide, but rather a narrow representation, a puzzle piece.

## **Goal**

The practical intent of this project is to create a modestly sized, semi-enclosed space, an alcove that can be placed into an opening in a wall or built into one.

The reason for this project to take the shape of an alcove is to envelop a person within the material, to possibly become a part of the world of iron for just a moment.

## **Problem formulation**

-When looking at my previous sketching material, what are the main characteristics that I am looking for to make up the totality of the alcove?

-How do I go about merging the characteristics chosen from amongst my sketching work, consisting of a variety of smaller pieces, to achieve a convincing whole within the alcove?

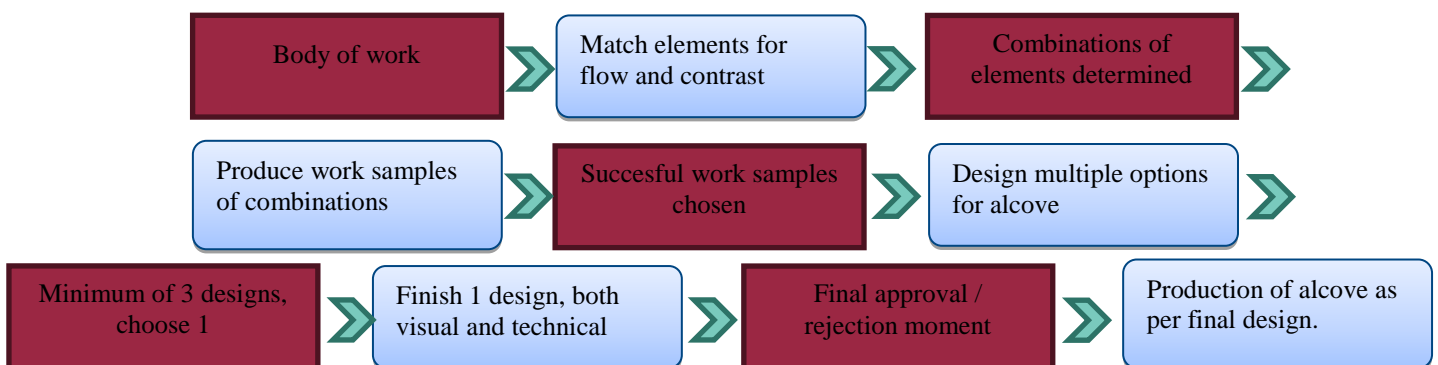
-How do I confront a person with an aspect of this “living nature” of iron through artistic representation?

## Approach

My intention was to select and draw out from the source of material that I had produced earlier, that which I needed to form the alcove. This way I could rely on the artistic strengths of what I had been working with previously, but use it within a new framework. In this way I already had the building blocks for my project. I further developed the material and adapted it to suit the project so as to provide contrasts to further understand what I needed to achieve my goal.

The challenge would be found in using all these constituent parts in order to form a balanced totality. I had to focus on finding what elements work well with each other, both visually and technically. I had to take production time into consideration, making sure that what I was aiming for was achievable within the timeframe of the project.

The sketching process thus looked like the following as seen in the following. red for status / decision, blue for action:



The development of my understanding of this vague perception of the “living nature” of iron has progressed during the course of this project. It is very useful to me to go back and forth between a more meditative reflection and perception of these kinds of phenomena and working with them in an artistic manner. At times, in the results of my artistic activity there lies a kind of premonition of something that I do not yet understand, but it takes shape ahead of my conscious knowing.

As I started with this project, my artistic endeavour was based on the inspiration I received from ancient architectural structures, caves, rock formations and the like. There was a focus on the visual character of the world view of the cultures that made these temples, palaces etc. In the former the world view impressed itself onto the material that these structures were made out of, in the latter, the qualities of the stone expresses itself in its shape.

In a way I was still simulating the qualities of these sources of inspiration in my work, as I began with material experimentation. In order to gain a foothold I used photoshop to edit images of rock formations to a point beyond recognition to form a reference point for my work. I then joined pieces of iron together by welding and forged them to form a mass in a specific shape. Multiples of these pieces I would then assemble as a composition in order to understand what I could achieve in that method. In this manner I began experimenting with the material to create a starting point.

Looking back, the problem with this method is not so much the use of a reference point, even the fact that the reference point came from another material. The problem with this approach was that it introduces an foreign esthetical stamp on the work and negates my responsibility to engage with the “living nature” of the iron. The problem with doing this is that it is exceedingly hard for me to do so. To really receive a concise impression in this manner is hard enough. They usually come in the form of plastic motions, efforts of willpower taking shape. Attempting to capture this within an object taunts the limits of my capability as a student artist. To rely on such a reference point then, becomes an easy crutch, but eventually leads away from the actual intention of the work.

