To create with the imagination

...the search for FLOW



Master Thesis By: Lisa Björke

Spring 2010

Konstfack, University college of arts, crafts & design

Department: Ädellab/Metallformgivning

Mentor: Aurél Schiller

Master examination 13th of April 2010

opponents: Otto Künzli and Jorunn Weiteberg

INDEK

- 1. Abstract
- 2. Background
- 4. Introduction
- 6. Questions of issue
- 8. Imagination
- 10. Creativity

I Difining creativity

Il Theories of creativity

20.Flow

I What is flow

Il Psychic entropy and negentropy

III Flow in our spare time

- 28. Conclusion
- 30. References
- 31. Further reading
- 32. Pictures



Our world is filled with creativity; it is a part of everyday life for all humans. All products and artefacts in the public realm and in our private space come from creativity. Some are created to satisfy a certain need in the society and others are created to please the artist creating it. There are thousands of other reasons why we have a need to create.

Creativity would not exist without the imagination and both are crucial to humans and the development of society.

The imagination is endless; it can take you back and forth in time letting you travel to inexistent places, so that you can create an utopia for yourself. Imagination is crucial in a creative process: without it, the creatvive process would be somehow crippled. Through imagination we are able to see the goal ahead.

On one hand working with creativity is frustrating, since it is a constant search for solutions and new ideas. On the other hand it is very rewarding: the moment one finds answers, starts the work and finally comes into a state of flow, creative work suddenly is worth the frustration. The search for flow through challenging tasks is a way to improve the quality of both your artistic life and your life in general, and it is open to anyone who sees the point of the struggle.

In this essay I want to research the world of imagination and creativity: what do we use it for and why do we need it, how come it is so necessary? A creative process can be everything from frustration to complete satisfaction, such as a state of ecstatic flow.

Background

About seven years ago I started to deal with my creativity in a new way. Before that moment I was working with theater, acting, and I saw it as a good way to use my creative ambition. Nevertheless, as years passed by I could feel that it was draining me more and more as the expectations got higher. I noticed that I couldn't deal with the feeling of getting turned down for my interpretation of another man or woman's work. Theater is not only about your expression; it is also about how you look, what age you are and whether you know the right people or not

I wanted to be the provider of the first fruit of creativity rather than dealing with someone else's creations. I struggled for some years to find a new way to work with creativity and a lucky coincidence lead me up to what I work with today. Finally I feel like I am the one mastering my emotions. Even though I also get evaluated for what I do now, I feel like I can stand up for my expression because finally it is mine. My jewellery work also does not depend on the emotional state I am in at that point since I have been able to disconnect the work from me and it does not depend on my bodily expression any more.

I few years ago during my bachelor studies in Gothenburg; we had a workshop about emotions and expression. The woman who led the workshop, started off with talking about different stages of a creative process. Up until then I believed that I was the only one who could have the feeling I was stuck in a process, the moment where you don't have any answers to anything and where everything is going wrong. But when she spoke about this phase as the "Frustration phase", I suddenly realized that I

was not only one experiencing this difficult part of the creative process.

She was also the person who introduced me to the term "Flow", this state of creative high where everything seems to go easily and your hands move with ease, making you feel like you will never run out of good ideas again.

She described these different stages as a cycle, going round and round. For me it was very uplifting to hear that first of all, I was not alone in this and secondly, that even if I was in the frustration phase I would eventually and presumably come into a state of flow again.

Unfortunately I cannot remember the woman's name, but I will never forget the feeling that she planted in me, when introducing me to this fantastic cycle of creative phases.

"To know oneself is the first step toward making flow a part of one's entire life. But just as there is no free lunch in the material economy, nothing comes free in the psychic one. If one is not willing to invest psychic energy in the internal reality of consciousness, and instead squanders it in chasing external rewards, one loses mastery of one's life, and ends up becoming a puppet of circumstances."

(Csíkszentmihályi,2004,p.188)

Introduction

Our world is filled with creativity; it is a part of everyday life for all humans. All products and artifacts in the public realm and in our private space come from creativity. Some are created to satisfy a certain need in the society and others are created to satisfy the artist who created it. There are thousands of other reasons why we have a need to create.

