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# Taiteen kandidaatin opinnäytteen tiivistelmä

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Työn nimi Creative constructions— A plunge into the mind of the inspired

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The thesis explores literature on creativity research through separate dialogues with two artists. It links together theories on creativity with experiences from within a creative profession through the participation of a musician and a painter. The background research consists of scientific publications singled out with potential parallels with participant's everyday life in mind. The intention is to deepen the understanding of creativity as a phenomenon through the discussions as support for the writer's future profession of art education.

The overview of the literature on creativity is carried out with possible relevance for the dialogues and participants in mind. The dialogue is used as a tool for a deepened understanding of the topics. The participants share their experiences on creative processes and receive information on creativity research. The dialogue as a method is chosen to enable a flow of thoughts that a structured interview might not permit. The quoted dialogues are present within the paper as cut-out side stories with highlighted parts of interesting thoughts. The discussions were carried out in Finnish and English.

The thesis consists of seven main chapters. The first chapter introduces the intentions of the thesis, the participants of the dialogues, and makes the distinction between everyday creativity and innovation. The second chapter locates creativity within the domain, the field and the person, and explores the interaction of these. The third chapter traces back interest in a domain through a childhood experience and explores the characteristics of a creative mind. The fourth chapter dives into different ways of problem solving. In the fifth chapter the process from an idea to the final evaluation of a finished work is presented. The sixth chapter illuminates two areas of positive psychology: intrinsic motivation and the flow-experience. The seventh and final chapter summarises the chosen parts of creativity research, reflects upon the relevance of the knowledge for the writer as a teacher and evaluates the dialogue as a method.

Several interesting approaches to creativity research have been rejected due to the abstract nature and the inability to tie them to the dialogue. The dialogue has been an effective tool but not without difficulties. Exceptions were made in order to cover all of the desired information.

The approach broadened the understanding of the complex topic. It illuminated the creativity research and offered a window into the mind of the participants. The creativity research became approachable and received a position in reality. The deepened knowledge on the subject became a tool for teaching and positioned art education within creativity as a wider phenomenon.

**Avainsanat** creativity, dialogue, innovation, domain, field, person, crystallising experience, problem solving, association, immersion, incubation, insight, evaluation, elaboration, inspiration, intrinsic motivation, flow

# CREATIVE CONSTRUCTIONS

-A PLUNGE INTO THE MIND OF THE INSPIRED

**BACHELOR'S THESIS** 

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# 1. INTRODUCTION

Creativity is what our culture depends on to evolve. It enriches our lives and gives us effective tools to overcome obstacles in everyday life. For many of us it has a very abstract and mythical position, and often it is looked upon as something granted only a lucky few, when instead we all have a natural ability for this. We stay more alert and self-assured while using this ability and if not, we run the risk of feeling unable to affect our surroundings, with a social exclusion or marginalization as the worst case scenario. As I am studying art education and working in this field so intimately related to the subject, it is a natural step to find out more and learn the vocabulary on this matter. In this research I try to dig in to the process resulting in novel thoughts and solutions, both for personal interest and to support my professional output.

What circumstances favor this phenomenon and why does the brain keep on repeating this fascinating event? The attempt is not to write down a self-help note or solve the equation, but to illuminate if ever so little this beautiful feature of the brain. Creativity has been studied over several decades; therefore the amount of research is massive. To even try to read up on all of the material is an impossibility, scratching the surface and hoping for treasures would hence be the best definition concerning my approach, when trying to find out what has been written about it and what the common views are at the moment.

What follows is a text where I will try to map out the structures of creativity. To help me on this journey I have engaged two individuals who both work within a field involving this matter. Carrying out the background research of the theories and then linking it to practice together with them will help me understand and, hopefully, confirm and further shed light on what I have learned. Instead of the traditional interview with clearly defined questions I have chosen a more intimate approach. I am hoping for a fruitful dialogue where I will try to enlighten my "allies" of the psychological and cognitive processes on the subject, and in return I will receive a close-up of the brain at work. Will my addition to the conversations sound at all familiar, or will the conclusion be something of a totally different kind? By using the dialogue as a tool I will try to come to terms with the creativity research, and create meaning and shared understanding through the conversations. I am hoping for insights that otherwise would not occur, for both parts. I will try to add what information and experience I have gathered so far, and the other participant of the dialogue will (hopefully) offer thoughts and explanations of his own. On the practical level I will dive right into the literature and make myself a path with potentially useful material for the upcoming discussions in mind.

Creativity is not always the mythical "Eureka"-moment, the sudden insight of the individual. Innovations rely heavily on knowledge, the field of work itself, co-operation and feedback. Therefore, to explore it with the help of two very different individuals, both mastering their skills and working with creativity on a daily basis, seemed to be the best approach. As a tool for the forthcoming sessions I decided to use the dialogue; in other words create a moment of connection and verbal wanderlust, and hopefully dig a bit deeper into the subject with and through this collaboration.

Aside from the common use of the word dialogue, in a philosophical context it refers to a discussion with the characteristics of confidentiality, openness, respect for the other and sharing of experiences. According to Greek etymology it stands for something "gathered in between", a connection where something is accumulated or assembled between two participants, forming something "separate yet not distant". The dialogue lets both participants be "you" and "me", a concept close to Emmanuel Levinas' ethical concept of "face-to-face" and Martin Buber's thoughts of relationships through the compassionate "I and Thou". With this in mind one stays not just a person in relation to the other. The true colours are revealed, the dominant or power relationship vanishes, the person surrenders and "obtains" the world.

To use the results of the discussions to the fullest I have chosen to intertwine them with the research. Each topic will be accompanied with cut-outs from the discussion and specific parts high-lighted wherever an interesting thought correlates or disagrees with the material.

# 1.2 TWO PERSPECTIVES ON CREATIVITY

In this part the participants of the dialogues are introduced. They represent quite different approaches to the research, but both work with matters concerning what we call creative tasks and processes. I have chosen a painter and a musician. A painter was a logical choice due to its closeness to art education, and a musician due to the similarities of the domain. The discussions are being loosely based on my research, but with as much freedom as possible for especially close-to-heart topics and interests. I have recorded the discussions, and the parts with relevance for this text have been transcribed and fit in with the informative text. Since the discussions had more of a natural flow than in a strict interview some of the topics overlap each other.

John Holten is a Norwegian painter, also working with art graphics, drawings and commercial works.

Julius Valve is a Finnish electro musician working on solo projects under the pseudonyms of Aprox and Human Chocolate.

The recorded discussions have then been transcribed as directly as possible in order to shed light on and preserve the natural flow of the thoughts and ideas. John Holten was recorded in English, and Julius Valve in Finnish. Since the Finnish has been translated to English some slang words might not have the most accurate translations and unfortunately some nuances might have been lost.

# 1.3 CREATIVITY VS. INNOVATION

As I am writing this there is an especially strong trend in society of using the word "innovation". Therefore I will use it only briefly, to make the distinction between a more every-day creativity and the one of novelty and conceptual expansion.