While sketching with the material in order to investigate the qualities that I was after, I found that composition was often a necessary factor, or at least that it invited itself into the project. This often led to a figurative portrayal, again throwing up a wall towards feeling the object instead of understanding its figurative characteristics. Some objects appeared to be in the shape of something, such as a flower, an anvil or a face, etc. Others gained perhaps a ritual connotation through their presentation. Although these objects have their merits, they to some degree led away from the sensation I wished to bring across through presenting themselves as a symbol.

At this point the experimentation was still detached from the necessity to shape it into a space-filling material. I was mainly investigating a composite method of forging and welding in an artistic manner.

The experience of the impressions that the iron evokes has strengthened over the last six months, but was with me somewhat subconsciously or rather unnamed before. With my artistic practice, understanding of what motivates me always lags behind my actual work. Distraction and confusion have been a big part of the early development process. Because of my feeling of responsibility towards the finding of an artistic representation of something that I myself do not fully understand I often felt intimidated by the task I set for myself, and thus chose easier paths.

I worked in a way where I would weld together pieces of iron into a massive clump, making strong welds here and there and leaving openings in other places. During forging the hot material would compress against itself, causing it to shape itself rather than me directly influencing its shape through the use of a hammer. Either the package would fall apart during the forging as the welds would shear under the pressure, or I opened up the package myself afterwards. This revealed the effects of the material working itself, revealing an aspect of itself that I found very fascinating. This investigation was enormously interesting in furthering my understanding of the concept of “formative forces” inherent in iron (formative forces is a term used in anthroposophy, most notably in anthroposophical architecture, dealing with shapes inherent within the character of the material). Although it seems to me that these forces do not directly reveal themselves within the shapes created in this process, there seemed to be a closeness that makes further experimentation very relevant.

Slowly I came to understand the central role that iron itself has for me, and that is ought not to be worked in such a way that external impressions (such as those of a figurative nature) were allowed to have too much of a role in the creation process.

However, I also realized that the deeper and further investigation of these formative forces, which are a part of the “living nature” of the material, would fall outside of the scope the project. That direction would require me to work in a different manner than the confines of this project would allow me. Another, more practical, consideration was the sheer amount of labour involved in the creating of these pieces.

By this time, I had created an outer skeleton for the alcove to be constructed inside of. The development of the shape of the alcove was to be honest a slightly hasty affair, although it does have a deal of thought that went into it, it is certainly not the most worked through aspect of the project. The overall shape, that of a cut oblong, was decided after thinking through what I wanted the space to convey. It was important to me that the space would not fully reveal itself to an outside spectator. The



fact that the entrance is smaller than the space itself conceal a large deal of the space, thus luring the spectator inside. The secondary dome is intended to give an extra dimension to the space. It is not the same as the larger space in the sense that it cannot really be entered in the same way, leaving it to be experienced in a different way. The intention is for the larger space to be experienced with the body as well as visually, while the secondary dome invites a different kind of experience.

Before I came to the shape as it is now, I had sketched with a variety of shape ranging from triangular and squared shapes, to chaotic lines. I sketched with the depth and height as well. But in the end I settled with the shapes for the reasons stated above, while the rounded arches I intended to use for their more harmonious appearance.

In order to create the skeleton I first made a 3-d model of the shape of the alcove in Rhino in order to keep track of all the measurements. I then proceeded to cut, shape and weld a frame together out of steel bar. A reasonably simple affair.

About halfway through the project, I had to decide on how to cover the inside of the alcove. It was a question of choosing from the material experiments I had done previously in such a way that it work artistically in terms of embodying the essence of the project, as well as being feasible to produce within the time frame. I decided that the top half would be the most important to work on, as the shape of the alcove invites the viewer to look up, and since I wanted to convey a sense of earth-closeness, the above would need to bear down.

I started to cover the bottom section of the structure with forged steel sheet. They were first forged, then welded together, forged again and hammered with a sledgehammer into a curved shape.

After these were installed into the skeleton, I realised I would need to construct a wall to put in front of the alcove, so I could better understand how it would appear when It would be installed. After this was done I also covered the structure with paper to block out the light and get a feeling for the room as an enclosed space. Doing these two things dramatically changed the experience of the alcove from then on. It became clear that apart from a visual experience, it would very clearly be a physical and tactile one as well. The size of it relates to the human body in a peculiar way. It is small enough to feel enclosed, but open enough not to be claustrophobic. I experienced it as somehow merging with the space.