Talking about creativity and what it is can be anything between possible to impossible. If you ask people what creativity is, the chance to get two identical answers is highly unlikely, but still we somehow know what it is. Creativity would not exist without the imagination and both are crucial to humans and the development of society. Nils-Erik Sahlin, Swedish professor in theoretical philosophy at Lund University, has worked a lot with creativity and I will, among others, use his research in my text in order to understand the term creativity, what it stands for and how and why we use it.

Being surrounded by creative solutions I ask myself whether we need more. I suppose the answer must be both affirmative and negative. Negative, because people are overconsuming and we are exploiting our natural sources to such an extent that it is not good for us and the environment. Affirmative, because creativity doesn't always have to be about the outcome, many times the journey is the goal. For some, including myself, it is not about coming up with new solutions for a problem; in this case creativity is about expressing your fantasy and using your imagination to the full, without borders and expectations, to make a statement and tell a story.

But even though we have more than we can ask for, creativity is necessary for hu-

mans to survive. Prehistoric man used their inventive mind to create things to help them get food, lead an easier life and to help them survive; such as weapons to protect themselves. Through evolution this creativity has become an important aspect of our contemporary society, being both a good and bad development. In our western society we don't need to come up with creative solutions in order to survive physically, but I think we need it to survive mentally and to stay sane.

The imagination, as I mentioned above, plays a huge role in creative fields/professions such as arts; for an artist it is where it all begins

The imagination is endless; it can take you back and forth in time letting you travel to inexistent places, so that you can create a utopia for yourself. Imagination is crucial in a creative process: without it, the creative process would be somehow crippled. Through imagination we are able to see the goal ahead.

On one hand working with creativity is frustrating, since it is a constant search for solutions and new ideas. On the other hand it is very rewarding: the moment one finds answers, starts the work and finally comes into a state of flow, creative work suddenly is worth the frustration. The search for flow through challenging tasks is a way to improve the quality of both your artistic life and your life in general, and it is open to anyone who sees the point of the struggle.

The Hungarian psychology professor Mihály Csíkszentmihályi developed a theory about the state of flow, and I will use his research to support my essay.

Questions of issue

In this essay I want to research the world of imagination and creativity: what do we use it for and why do we need it, how come it is so necessary? A creative process can be everything from frustration to complete satisfaction, such as a state of ecstatic flow.

What is it that can give us this complete feeling of satisfaction simply by doing, when the process is a reward itself?

What is happening to us when we experience flow, and how can we get to that state?

Being in this state evokes a feeling of total gratification: everything is going easy and working in the studio is pure happiness.

How can a creative process be so rewarding sometimes, when the making itself can create this edifying feeling of flow?

The experience of flow seems to exist within many fields, but is there a difference between creativity in theoretic fields and artistic/practical ones?

Within the jewellery field I encountered different ways to approach new projects and I noticed different schools seem to stand for different ways to deal with the task. In some schools students start with sketching on paper, having a clear image in their mind of a finished object that they then "just" have to make. Others start off by set-

ting the scene and collecting images and materials that match the expression and atmosphere that they are looking for. Then they directly start sketching in the material without thinking too much, but using their imagination throughout the whole process. They keep an open mind towards what comes out and they find different paths to proceed with. Could this be a way for them to trick their brain to come up with new solutions?

Can we fake creativity in order to stimulate the brain to new borders and reach new results?

If you feel stuck in a process, is it possible to work your way through it with faked "new knowledge"; keeping the hands busy with known things in order to trigger new ways of thinking to push the process forward towards the goal?

Imagination

"Imagination...is more important than knowledge. Knowledge is limited. Imagination encircles the world."

Albert Einstein

"Creativity matters in all aspects of society, work and life. The imagination mindset helps us think in new ways ... which produces creative ideas and solutions ... and ultimately leads to innovation." (http://www.appliedimagination.org)

"Imagination is our ability of forming mental images and sensations in a moment when they are not experienced through sight, hearing or other senses. "Along with satisfying the basic requirements for survival, human beings seem driven to express their varied natures through individual or collective acts of imagination. This urge to create seems to be an essential part of the nature of Homo sapiens; in fact, this desire to express our innermost thoughts through conscious ventures of originality sets us apart as a species from the rest of creation." (http://www.lynchburg.edu)