"All it takes to be creative, then, is an inner assurance that what I think or do is new and valuable." '

In other words, when we feel that we come up with something new we have used our creativity. But for something to be recognized as both creative and innovative it also has "...to bring into existence something genuinely new that is valued enough to be added to the culture". <sup>2</sup>

It dares to be said that "...someone (only) personally creative will never contribute a thing to the culture." 3

When we spoke of innovative work both participants had very down-to-earth opinions when evaluating the output, but still I felt they had a strong sensation of doing something different, that no-one else was doing at the time.

An innovation is an outcome of creativity that is adopted by society. What we regard as creative tends to have sprung from great minds, but for a novelty to be accepted and absorbed in the society it tends to be filtered through a few specific areas. These will be presented later on in the following chapter.

- 1 Csikszentmihalyi 1997, 25
- 2 Csikszentmihalyi 1997, 25
- 3 Csikszentmihalyi 1997, 27

# Julius:

I stretch the outlines of a small area, I stretch the limits of pop music. I'm trying to expand it, by combining things.

"Elvis-stuff" combined with "Marilyn Mansonstuff" for example, could be one thing. Not really in terms of technical things, I haven't really explored that. Eclecticism, if you will.

### John:

I have my material, so I've not being good at being very experimental. '

More (with) the idea, the medium is quite often the same.

# 2. AT THE CORE OF CREATIVITY

When starting this project I had a rough perception of where to begin. Naturally I was interested in the creative person and the process of creativity, but the outcome or the product felt more vague and I found myself getting lost in the different approaches; which ones to choose and how to narrow them down. The solution was to keep reading a broad selection and more or less write down what seemed could be relevant and useful for the upcoming dialogues. A rough look-through resulted in this division:

- The psychodynamic approach: based on the idea that creativity is sprung from tension between conscious reality and unconscious drives.
- The psychometric approach: focuses on measuring creativity by exact and supervised tasks.
- The historiometrical approach: historical study of human progress and cognition through documented cases and statistics.
- The biometric approach: genetics, neurobiology.
- The cognitive approach: seeks to understand the mental representations and processes underlying creative thought. This will have the main emphasis in my text along with the following:
- The social-personality approach: sociocultural environment, personality and motivational variables as the source of creativity.

All of these are worth recognizing if ever so briefly, but the ones useful for this research stay mainly within the cognitive and the social-personality approach. Digging further into other material resulted in these (partially overlapping) areas to take into consideration as notable influences of creativity:

- 1. Family, with factors such as encouragement, mismatch with family values, birth order, resources, age of parents, trauma, parental loss, etc. These are highly individual factors, and will not be considered in this text, as well as the following:
- 2. Historical influences; events and trends affecting the culture over a longer period.
- 3. Socio-cultural influences, as in organizing resources for the purpose of developing creativity and cultural "organisms"

The following turned out to be the most important factors for my research:

- 4. Cognitive processes.
- 5. Characteristics of the domain and field.
- 6. Education/preparation; formal as well as informal, appropriate teachers, educational arrangements, mentors, social relationships, crystallizing experiences, etc.
- 7. Social/emotional processes.<sup>2</sup>

In the upcoming chapters I will plough through the topics that I sensed were of importance for me and the dialogues.<sup>3</sup>

- 1 Sternberg 2008,. 5
- 2 Sternberg 2008, 175
- Other important aspects that I had to dismiss due to the difficulty to link them to the discussions were topics such as genetic predisposition, intelligence research, the age factor etc.

I have had such a different path with music... In junior high I started to make electronic music. (It took) probably six years until I started to create music that sounded like something to the human ear, music that sounded like some sort of noise... Then it became good enough to start to do gigs, and from that on I quickly began to get some attention just for the fact that it had another "thing" in it.

Since then it just has evolved into what I'd like "pop-music" to be. Before it was about what I wanted to create with sounds, and what I could do. After those ten years I only began to be kind of good. Now I'm starting to be really good. And it is now fifteen years that I've been making music. But I already knew at twenty-four how to do stuff people love, or in some way could dive in to. I am still that bad that I cannot create things just like this (snaps his fingers) but...

# 2.1 FINDING CREATIVITY

"...new ideas, even highly creative ones, often develop as minor extensions of familiar concepts."

We are all standing on the shoulders of giants. Those preceding us are the ones that have lifted us this far and given us the ideas and the tools we now work with. These are, according to the Systems Model the places to search for creativity:

- The domain: a content specific area of knowledge, for example genetics, nutrition; they are bodies of disciplined knowledge.
- The field; where the people are found, the individuals and the "gatekeepers" of novelties, those who select what new will be added to the evolving field.
- The person: the individual, he or she who perfect or change the tools and symbols of the domain; the bringer of the new ideas.

The domain will not be affected unless the person "masters the tools". In other words, a writer will not likely change the domain of computer programming and a chemist is probably not going to affect the real estate business. A deep immersion with deliberate practice of the discipline is crucial<sup>4</sup>. Usually it takes about ten years to upgrade, if you will, from "novice" to "master"<sup>5</sup>.

Also, the change is very much dependent on the domain itself, the trends and the spirit of the times, whether a novelty will be accepted and slip through to the larger society or culture. Mihalyi Csikszentmihalyi uses the examples of Golden era of Greece or the blooming Renaissance in Florence. There was no sudden explosion of especially skilled artists; instead the economic situation enabled an increase in artistry with a great amount of investing patrons; there was a surplus of attention.

- 1 Sternberg 2008, 195
- 2 Uusikylä &Piirto 1999, 67
- Csikszentmihalyi 1997, 27 28
- 4 Sternberg 2008, 234
- 5 Sternberg 2008, 173
- 6 Haavikko & Ruth 1984, 191

### John:

I feel like it was at a very early age (that I mastered the tools)... I was just so focused on striving to get better. I had infinite patience with repeating and copying and...just challenging myself was challenging enough. And also that it's never kind of quite "there" yet, which could also be a driving factor. Of course, most of the time I must say I draw for my own satisfaction. You get a lot of satisfaction from the feeling that you are mastering something, and I felt that I mastered it, but I didn't feel fulfilled, I didn't feel like a "master". I felt good at it, but there was always more to reach for. Of course, it is a big driving factor to feel good, concerning self-esteem; appraisal, feedback.

That (controlling the skills) comes and goes. For instance discovering your limitations, I would say I've felt that more as an adult than I did earlier. I think it's that young enthusiasm and self-esteem, or the belief in yourself that are bigger, at least in my case, being younger... I felt like there was nothing I couldn't do, just given time enough. I think that is more difficult now, many times. A bit of naivety as well, maybe, this thing that you think you can do whatever. Because I got so much positive feedback, the fuel to keep on doing what I was doing was that people were telling me I was good, and that in itself of course helped (me) feeling that I was mastering what I was doing. At a very early age I felt that I mastered this, so the ten year thing is very hard for me to relate to.