By now I felt ready to start making decisions on what to cover the top of the alcove with. I used wire to hang experimental pieces of different characteristics inside of the space to get a feeling for their effect. One of the most striking experiences was when I hung up a piece that was my favourite choice to hang in the centre of the secondary dome, the detailed nature of it became offensive. It really hurt to look at it, as my eyes struggled to adapt to it. I would have to replace it.

Through trying out different combinations in this way I decided that I would cover the majority of the upper structure with laminated forged sheets. These meshed well with each other and could easily be produced in a larger amount.

When I had hung multiple of these laminated pieces I started to get a feeling for what the room was becoming. It felt as though my inner experience of iron had become a metaphysical expulsion that I projected into the room, covering it with this strong sensation of materiality and “otherness”.

By this point I had made all my choices in terms of design. What followed was an intensive period of production. I created a certain amount of pieces of laminated sheets that I forged and shaped to fit in place. These I then spot welded into place. In this manner I continued, patching piece by piece to cover the entirety of the inside of the alcove. During this period of production, I realised that I had somewhat lost the connection to the material. I was not actively connecting myself to the work I was doing. This is a necessary element for being able to feel the material, but I could not establish it during

this process. This was an interesting complication that has affected my intentions on how to work with the material in the future. At this point however, it was more important for me to carry out the design as I had established it than go into crisis mode. I had to accept that I had to give one thing up to gain another.

Technically speaking, the most challenging aspect was the finishing of the object. I had to first trim the edges protruding from the entrance and then seal them behind a cover, to create an interface between the wall and the alcove. In order to do this I had to heat the rim by gas torch and flatten the pieces against each other. Then a bar needed to be placed to function as the cover. During the heating and welding processes a lot of warping took place that seriously threatened the overall shape of the entrance. With a little help from Mathieu we were able to hammer it back into shape, however.

At this point, all that was left was to make some adjustments to the wall and fit it into place.

## **Result**

Iron as an element is, by mass, the most common element on / in earth. Its existence is bound up with the rocks it is extracted from. It lives in a world of solidness and darkness below our feet. A world that we cannot directly experience. It is inherently bound up with the mineral nature of our earth. It moves and progresses slowly, existing in pressure and warmth. There is something about iron that makes it strongly earthbound, more so than say silver. As I came further in the construction of the alcove, I realised that the space would not so much become an embodiment of the formative forces of the material, but would serve as a means of transport into this subterranean world. Whereas iron in itself does not necessarily weigh one down (apart from a literal interpretation), the alcove pushes you down into a different sphere. It can weigh down on your shoulders and somehow transport you there. This was a very interesting discovery because it linked back to a feeling I had long before I started the project this year. It was a sensation of sinking down below the surface of the earth, merging with it. It is fascinating to me how these things intersect.

In a sense, I did not achieve what I attempted to achieve with this project. The coming to grips with and representing the formative forces of iron. I am not surprised at this, however. It would be rather arrogant to assume that I could have really done this in the first place. I did learn a great deal about it during the process of this project however. If I wanted to have dealt more in depth on the nature of formative forces, I would have had to work with a smaller project requiring a lesser volume of work.

At the onset of this project, I was strongly focussed on the architectural aspect of this project. The main topic that this document has been dedicated to was not yet present and I instead focused on trying to create a way to implement my work into an architectural context. I had a strong desire to insert an artistic principle into architecture.

At the time I was neither really conscious of the direction that I really wanted this project to take, nor really had the courage to admit to it or present it in that light.

This caused a slightly confused approach to the project. My intentions shifted early on into the process, but I could not really consolidate them until later.

An element that suffered due to this uncertainty was the architectural context. I decided to let go of trying to relate it to a certain kind of space where it could be placed, and view it as a self-contained art piece. Although I am satisfied with the choice made, it does show a change in the original intention of the project and still presents a problem. The object is at this point homeless in a way. By its very nature it establishes a relationship to the space it is present in, but the fact is that it is not made in relationship to an outside. Although it can be placed into a space that can be receptive to it, it easily

becomes a foreign object. This failure is mainly due to the fact that I did not allow myself the time to thoroughly consider this relationship.