Imagination plays an important role in our learning process and it helps us give meaning to experiences and understand knowledge. Children often use narratives or pretend play in order to exercise their imagination. This aspect of not being limited to the acquisition of exact knowledge by the requirements of practical necessity makes imagination, up to a certain point, free from objective restraints. The ability to

imagine oneself in another person's place is very important for social relations and understanding

"Thus, it is Gaut's view that there are only two ways in which we can credibly link the imagination to creativity. He named the first way the "display model," which maintains that my unconscious generates a creative idea to me through my imagination. This model appears to be present in passive creativity, for the imagination doesn't have a necessary role, but a display function. It can be compared to the monitor of a computer, which has the peripheral role of displaying the creative results of a computer, but does not aid the creation of the software. The second way, the "search model," is more apparent in active creativity, as it holds that the imagination has a central position in the creative procedure. Gaut states that, "according to this model, when one comes up with a new idea or invents a new object, one can be thought of as having worked through various possibilities ordered in a logical space." In other words, the imagination is used to visualise several different outcomes before selecting and settling on the most relevant one. In this way, it is clear that Gaut believes that the imagination is suitable to be the vehicle of active creativity."

(http://socyberty.com)

"Imagination is the beginning of creation. You imagine what you desire, you will what you imagine and at last you create what you will."

George Bernard Shaw

Creativity

Creativity- originality, imagination, inspiration, ingenuity, inventiveness, resourcefulness, creativeness, vision

Creativity can be everything and nothing at the same time, making it hard to pinpoint and resume in a brief definition. Nevertheless, in this chapter I will look into the theories about creativity and try to find an answer to what it is that gives people this desire to create.

What is creativity and why is it interesting?

"Creativity is a capacity for solving problems, the brain's ability to produce new unexpected solutions. It can be everything from a good line in an everyday conversation to solving a very complicated scientific problem. Creativity is appealing because the quality is rewarded in different ways. First of all the society is striving for creativity and has therefore created tempting external rewards, such as work that brings up (or jobs/professions/occupations that bring up) money, power and prestige. Second of all there are strong personal rewards: mastering a profession that demands a complex technology, gaining the ability to organize and experiencing moments of creativity that generate intense satisfaction. Csikszentmihalyi has coined the term "flow" for this state of total professional rush/euphoria, which for example surgeons experience so strongly as if being highly intoxicated with narcotics."

(Boman, 1990, 74)

Creativity can exist in all layers of the society; we can talk about creativity in hobbies, in arts, tax planning, sexual creativity etc. But so far we don't talk about creativity in a negative sense, can there be creative terrorism, creative torture, creative black-mailing?

In the Idealistic honest society maybe not, but surely this form of creativity exists in criminal groups. If we don't think about ethics and moral we have to accept creativity in all layers of humanity, whether it is good or bad.

"I don't know if it is really worthwhile to define creativity, but I can try to formulate a very wide frame of definition. Creative is the person who in one or another level (from the modest up to the "divine" of creation) either thinking or doing something more or less new and original, that is seen as valuable in some aspect of a small or large group of people, or at least – to mention a borderline case- is representing some sort of value for the originator himself (for example give him or her an appreciation of beauty). This doesn't say very much. I'm sure there are a lot of other definitions that are better, but they might not be of any help anyway. In any case it is hard to limit the concept. The easiest way is perhaps to draw the line personally where we think that it's suitable, according to the view that an individual thinks is important for the moment, or as they continuously investigate. For my part, I can only declare that I think my neighbor's small garden is creative and that I think a lot of academics and artists work is rubbish."

(Fenyö, 1990, p.28)

Creativity is about seeing things in a new light, to come up with new solutions and find new ways.

"The research around creativity is characterized by anecdotes. Many people who write about creativity, speak of it as a conscious or unconscious mystification and romanticize the conception of it. They define creativity as a condition where the divine spark and chance collaborate and where the end result is a great achievement."

(Alsrup, 2000, p.40)

According to Nils-Eric Sahlin, if you read through a great part of the extensive literature about creativity you might easily get the impression that in order to be creative you have to be a physicist, not too old and male. But Nils-Eric Sahlin is claiming the opposite. In his opinion there are many extremely talented persons who lack in creativity. But also the opposite often exists: people that are bubbling of ideas and originality, but miss the conclusive ability to structure and value.

For many people creativity is an ability to see things in a new light, and in new ways.