There are fields within the fields... I am a bit of an exceptional person in the sense that I have been performing with electro musicians, punks and heavy-metalists, with performance artists ... With any kind... And that's probably due to the fact my music is of a cross-over nature. Also, I do not collaborate with people, basically ever.

Worth mentioning is that nowadays the domains and fields tend to be rather intricate and scattered, resulting in the lack of the so called "renaissance man". In order for success we need to become specialists within a certain domain, leaving us no time to master a multitude, or the result is the opposite: "Jack of all trades, master of none". Therefore we might be missing out on an enormous amount of innovations the further our society evolves. Still to keep in mind, the existing domains themselves are proof of the creative human mind.

"In fact, it is the human capacity to accumulate knowledge and to build new ideas on what has come before that underlies our enormous generativity and makes creativity possible." <sup>2</sup>

So, creativity is what leaks through, hopefully changing the culture and everyday life for the better. Interestingly in both dialogues the idea of the ten year rule seemed distant, yet I felt it was still accurate. Generalisations of this kind naturally have to take into consideration the general lifestyle; other occupations, side projects, all sorts of factors that have an impact on the opportunity to focus on honing and perfecting skills.

- 1 Csikszentmihalyi 1997, 37
- 2 Sternberg 2008, 198

### John:

I did feel so (that I could add something to the field), especially so when I was in art school and decided to go for it. But (now it's) harder and harder to feel that way, and that's maybe also why I've been quite disillusioned the last ten years, that it's hard for me to work, and it's hard for me to have continuity, because I am so unsure that is there a gap I can fill... The feeling of everything being done, and so much more talented people out there... This byproduct of also not being able to stay with it, you have to do so much more else to get by in life... But definitely I had that feeling, often, when I was younger. What I do nobody else does, it's so original... I have something to say, I have something to give... Yes. I did feel that.

That's also my thing, that I am a completely subjective maker. That the field is rather "they" who stare at me and I'll tell them what I did, that it's not a pissing-contest. Grants are available, and those who have references. who know the insiders, and demonstrate their talent to some jury get them, but it is not the basis for art in Finland, art is being done without scholarships above all, and it's more about creating something wonderful and exciting, and to communicate vibes... In general, people are only interested in the fact that they have fun on stage, and even though the music would be a bit poor, it is the atmosphere that counts. If the audience feels that the artist stands for the work, it saves so much. Those who dare to try anything crazy will probably be received much more heartily.

I live in pretty fortunate times when I'm an electro musician and tools are available for example online, for free. I purchased them, because they turned out useful, and because I use them so much. Beginners search for online programs and work with them ... people begin to experiment when there is a desire and will to search. I think that should be done, no matter what, it is rather a rule that if you are going to create some music there's no other way than to start trying out all sorts of things. Precisely that freedom of creation is in itself of much more importance than if you know your music theory or some basic rock format. That is precisely the kind of search for novelty and playfulness and nuance thing. That tiny magic ... It will always be up to the maker if it's going to be great or mediocre...

# 2.2 A GOOD IDEA, NOW WHAT?

When a new idea emerges in a field, how does it push through? According to Csikszentmihalyi, it all depends on the following:

- A reactive field vs. a proactive field. The proactive stimulates novelties and does not rely on old ideas and habits. A perhaps very generalizing example but still very illuminating might be the comparison between religion and science, where the latter is dependent on innovations and change.
- A narrow or broad filter when selecting novelties. Certain domains are very dependent of novelties, whereas others embrace them more reluctantly.
- How well the field is connected to the rest of the society/culture: does an
  idea or a product meet a specific demand with the public, or does it stay
  within a selected user category?

"There are even those who claim that creativity is determined by the social and cultural context within which it grows and develops." <sup>2</sup>

There are two key words to keep in mind concerning the creative work, innovations and how well they reach out to the society and culture. Both work together as complex developmental processes. One is to have interest in a domain, and perhaps the most important: Access to the domain, access to the field. Struggling by one-self without the right connections demands tremendous will-power and determination, something that eats away the energy from the work itself.

"For the person who will transform a domain, there must also develop a significant asynchrony between mind and domain such that the mind encounters significant dissatisfaction with what the domain currently offers." <sup>3</sup>

This felt important. An idea springs from the need of change and improvement. Whether it finds its way through the filters of the field can be inhibited by various reasons, such as religious constrictions, excluding whole groups from society; cultural restrictions, ethical or economic factors, and so forth. On the other hand, many cultures are extremely sensitive on picking out talent for specific matters (basketball, chess, you name it).

What was interesting was that neither Julius nor John felt that they were part of a "scene". Still, they obviously have and have had a fair amount of interaction, with educational institutions, colleagues, culture, and naturally through the tools (made by others). No matter how independent the maker, the outcome is always dependent on our surroundings.

# John:

When I started at art school I went in quite skeptic. I thought there were lots of weird people there with a totally different idea about art than me. I was quite conservative. It took me many years to appreciate things like... like other art directions than the quite photographical, classical, that I had. Such a conservative approach, I wanted to be "clever" all the time. It comes from copying all those cartoons I did for hours and hours when I was a child. I knew I was good and I always wanted to get better. But I was a late developer when it came to appreciating all the other art directions that are not exactly clever, they are more emotional... I really had to discover that world after I had started the education, so I wouldn't really say I had inspiration from alternative art directions... these are things that I discovered when I started learning about art history. Kind of getting "full" observing art and learning more about art, then I started appreciating why art has developed in so many different ways, and seeing it from a more intellectual point of view.

- 1 Csikszentmihalyi 1997, 322
- 2 Csikszentmihalyi 1997, 175
- Sternberg 2008, 173

**Julius:** I was thirteen when I attended illegal raves. It was such a catalytic experience, I got there secretly to those illegal raves with my fifteen year old friend, still such a kid, like "what is this?", smoke machines and pumping music and strobes, this kiddo walking around in seventh heaven because the music was so cool and primitive and everyone was dancing, and it was a collective music event such as I had never experienced before. It was probably something rebellious too, for a thirteen year old coming from the outside. Yes, this is absolutely the moment that has made me an electro musician. Still a clear memory, that experience, it was so amazing.

# 3. DISSECTING THE CREATIVE MIND

In the previous chapter I tried to find the frames in which we operate. This chapter will be approaching the person and the mind, where the magic happens. Sigmund Freud talked about the interest that, resulting in a creative process, originating from some repressed (sexual) childhood experience, resulting in a curiosity or urge to find new representations (art) or explain, unveil (science).

According to this, the idea dips into the subconscious where it unguarded and unsuppressed can connect with the childhood issues, and after that reemerge to the conscious mind, enabling new energy and focus for the person to solve the problem. While this no longer is the trendiest of explanations, it does have some resemblance in thoughts of association and focus in the cognitive approach, which I will return to shortly. But for now Freud can stand as a reminder of what power the subconscious still has over us. The cognitive explanation dismisses the trauma in the center and emphasizes free associations in the subconscious. The irrelevant connections may disappear but the robust, usable ideas persist and re-emerge to the conscious mind.