All in all I think I might have been over-enthusiastic when deciding on the size of the project. The amount of production time required ate into the amount of artistic exploration that I could afford to do, and perhaps led to the need to make decisions rather quickly here and there. It caused for there to be some questions that are still open but as of now unsolvable within this object. At the same time however, I am glad that I have taken the project in this direction. It has afforded me with many valuable insights for my continued exploration as an artist.

When I started this project I mentioned that I would like to achieve a synthesis of substance and “spirit” within my work. I referenced the Ngil masks of the Fang tribe of Cameroon as a prime example of the presence of something ephemeral within a physical object. What I have learned through my work on this project is to differentiate between a principle laid onto the material and drawn up from within the material. Although these masks are often of exceedingly wonderful character, something that in terms of depths I can only hope to achieve in the future, it was very interesting to become conscious of the difference in principle of working. Throughout the process of sketching and creating pre-studies I had not yet realised this, which is clearly visible in the body of work. The principle of drawing forth the living nature of the iron is not entirely present within the final alcove piece as described above, yet it is substituted by pointing to the sphere in which this principle exists.

## **Discussion**

What most clearly stood out from the commentary was the fact that both my written and oral presentation did not match the quality of the artwork. I agree. The main reason for this that I can see is my ambivalence in wanting to communicate the whole story and background to my work. This caused me to perhaps focus on the wrong aspects of the project. In going forward from here, I believe that I want to change the format of my communication. I want it to be more poetic, more storytelling. Because it is true that what I express in my work, has not been present in this report. This is a valuable learning point.

There was some talk about the wall I used. It is true that it is a compromise. I suppose it depends on perspective. I as a maker was mainly focused on the inside space. That was what mattered to me. When inside the space, the wall is inconsequential. However, from the public’s point of view, the totality of the wall and space is the most important impression. In the end, this is the point of view that really matters. That is what the artistic communication is about. So again, the point is taken, and I can agree. For me it was a matter of compromise. The metalwork was more important since I would not be able to do much more with it after the presentation. The wall however, I can easily work with later on towards a new exhibition. This is the rationale I used, in any case.

The next point to address is about clarity. What do I want to achieve with my work? The answer to this question is linked to the first comment. Why I do it is clear to me, but I still need to find a way to communicate this motivation. Nonetheless, I will state it here. The reason I work with this topic is to let the iron itself find a way to freedom. In my perception, there is a latent, sleeping force that is waiting to be discovered. It is overlaid by a crust of misconception and misattribution with forces that really have nothing to do with the intrinsic quality of iron. Think only of war, destructive and misbalanced masculine forces and the first metal that will force itself on your field of vision is iron in the shape of a statue of Mars or simply a sword. These conceptions lie over the material as a caked on layer of rust. They have to be pierced to come to grips with the real nature of iron, which is still only a ghost to me. Within the context of this project, the goal has become to create a space that could show something of this search to others, to create a sphere where impressions can be had.

I have not referenced to many other artists. I have spoken about anthroposophical architects and students of anthroposophy that use a similar method of perception to what I use to come to perceptions

and conceptions. I have written about my admiration of the architects that made ancient palaces and temples. And I have written about the Fang ngil society from Cameroon that made their haunting masks. I still find it difficult to find anyone that attempts to do something similar to me. I have referenced Anselm Kiefer in order to clarify a contrast in approach. Perhaps this contrast will help me understand my place within the art world. This is also where I would like to touch on the relevance of my work in a wider setting. In a certain sense I am tempted to say I am not doing this for society at all. I am doing this for my own understanding and for this force that exists behind the iron. But this would be short sighted. First of all I want my work to have beauty and to leave an impression with people that can cause something within them. I want to introduce people to a world conception where everything is alive, and everything has meaning and relevance. With my work I want to breathe some life into our secular world, which at times can feel frighteningly devoid of inner relevance.

## **Conclusion**

This project began with many questions and many different angles of approach. I wanted to tackle an architectural work, a work of spiritual insight, and a work of many hours of forging. I have had to readjust my approach, my values and my goals. My conception of the subject I am working with has become clearer during this exam period. It has created new questions and pushed aside others that have become less relevant for the time being.

But perhaps the most important part of this project was at the presentation. It confronted me with the question of how I wanted to communicate my subject, and why. Who do I want to speak to, and how? The mode in which I present myself in connection to my work is important. I thought that my work should stand by itself. But I do not do it justice if I do not connect myself and my way of presenting it to the object, thus devaluating the work as a whole. The final lesson has been that I have to take pride and confidence in myself and my work in order for it to have an impact.

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# Index images

Material sketches discussed in results:



The end result