Theories of creativity

- Romantic era: creativity comes from god and the divine
- Psychoanalysis: Creativity is our ability to reshape or sublimate forbidden feelings.
- Cognitive psychology: creativity is a special way to think differently.
- Positive psychology: creativity is an optimal psychic state that makes us use our abilities to the full.
- Neuropsychology: Creativity is when alternative ways are used in our neutral network.

"Before psychology arose as a science, creativity was considered to be a gift from God, but with Sigmund Freud and the arising of psychoanalysis, creativity started to be seen as an ability to reshape forbidden feelings. Followers of this thought consider the unconscious as a special storage for creative ideas. Modern psychologists have other suggestions, for example that creativity is a way to think differently in an optimal state or an expression for such a state."

(Mikkelsen, 2008, p.75)

There are different ways to look at creativity, this following chapter will focus on the theory of positive psychology and creativity in a more practical sense. In the beginning of the 20th century the French mathematician, theoretical physicist and philosopher of science Henri Poincaré divided the creative process is into four phases.

- 1. Preparation phase (collecting information)
- 2.Incubation phase (the process of thinking about a problem subconsciously while being involved in other activities)
- 3. Illumination phase (where the actual idea is created)
- 4. Verification phase (seeing whether the idea is a successful or not)

There is however a problem with this theory, first of all Poincaré is using his own creativity as an example, and he is limiting it down to creativity in mathematics. Second of all he is talking about one particular occasion. According to Poincaré there was no need for more examples than this, he claimed that others would recognise these phases and the process he is describing even from the fields they are engaged in. Even though this was a theory made for mathematics, can it be adaptable to art? Do jewellery artists follow the same structure as Poincaré mentioned, or does it look different?

To solve a problem is not creative in itself; it is the way you do it that tells about the creativity or the lack of it. Creativity doesn't have to be the discovery of something new and revolutionary. Talent without imagination and flexibility seldom results in creativity. Even if we can't say exactly what creativity is, or where it might come from, one can say that if we have a need to develop our own creativity it is first of all about having the courage and the will to produce a lot. To quote the author Julia Cameron "We have to take care of the quantity, then God will take care of the quality".

Creativity is to solve problems, but solving problems is not always creative...

I will now compare my artistic process of my graduate project to the four phases of the creative process as defined by Henri Poincaré.

1.Preparation phase (collecting information)



1. Alice in wonderland 2. The giant, Cremaster 5 3. Fairytale 4. Spring 5. Materials

The first phase in an artistic research is to set the scene for the story of the future work, this might be collecting images and materials that have the right atmosphere for the story. This first stage is about sketching freely in the material to find structures, combinations and qualities

that could fit in to the future body of work.

2.Incubation phase (the process of thinking about a problem subconsciously while being involved in other activities)



Tim Burton's Alice in wonderland 2009

This could also be named the frustration phase, where the work seems to stagnate and you don't see any answers or questions. But subconsciously you are refining the project while you are occupied with other things. This could be that you are working with things that do not make any sense for you at the moment, but are keeping you occupied while you are processing and digesting your project. You are stimulating your brain through already known things to trigger new ideas.

3. Illumination phase (where the actual idea is created)



After a while the pieces seem to fall into place and you can see in what direction your project can be taken, and finally you have some answers and maybe even more questions.

You find the structure you want to follow and you can select a number of your objects which would be worth continuing with and discard or put aside those left. You will eventually find yourself in a state of creative flow, where everything is going easy and you feel you have the answers to everything concerning your work. Working with the project gives you a feeling of total happiness and you loose track of time and space. This part of the process occurs when everything is running smoothly; just being in the process is rewarding in itself.

4.verification phase (seeing whether the idea is a successful or not)



This might be the biggest difference between a theoretical and an artistic research. To verify a theoretical process might be to see if the equation is correct in the end or to see if the machine is working in real life as it did in theory and on the blueprint.

To verify whether an artistic research is successful or not might depend on the satisfaction of the viewer or -in the case of jewellery or fashion- the wearer. It might also depend on how you perceive the critique given on your work. Other relevant aspects to consider for evaluating the success of an artistic process are for example the choice of materials and whether the piece mediates the story you wanted to tell. This phase might be more vague in an artistic process as the beauty lies in the eyes of the beholder.