So first, a quick visit back to the childhood through a specific incident.

# 3.1 A MOMENT OF CLARITY

The so called crystallizing experience is a familiar phenomenon for many creative persons. This event usually takes place at a young age, and is defined as an eye-opening experience. When met with the "inborn talent" it gives the subject a clear vision of a possible future profession; it "imprints" the person to a specific field so to speak. Even more than cognitive precocity or inclination this has an effect on motivation far beyond the usual ones. <sup>2</sup>

A crystallizing experience can be ignited by exposure to material from a specific domain, a representative of the field, or simply an artifact or product. This experience is described as something of a mental wake-up call.

"It is recommended that all children be treated as if they have the potential for crystallizing experiences. They should be exposed at an early age to materials which may motivate them to explore a domain." <sup>3</sup>

Unable to recall any incident of this sort in my childhood, this was one of the topics I was expecting the most of. While John seemed to have had more of a steady pace towards the arts, the experience of Julius and the enthusiasm with which he told the story felt very reassuring.

# John:

There are a few incidents, what I can remember, when I realized how good I was... For the praise or the reactions that you meet and you might kind of realize... that you are on a higher level doing something than most. And that could be anything from getting really strong and good reactions drawing, for instance, at school, to... I guess the first time people really asked me to make drawings. Which was at a quite early age. But no specific incidents come to mind, no...

- 1 Csikszentmihalvi 1997, 100
- 2 Sternberg 2008, 172
- Walters & Gardner 1984, 21

### 3.2 THE TRAITS OF A CREATIVE PERSONALITY

Some find the passion at an early age, some discover it later, but are the creative persons still different from the rest, or do they just get lucky? What do they do? The creative mind tends to work within these frames:

- problem solving
- · building theories
- producing specific/permanent work (as in sculpture, writing)
- · repeated performance, (dance, acting) and last sort of an extension of this,
- high-stake performances (competitions, politics etc.)

Another way of categorization is the master (skills), the maker (changes), the introspector (thinks) and the influencer (affects).<sup>2</sup>

This was still fairly easy to grasp, but then it became more abstract. Regarding skills there can be a division into<sup>3</sup>

- Synthetic abilities or the ability to generate ideas, redefine problems, switching back and forth between conceptual systems. And if this is not enough; within the synthetic abilities there is a division between
  - 1. selective encoding, that distinguishes relevant information
  - 2. selective combination, combines relevant information in novel ways
  - 3. selective comparison, relates new information to old in novel ways
- · Analytic abilities, that evaluates ideas and then further evaluates weakness/strength and guides to the right direction, and
- Practical abilities that applies to the intellectual skills in every-day life and "selling" ideas"

Since my goal is to recognize what creativity consists of I did not want to reject this information, even if it felt ever so distant from the dialogues.

"To create, then, involves the realization of an analogy between previously unassociated mental elements"5

Association seems to be a key to creativity in many ways. How does it happen in a fruitful way? Sternberg mentions a generative cognitive style concerning creative talent, overlapping the previously mentioned, that include

- Imagination: playfulness, making and finding new patterns, unusual combinations and associations.
- Sense of domain relevance: the ability to distinguish what is important and what is not, finding paths where others do not. (both for building theories and practical work)
- Intrapersonal intelligence: or in other words "introspective smartness" and to be able to distinguish between cognitive and emotional processes (and detecting intuitive misconceptions).

# Iulius

...I also have accepted the fact that I am a sensitive man. That was a really hard thing for me as a child. It took me many years;

I must have been twenty-five when I realized that "yeah, I am sensitive". A bit like coming out of the closet. That alright, I am like this, I bloody have to talk about my feelings. And that without that I would never have developed a sense of style! So the thing of coming to terms with my feelings has been a big thing to be able to create...

- 1 Csikszentmihalyi 1997
- 2 Sternberg 2008, 221
- 3 Sternberg 2008, 255
- 4 Sternberg 1991, 135
- 5 Sternberg 2008, 137
- Sternberg 2008, 217

Understanding the basics enables you to do more complex things much easier, but that kind of childlike excitement and starting from scratch enables much more original stuff. Then the "dance" between these two makes it good. If one or the other is missing completely it turns into such crap that no-one would want to hear. Understanding some traditions makes it easier creating better stuff, but... I do get those raw drafts faster, that certainty that something works. So yes, I'm faster at making songs that sound like music, but it doesn't necessarily mean that the song gets done much faster, because nowadays I have molds. (Charles) Bukowski has said on writing, what I now borrow for music as well, that "When a form appears, try again". Start again. If you make something accordingly to a structure you start creating structures and not that creative thing. You aren't interested in the emotions anymore. Then you are so damn far away from the basics.

In other words: imagination and fantasy goes hand in hand with a rooted sense of reality, being original without being just bizarre. Playfulness goes together with discipline: so called "detached attachment" to the matters, being passionate but objective. Also to be smart but naïve, wise but childish, traditional and conservative in some ways, but at the same time rebellious and iconoclastic; safe but risk taking.

How on earth could I study this more closely in the dialogues? Well, only afterwards listening through the recordings did I feel that I might have reached something close to these thing when talking about personality traits or how to approach new ideas. They both seemed to have started a process of analysing their abilities and limitations long ago.

The Handbook of Creativity mentions fruitful asynchrony, to not fit in but turning it to an advantage. <sup>2</sup>While we all have this feeling at some point, it takes a different mind to turn it around and use it as a tool. An intelligence level slightly above the average tends to help, but after a certain point the IQ loses its effect; if the challenges don't meet up with the qualifications the person runs a high risk of getting passive and stops bending the rules.<sup>3</sup>

Creative people often seem to have a certain ability to switch back and forth between different personality traits, as if moving from one pole to the other when needed. This multitude in personality and complexity in the work is very close to Carl Jung's idea of the mature personality<sup>4</sup>.

### John:

Ouite often the art that I wish to make, they are part of the same universe or line of thoughts, you try to attack them from different angles, but the kind of belong together... Sometimes it's okay to stick to a theme, because there are so many things to work out about it, but technically you can have that feeling sometimes, that you should be more brave, or maybe jumping into a different technique or different medium would bring something out of you, something better. But being sometimes a coward or a bit conservative or having a bit little self-confidence makes you stick to the safe...

- ı Uusikylä & Piirto 1999,. 32
- 2 Sternberg 2008, 223
- 3 Csikszentmihalyi 1997, 59
- 4 Csikszentmihalyi 1997, 57

# 4. THE PATHS OF PROBLEM SOLVING

So far I have tried to cover (a little of) the areas of creative work and some of the personality of a creative individual

Without going into the research on special features of the two brain hemispheres, while working with a problem (footnote: referring to a specific work, task or idea when using the word problem) the brain has a tendency to process it in two different ways.

Serial processing is much like solving a mathematical problem: linear and step by step. Parallel processing breaks up the problem into several parts, with different ways of solutions for different parts, all happening simultaneously.

This is very close to the convergent thinking, which is used for logical, well-defined problems with one solution, and the divergent thinking, which leads to a more floating approach, a flexible jumping between a variety of possibilities and, again, associations. Both ways has their pros and cons, and can be thought of as a specific tool depending on the desired outcome. (Notable is also that the typical test measuring intelligence tends to concern so called convergent thinking)

The parallel processing and the divergent thinking naturally leads to many possible solutions, which again requires the "nose" to differentiate between the good and the bad ideas and solutions. Sternberg speaks of abstraction as the path to innovative problem solving. This is also found within the psychoanalytic approach with the primary-secondary process modes<sup>2</sup>, where

- 1. Primary is dreaming, day-dreaming (and also psychosis and hypnosis!) and may contain free association and concrete images, whereas the
- 2. Secondary process stands for the abstract, logical and conscious state.

These two interacting can be referred to as a tertiary process<sup>3</sup>. The creative mind seems to be able to operate more freely on both levels or modes, or at least shift more effortlessly back and forth. What the rational mind otherwise would reject gets another go in the subconscious, where possible gems can re-emerge for the secondary processing.

Another trait is the ability to focus the attention on several things simultaneously, and producing more remote associations or conceptual combinations, i.e. combining two separate ideas or items to a completely new "product". Test subjects were able to use their imagination with a more fruitful outcome when they were asked to work with two randomly offered concepts, than when asked to choose freely. This was due to unexpected use of the pre-inventive structures. When the mind tries to come up with something new it generates building blocks from the pre-inventive structures (known ideas or concepts) in the generative phase. In the exploratory phase these "blocks" or concepts are then interpreted or studied closer for new angles or ideas. The use of two seemingly unrelated "blocks" had a more imaginative outcome than using only one "block" to stretch out and transform into something new.

This was such abstract information that the discussions did not really cover it, but talking about ideas in general gave a small insight in these processes.

John:

The pattern that I see it that it quite often is a big (idea), and I kind of have to take one part of it and express that, but the feeling that it belongs to something bigger is quite often there.

It depends so much on what I am starting... If I, for instance, have an acoustic guitar when I start making a piece, I sing whilst playing, so the composing is with a very strong sense of direction. But when I start making an electro song it is much more the sum of all pieces where the idea is sprung from, then I just start building it from nothing. That's what is so amazing about electronic music; you create things out of nothing! You consider whether you like that chirping sound or not, and then turn it into an instrument. That's the craziness about it, and that's why it is so much more intricate, in my opinion.

Julius:

- 1 Csikszentmihalyi 1997,. 60
- 2 Sternberg 2008, 138
- 3 Smith & Carlsson 1990, 4
- 4 Sternberg 2008, 206

I do believe in the introspectiveness in creating music, believing in your own feelings and picking out the things you want to name or "put into order in reality"... It was that sound art also, to somehow unfold the introvertia through catharsis like, "let it blow up", and loads of crackle and booming and... (makes exemplifying noises). It used to be only about the expressivity and now it's...love, only love (grinns).

It must be this need to find understanding and warmth, abstract things like love... I have simply come to the conclusion that the purpose of my art is to explore, name and expand the concept of humanity with the people of my era. Because I want to name and organize this reality, I violently want to create my own perception of love to share with other people, to expand my perception of love. I want to understand this reality; I don't understand it at all! (laughs). That is the only function. In my opinion that is the only reason for art, to try to organize this... this "broken phone"based world and its myths. Art is much more normal than the normal every-day reality, at least from the experiential point of view.

# 4.1 THOUGHTS ON INTERACTION

A very interesting though more clinically oriented detail is the correlation between the primary-secondary processes and the so called cortical arousal. Cortical arousal refers to the brain activity in the scale between sleep to high-level emotional tension. Martinsdale mentions oversensitivity that leads to withdrawing from the over-stimulating everyday life. This in turn leads to a craving of stimuli that is compensated by "brainwork".

The social extroverts seek compensation of a cortically under-aroused state or under-stimulated state or through the company of others. The introverts on the other hand, are seen as over-aroused to begin with, and therefore withdraw from the hectic surroundings.

High-arousal state tends to result in decreasing creativity. This doesn't state that extroverts are less creative, but that the brain needs its stimuli and the proper one leads to creative processes. This goes back to the personality multitude where the creative mind tends to be able to switch back and forth and focus the attention on what is needed at the moment. To tolerate solitude in order to gain the skills and expressivity, but also happily rely on feedback and interaction. Another theory is that creative people simply lack cognitive and behavioral inhibition, which is closely linked to features of psychosis.<sup>2</sup>

Working in solitude or a certain seemed to characterize both Julius and John. Where to draw the line between just needing a relaxed working space and a "true" introvert is a different problem.

### John:

I'm not very good at work artistically or creatively within a group. That's never been my thing. I wish I could have done that more often, maybe I should have taken the risk of trying that more often, because it probably would have been stimulating, but I've kind of grown in to this working in solitude. Sometimes it's a drag, but it also has to do with ability to concentrate. If I work quite intensely on one of my pieces, I'll go so deeply into concentration that it suits me being alone. But in the creative process it probably would have gained me, doing that more often, but I never took that leap.

- 1 Sternberg 2008, 141
- 2 Sternberg 2008, 143: Degeneration theory, disinhibition syndrome

# 5. 1% INSPIRATION, 99% PERSPIRATION

The next step is to try to find out more about the process from an idea to the finished product. No matter how the brain tackles a problem, we tend to go through certain steps from a vague idea to a completed work. According to Csikszentmihalyi there are five of these steps:

- 1. Becoming immersed/involved in a problem, followed by
- 2. The incubation period, when we juggle with ideas, with subconscious processing where unusual connections are made. The conscious process with active focusing tends to work linearly, but left on their own the ideas connect sporadically and bind together in an unexpected fashion. The incubation period often comes to an abrupt end with the
- 3. Insight, aha!-experience or Eureka-moment, followed by
- 4. Evaluation: in other words; is the idea worth pursuing or not, and then the
- 5. Elaboration, which takes determination and persistence. All of these steps are interrupted by further incubation, epiphanies and fresh insights with loops, stepping backwards, shortcuts and so forth.

Sternberg on the other hand mentions four steps<sup>2</sup>:

- 1. Preparation (learning the required elements for the problem or task at hand)
- 2. Incubation
- 3. Illumination
- 4. Verification/elaboration.

In the following part I will further analyze these steps.

# Julius:

I do a lot of jamming, all sorts of jamming, with guitar musicians and basic rock drills, raw drafts, I just kind of do. And they usually don't become anything, about a hundred half-way songs per week, and they stink! But the simple thing about them (is) that I have to have some sort of emotional experience that I need to express. If I don't have that I have nothing to work with.