Brooch by: L.Björke 2010 Comparing Poincaré's creative process for mathematics to an artistic one, more precisely, to that of my own artistic work, it can be said there are many parallels. In that sense, considering small differences/nuances, his theory of the creative process is adaptable to other fields. This knowledge about the creative process could be of help for future projects, as one could then recognize the different stages and find serenity in them.



"Flow"=a condition of total concentration followed by a feeling of complete I euphoria and an experience of absolute goal-orientation.

Flow is the mental state of operation in which the person is fully immersed in what he or she is doing by a feeling of energized focus, full involvement, and success in the process of the activity. Proposed by Mihály Csíkszentmihályi, the positive psychology concept has been widely referenced across a variety of fields.

According to Csíkszentmihályi, flow is completely focused motivation. It is a single-minded immersion and represents perhaps the ultimate in controlling the emotions in function of performing and learning. In flow the emotions are not just contained and channeled, but positive, energized, and aligned with the task at hand. To be caught in the ennui of depression or the agitation of anxiety is to be barred from flow. The hallmark of flow is a feeling of spontaneous joy, even rapture, while performing a task.

Working with creativity in an education is on one hand frustrating, since it is a constant search for solutions and new ideas. On the other hand it is very rewarding: the moment one finds answers, starts the work and finally comes into a state of flow, creative work suddenly is worth the frustration. The kick of being in flow is indescribable; it is like you will never find yourself in the frustration phase again. You feel like you have answers to everything and creativity is in everything you do; flow gives a total feeling of happiness.

This a feeling is not only experienced within the art field, it can be applied to any creative work such as science, medicine, construction and so forth, and it does not depend on our social situation, ethnic belonging or education. The search for flow through challenging tasks is a way to improve the quality of our artistic life and through that also our life in general, and it is open to anyone who sees the point of the struggle. We find this feeling when we are engaged in a meaningful task that puts our knowledge to the test; when we have all our focus pointed at one direction, and loose all sense of time and space. If we face a task that is above our level we feel anxiety and frustration, but if the task is too easy, we will get bored quickly and lose our inspiration.

"The flow-state will appear when we have good conditions to manage a challenging task"

(Georg Klein, 1997, p.9)

During childhood, we search for this experience of flow instinctively and while growing up we learn to focus our activities towards more practical goals that also can create flow, but seldom do. This is due to the difference of rewards. Mihàly Csìkszent-mihàlyi divides the rewards into the "autotelic reward" and the "external reward". The autotelic reward is the state of flow itself, which can give a deeper and longer lasting feeling of satisfaction than the external reward can do. Csìkszentmihàlyi claims that if you search for all the rewards in the world you can easily find yourself in a state of inner separation, lack of concentration and a sense of meaninglessness.

How does it feel to be in flow?

- 1. Completely involved in what you are doing: focus, concentration.
- 2.A sense of ecstasy: the feeling of being outside everyday reality.
- 3. Great inner clarity: knowing what needs to be done, and how well you are doing.
- 4. Knowing that the activity is doable: knowing that your skills are adequate to accomplish the task.
- 5.A sense of calmness: no worries about oneself, a feeling of growing beyond the boundaries of the ego.
- 6.Timelessness: thoroughly focused on the present, hours seem to pass by in minutes.
- 7.Intrinsic motivation: whatever produces flow becomes its own reward=autotelic reward.

Psychic entropy © negentropy

"Emotions refer to the internal states of consciousness. Negative emotions like sadness, fear, anxiety, or boredom produce "psychic entropy" in the mind, that is, a state in which we cannot use attention effectively to deal with external tasks, because we need it to restore an inner subjective order."

(http://www.eoht.info/page/Psychic+entropy)

According to Csìkszentmihàlyi our modern society is characterized by increased entropy, which is a serious threat to our culture. Psychic entropy is a state of confusion where you don't know how to address your attention or how to focus; your life becomes out of control, you don't know what you want to do and you are never satisfied.

As an example we can take a policeman who normally is very engaged in his work and faces all his tasks with a lot of enthusiasm. One day he has a lot of trouble staying focused and he is not really present in what he is doing, he is in a bad mood and can't wait for the day to end. The thing that is troubling him is in fact rather simple and trivial, but it is disturbing him a lot. In fact he has a very old car that is completely falling apart, and has started costing him more and more money. A few days earlier he had discovered a new problem and he knew that in order to fix it he would need a lot of time or would have to pay a large sum of money to pay someone to fix it for him. But he is depending on the car to get to his work and as he is newly employed at his work, so he wants to be on time and stay focused. But this small problem is occupying his thoughts and disturbing his concentration. This is an example of what is happening when the inner order of the self is disturbed.