# 5.1 FINDING THE PROBLEM

"Impara l'arte, e mettila da parte".

Learn the craft, and then set it aside. The beautiful Italian proverb says it all: no matter what task we are struggling with it is crucial to practice and master the vital skills. Only then are we able to truly improvise and use the playful side in us all. This ties us back to the domain, the field and the person: if we aren't amidst the tools and knowledge of the domain we are unlikely to have an impact on our surroundings. What more is, when we master the tools we also dare to reject them and turn the opposite way for a solution.

"The creative process starts with a sense that there is a puzzle somewhere, or a task to be accomplished. Perhaps something is not right, somewhere there is a conflict, a tension, a need to be satisfied. The problematic issue can be triggered by a personal experience, by a lack of fit in the symbolic system, by the stimulation of colleagues, or by public needs." <sup>3</sup>

Creativity seems more and more to be a highly structured activity, but can be enhanced by abandoning conventional means. The hard part is finding the inspiration or your problem to work with. Presented problems tend to be faster to solve, whereas "discovered" problems tend to have a larger impact or evoke deeper affection and dedication.

- 1 Csikszentmihalyi 1997,. 79
- 2 Sternberg 1991, 191
- Csikszentmihalyi, 1997, 95

John:
Nothing in my near
environment. It (ideas) would
come from magazines, things
I saw in the news, or movies.
Distant, not related to me.
Reading art books or cartoons
or magazines, fantasy art, album
covers. Artists that I knew
were, but that I didn't have any
relationship to except for my
work. That came a bit later, that
I had direct inspiration from
artists that I actually met.

It begins with my emotion. Then I do the rhythm and the base line and sing at the same time, and it builds up quite freely. Usually I work in a linear way, I don't think that "where's the chorus", but how the song goes, it goes like this: (sings) and then: (sings)... some ideas on tape and work on that.

Getting influences...we have a collective need to discuss the myths that are dear to us. I strive to expand music as a thing, more like a nuance thing, to bring something theatrical into it, but mainly it is just extending what others have done. It would be ridiculous to claim that I had invented something new, but some nuances, maybe. Every time you think that it's all been done something new comes along...a nuance or genre thing that no-one has thought of before.

It's about dealing with that feeling...I have some sorts of know-how on how to do these things and I strive to go for it so that I forget the technical part. Sometimes I even make things crappier on purpose by creating intentional limitations, for example; I always have the opportunity to record studio class sound, but sometimes I just use my cell phone to record when I jam and sing. Just so that I don't get that feeling like when you have read too much. Such a silly process (laughs).

I don't understand what it is to be human. I somehow need to determine that, and that is my life work, to define it emotionally. Which, on an intellectual level, is a really crappy thing, because I don't believe in the relevancy of anything. Maybe it's like this that in case life really is this incredibly materialistic, I at least want to claim that there is something else, too.

The source of these lies in personal experience, i.e. the ordinary life: curiosity, interests, surroundings, deprivation factors and even taking interest in seemingly the smallest of problems. Then there are the requirements of the domain: the past knowledge: "the state of the art", the symbolic system and internal logic. Those who work within the field or domain must respond to this logic, either to use it, or compose new ways. (Or as with many fruitful ideas; borrow ways from another domain!)

"It is often dissatisfaction with the rigidity of domains that makes great advances possible." 1

And finally; the social context. This can be the social pressure, what others do and how they influence us, or events of a larger scale, for example "the beloved teacher", the influence of war on art and science.

Luck, or black swans<sup>2</sup> can play a significant part in finding a problem, but preparation is still the key to be able to recognize and utilize them.

Aside from other sources, what I enjoyed in this part was that John actually covered the fact that skill itself can be a rich source of inspiration, and Julius on the other hand mentioned the fact that distancing oneself from the skill can be another solution.

Csikszentmihalyi 1997, 89

2 Taleb 2007

### John:

A lot of inspiration and stimuli, and also bit of help of seeing and believing in my opportunities, came from older, more experienced artists. And once I started to meet and work with older, more established artist.

I guess my goals were, politically and idealistically, to show something or say something through my art... And also, being that old fashioned in a sense (laughs) that I always wanted people to appreciate the craftsmanship, that has been very important to me, always. Because I admire craftsmanship, whether it is carpentry or metal work or painting or... In so many ways that is such a dying thing in our society, that true craftsmanship is soon gone in so many ways of life. I've always had that admiration and the strive to be "clever". (laughs)

When really true creativity on an emotional level hits me, it is grand. I think "grand"; I think big topics, big issues, big ideas. The problem is holding on to that enthusiasm for a certain idea, because I tend to work very detailed, very slowly. It takes a lot of hours into one image, sometimes it can die down. I would say that I quite often start out grand and then going smaller. (laughs). You know, you get lost in all the details.

They are maybe more philosophical things, relating it, like my view of the world, the future of mankind, big things like that.

Quite often the feeling I get observing the news and how the world is going. These things are of course recurring in my art, has been for twenty years

I have a really good example, a song that is a very small "strumming", or a guitar song, "This Spring", in which I wanted to depict spring, the depression that at least many of us Finns suffer from in springtime, a sort of an apathy. How the spring feels like, the pale light and... I had two verses that I had to write, very short ones, and it took me a year to get it done. I thought about it almost every day. Actively. No-one would ever believe it when they hear the song that it would be so hard somehow. Incubational time is precisely that phase where you remove the pretentiousness. You have an idea and then you somehow try to make it recognizable. That I know the sensation, but how I describe it is precisely the phase...

The ideas do come more through doing, but there's so many moments when it's appeared out of nowhere. And I see it fully, I know the style and the pace and...

No song that I've ever finished would ever have been finished without those perfect flashes, like "there it is, I can see it". That immense joy and sensation of succeeding might just be the fix in this. You do reach for it and want it. You do get them, per song there has to be at least one Eurekamoment. It can be so many things, sometimes like I combine (things), I have a song, then put a synthesizer, and I'm like, "there, that's how it goes, of course!" Sometimes during the process that Eureka-thingy comes from being with an old script for a long time and then you kind of put a new dramaturgy to it. You throw it around and about and then it comes to you, that (hit hands together)" these things together! These things together makes the song and no other version will do", the clear moment comes at some point for sure.

# 5.2 CONNECTING THREADS

No matter what we have at hand at the moment, our brain is oozing with activity and thoughts. All our knowledge of the field and the domain is present as constructions in our brain, although the mind works its mysterious and somewhat chaotic ways.

Conscious problem solving tends to work in a more linear direction, whereas the ideas can run freely and simultaneously in the subconscious. During idle time and the incubation period the brain is in constant action. Idle time can be explained as the moments when being present is not needed, the time when we really do nothing of importance. This excludes anything that would require even the slightest of focus, as in watching TV, reading the paper or playing a computer game. Idle time can often be the period when we come up with a problem, but most of all it is a battery charger and a possibility for the brain of conducting "mental meandering". The incubation period is very similar to idle time, but at this point the problem at hand is already sinking in and being processed although we might be focusing on a variety of other things. Since both of these are concerning a state of "unawareness" I was not expecting much information, but both Julius and John had some thoughts on the matter.

Sternberg 2008, 99

### ohn:

It can be visually stimulated, you can sit on a tram, and then see something and then make a connection, maybe the things you have been working on or things that suit your visual inner universe... But definitely daydreaming, and sometimes even feelings from dreams... You know me, thinking in the same circles, in kind of philosophical/political lanes, it can be something that fits in there, but of course sometimes it can be something totally new.

With artistic ideas I might intellectually throw things back and forth in my head, before I actually start. They might start with a bit of sketching, but usually I just go straight on and think "now I got it". They are emotional ideas, so for me I just have to start.

The thought is where your eyes are... If you're thinking and looking at the world around you it feeds the thought in your mind. A depressed person only sees depressing things and pretentious people... so maybe... if you're thinking of that melody maybe I start listening to melodies and try to find... you become tuned to it. When you walk around in that (mode) it can come to you just like WOW! My oh my! A bit like "I'm working but not even thinking about it", it comes like "Phwwt!" (whistling sound). As soon as you "give up" the best works happen.

I am quite obstinate, quite a maker of my own... I have a sense of style. I have developed my sense of style a really long time, by listening to music and focusing on the nuances and especially on the vocals. And if I, in the song, come up with how to... I do make instrumental music too; this is just closer to me so I focus on this now, so in vocal music it's about such small nuances how you say things and what things go in there... Like you can really say whatever in a song and in the interpretation define such different information. If you get the different levels of information to work in a song, that's the sense of style. Understanding the curve of drama is so much about style. I've studied drama, and I definitely have the approach to music that there has to be curves... the sense of style, that defines what kind of music I make.

In electro music you have to do just about everything yourself. If you do (it) by yourself you have to control all the equipment yourself. There are all kinds of traditions and nuances, to understand and realize them, that is the creation of novelty.

# 5.3 JUMPING OUT OF THE BATHTUB

"... an insight occurs when the problem solver finds some similarity to the current problem, and this analogy suggests a different view of the problem that makes its solution clear." 1

The headline is derived from the famous moment of insight when Archimedes, realizing the solution to calculate volume by submerging a piece into water, allegedly jumped out of his bath and ran naked through the streets shouting Eureka in the excitement that followed.

The conscious problem solving can result in a very satisfying moment of discovering a solution, but it is the results of the defocused attention and unexpected association that emerges with the famous "Eureka"-sensation. The magic of the moment is emphasized by that the person usually

"...does not remember any intermediate conscious mental steps." 2

I dare say this excitement of discovery must be one of the most rewarding experiences on any scale.

# 5.4 EVALUATING THE OUTCOME

Incubation and insight would be rather useless (or eventless) without the specific knowledge or expertise that enables us to predict certain results without even trying it out. Even so, after the insight or the aha!-moment the idea still needs to be judged and tested. By being part of a larger community it becomes easier to evaluate the idea. Having access to recent works by others helps us to place the idea in time and context, and also gives us access to more of the valuable feedback from colleagues. Both Julius and John gave the impression of having reached far enough concerning skills to have the courage to evaluate their work very independently.

Sternberg 1991, 185 Csikszentmihalyi 1997, 98 John:

A couple of times a year... I just need to write it down because I just feel so strong that "this is too god, you're going to forget it". The strongest moments of that that I've had, they often come after a big crisis in my life. Something so severe happens in your head that in situations like that, something else comes out that might be positive or clarifying. The brain responses after being taken to the barest minimum.

I have to return to me being such an emotionally driven person, that it very much differs whether I'm feeling up or down (if I am content with the outcome). I can also be very driven to art being "down" or having had a crisis or something. Creating art of a more of a high level is obviously more easy...

Every inch of my body says that I don't enjoy it... But I do enjoy the result so much. Well, I do enjoy it more with every year, but not that much...What usually drives my back to it is that I have a gig coming up or my producer is angry with me because I haven't done some small detail... Somehow quite childish. (laughs). Music becomes real to me when... it's such a private thing, what I do, when I throw a gig and get to communicate it just the way it's supposed to be communicated. And then I have the people there, those people make the music. Then it's real, that song. Maybe I have a need to be accepted or something (laughs). That is quite an embarrassing situation, people come up to you and thank you for the gig, and you are just there like, you want to thank them for being there, that's not pleasurable either. The most pleasurable is when someone says that hey; this is a really good song, what music is this? And you are like "It's my song". That's the moment I like in social situations. That I needn't be me, the music is working. That the music is a bit like a living entity of its own.

# 6. DO WHAT YOU LOVE, LOVE WHAT YOU DO

There is in all of us a constant battle between the conservative and the risk-taking side. We enjoy the safety sensations of relaxing, as the animal does knowing there is no need for fear, no predators around. And we have needed the creative side to survive this far, to cope with unpredictable events and to survive in dangerous situations. Still, seemingly safe; we seek the danger; we put ourselves out there out of pure joy of discovery.

The work, the doing itself, without any guarantees of a fruitful outcome, can be a very pleasurable activity. Aside from other motivational factors like monetary rewards and status, the best case scenario is to be driven by intrinsic motivation: the process of the doing itself giving enough pleasure, feeling significant by itself, with no external motivation or pressure present or needed. Of course it is not as simple as that, and very few of us are lucky enough to have the profession as a source of delight, in fact, that could soon be a toxic environment.

"Pleasure does not lead to creativity, but soon turns into addiction..."2.

While most work has its good and bad sides, sometimes none of that matters; we find ourselves in a deeply concentrated state where our skills match the task perfectly and time just flies away. We are in the midst of a flow-experience, which is characterized by the following:

### John:

Again comes that feeling of mastering something, I have that pen in my hand and I know this is my thing. The head is the limitation, not the hand. And that I've had for so many years. The travel time from the head to the hand is getting longer and longer (laughs).

- 1 Uusikylä & Piirto 1999, 74 Sternberg 2008,. 299 Sternberg 1991, 12 17
- 2 Csikszentmihalyi 1997, 179
- 3 Csikszentmihalyi 1997, 111

I have no problem with flow; I'm a bit like a living jukebox. I can just create melodies and sing, and I remember thousands of songs by heart. The music just comes very naturally. The sense of time disappears completely when I get on to something. I can sit there for ten minutes or five hours without noticing how much time has passed because it just needs to be finished. I feel alive and a reason to live when I achieve this... It's just such a small thing of it all.

I believe it's a need for humans to create... I can't put it into one sentence why I make music. Because for me it's just like:

"I'm breathing, I'm walking, and I make music".

- The activity seems to have clear goals for every step, a feeling of purpose or guidance.
- As we go along we get immediate feedback, we see the results along the way.
- There is a proper balance between challenge and skill. Too hard, we become disillusioned, too easy; we feel it is not worth pursuing.
- We feel no stress about the outcome or failure; we are too involved in the activity to care.
- Distractions vanish; we are not bothered by dishes, rent or global warming.
- The action and awareness merges and the activity becomes "pure doing".
- Time disappears or becomes distorted.
- The self disappears; we are more or less in harmony with ourselves.
- The activity becomes autotelic, i.e. the doing is the purpose itself.

Together with the joy of discovery I felt that motivation and flow represented the "holy trinity" (if you excuse the analogy) of positive sensations that surround and result in creativity.

The reality seems so plain, that there are ups and downs, good and bad days and all the boredom of us mortals in there too. So deeply rooted are the beliefs about the "gifted ones", even if one of my headlines already stated: 1% inspiration, 99% perspiration. Therefore I was especially pleased to hear Julius' thoughts on the sensation of a song "coming to life" as mentioned on the previous page.

# John:

I can work very well under pressure; I can always find a solution, commercially. It's when I do it for myself that the problem can be bigger. Because then, if I'm not satisfied I might abandon it because it was too difficult... But (if) there is no deadline; there is nobody else except me, depending or pushing for it... Then it (flow) can happen.

# 7. WRAPPING IT UP

I gave this paper the work name "creative constructions" when I began the project, and it proved to be a very describing name. While I realise that there is a tremendous amount of research I haven't even heard of, and new information acquired every moment, I do feel that I have gained a greater understanding about the complexity of the topic. Starting with only a vague idea of what creativity research contains, the process felt like rolling out a red carpet for myself.

So, in order to maximize the creative abilities we all apparently have within us, the following pieces needs to be puzzled together according to its own unique pattern:

As a child, exposure to a domain with a crystallizing experience as a result seems to be a shortcut to a passionate involvement. For those not so lucky it is still of equal value to find an interest in a domain, the earlier the better. After this; practice, practice and practice more. While the ten year rule has its exceptions, is still takes many years to master the tools and to create a "personal database" out of the information. Learning and perfecting the needed skills enables us to forget the rules later on and gives us courage to experiment and play with the instruments with a greater freedom. The tool and the skill itself can be a source of creativity, and mastering it helps us to single out the good ideas from the bad, especially when combined with the support of an open-minded field and culture. Working with the colleagues of the field enables us to find and accumulate new ideas when similar interests and minds are gathered. Combine this with a mind set on solving problems through new angles, a curiosity close to the child exploring its surroundings, and the joy of the work and of being amidst the knowledge and tools of something we love, the brain carries on generating new ideas.

As a teacher this knowledge is of great value, both to encourage my future pupils and to state reasons for different thinking and new approaches, which I dare say art education definitely provides us with. Furthermore; to emphasize the joy of doing, learning and exploring, and how it integrates us in the society with a chance to improve it from the inside.

"Creativity is by no means an autistic activity. Even the most prominent creative genius operates within a social context."

Find the solitude required, or the other domain that feed new ideas to the first one, or create your own creative space if needed. But most of all; preserve the child-like joy of finding new things and seeking the adventure of exploring things from a new angle. The brain craves new stimuli to play around with, and a lifestyle with the opportunities to do so feeds fresh thinking and results in even more creativity.

**Julius:** 

That feeling when you throw a gig, that it's everyone's song. It's not yours anymore, nobody else's either, it's joined, a collective experience. That's sort of the best of it.

Music is always a collective thing. Your job is to reach out, if not to as many as possible, then as clearly as possible to some person you want to connect with. Know who you want to reach, that's who you share the music with.

That's why you carry on.

John:

In art school, when we started with oil paint, I didn't have the patience for how to paint with oil, so I just painted and everything just blended, I lost the sense of control so I hated it. I didn't paint for many years!

Now it's the preferred medium, but you need to learn the tricks of the trade and be patient.

Sternberg 2008, 124

### 7.1. CONCLUSIONS

Exploring the themes that rose from the literature through the thoughts of two professionals, dependent on new ideas and creativity, gave me an opportunity to understand the processes in a way that perhaps otherwise would have stayed distant and very theoretical. The dialogue as a method enabled me to participate and witness a more free flow of thoughts, something that a traditional interview would not have permitted. Since I did have a goal; to hear their ideas on the creative process and what surrounds it, occasionally I did have to step in and direct the discussion towards certain topics. Therefore the method was not entirely free of dilemmas; when to trust that the flow of thoughts would cover the areas I hoped to hear about and when to set it aside and ask for more on a specific theme; this did happen a few times in both discussions. But I do believe that most of the time it was according to the characteristics of a true dialogue; that of sharing thoughts and experiences, both trusting each other with information that a structured interview would not have allowed. It was an arranged situation, but even so; it allowed thoughts to be expressed that otherwise might not have found a place to be said out loud, and turned the knowledge I gathered through the literature into something real and experienced rather than cold information.

Hearing the thoughts on creativity and thus animating the research I have read up on has given me the courage to believe in what I learned, that I can rely on it and use the information as a teacher; to encourage my future pupils not to lose the playfulness and to stick to what they enjoy doing. With the right ingredients; who knows what they will be capable of.

# LITERATURE

Csikszentmihalyi, Mihaly, 1997(1996), Creativity: Flow and the psychology of discovery and invention, New York: Harper Perennial

Csikszentmihalyi, Mihaly, 1994(1993), The evolving self: A Psychology For the Third Millennium, New York: HarperCollins Publishers Inc.

Haavikko, Ritva & Ruth, Jan-Erik, 1984, Luovuuden Ulottuvuudet, Espoo: Amer-yhtymä Oy Weilin+Göös,

Smith, Gudmund J. W & Carlsson, Ingegerd M, 1990, *The Creative Process: A Functional Model Based on Empirical Studies From Early Childhood to Middle Age*, New York: International Universities Press Inc.,

Sternberg, Robert J, 2008(1999), Handbook of creativity, New York: Cambridge University Press

Sternberg, Robert J, 1991(1988), The Nature of Creativity, New York: Cambridge University Press

Taleb, Nassim Nicholas, 2007, The Black Swan: The Impact of the Highly Improbable, London: Penguin Books LTD

Uusikylä, Kari & Piirto, Jane, 1999, Luovuus: Taito löytää, rohkeus toteuttaa, Jyväskylä: ATENA Kustannus WSOY

Varto, Juha, 106/2007 "Dialogi". In Bardy, Marjatta, Haapalainen, Riikka, Isotalo, Merja & Korhonen, Pekka, *Taide keskellä elämää*, Helsinki; Nykytaiteen museo Kiasman julkaisuja

Walters, Joseph & Gardner, Howard, 1984, *The Crystallizing Experience: Discovering an Intellectual Gift* Read 11.3.2013 <a href="http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED254544">http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED254544</a>>