"The fundamental pattern is always the same: psychic entropy arises when information that is in conflict with the person's goal creeps into his/her consciousness. Depending on how central the goal is for the self and how serious the threat is against it, a certain amount of attention must be spent on it to dismiss the danger and to be able to do other things."

(Csìkszentmihàlyi, 1990, p.59)

The opposite of psychic entropy is the flow state, when you are focused and completely involved in your activities and when you direct all your energy towards what you want to accomplish. This opposite emotion to entropy can be described as "psychic negentropy".

"Positive emotions like happiness, strength, or alertness are states of "psychic negentropy", because we don't need attention to ruminate and feel sorry for ourselves, and psychic energy can flow freely into whatever thought or task we choose to invest it in ... therefore intentions, goals, and motivations are also manifestations of psychic negentropy. They focus psychic energy, establish priorities, and this creates order in the consciousness."

(http://www.eoht.info/page/Psychic+entropy)

An occupation doesn't have to be mentally challenging to bring a person into a state of flow; butchers and plumbers can experience it as well as scientists and doctors can. Csìkszentmihàly noticed that people who have simple jobs often like their work better than people with professions such as scientists or professors. There are different reasons for this: people who are very ambitious and have had a high education are often never satisfied with what they have and they don't focus solely on the job, but on the future, the payment or on the prestige and the power rather then on what they are doing at the moment. Therefore they don't experience on what they are doing and don't see that as rewarding itself

Flow in poetry...

"It's like opening a door that's floating in the middle of nowhere and all you have to do is go and turn the handle and open it and let yourself sink into it.

You can't particularly force yourself through it.

You just have to float. If there's any gravitational pull, it's from the outside world trying to keep you back from the door."

(from lecture with Mihály Csíkszentmihályi)

Flow in our spare time

A lot of people work just to be able to get spare time, but not many can use that time in a meaningful way. Csikszentmihaly observed people and found out that the experience of flow occurs more often in a work situation than during spare time. This is in contrast with the wish of the testees for more spare time and less work and is related to the fact that many people don't see what parts in life they really enjoy and what parts can lead to stress and depression. If you gain more insight in your life you can learn to balance the negative and the positive. This is something creative people can control better than others and which is an important component of their creativity.

The human biology is set for an active life, but in our society today it is to easy to live a passive one, since we are provided with finished solutions. In our highly technological environment we can go through periods of doing nothing, and merely consume what is at hand. This leads to boredom because our brains are not programmed for this passivity; it demands an active life and we need to use the skills mankind has developed during its evolution. Latest technological developments have changed us from highly active beings into more passive receivers of all kinds of conceivable and unthinkable entertainment: we are consumers of what is offered to us. If we don't use our spare time in a meaningful and constructive way, if we stay pas-

sive it can be dangerous both for the individual and the society.

Flow in figure skating...

"It was just one of those programs that clicked. I mean everything went right, everything felt good...it's just such a rush, like you feel it could go on and on, like you don't want it to stop because it's going so well. It's almost as though you don't have to think, it's like everything goes automatically without thinking...It's like you're on automatic pilot, so you don't have any thoughts. You hear the music but you're not aware that you're hearing it, because it's part of it all."

(Susan Jackson, Australia, from lecture with Mihály Csíkszentmihályi)

Conclusion

When I started the research for my thesis I didn't quite know what was awaiting me; I wasn't expecting to find so much literature about these topics. On one hand I expected to find more research on our imagination, but that seems to be too individual for creating a general theory, and the things I found were too vague to even bother to look into. But on the other hand I found a large range of literature concerning the topics of creativity and flow.

Creativity is about seeing things in a new light, to come up with new solutions and find new ways. But creativity could be much more than that; it could be a way to improve life, to get inspired by your surroundings, to translate your imagination into an object.... and more, much more.

To work in a creative process and be in flow can be seen as therapy for the soul, where your creations don't have to be anything new and revolutionary. In order to find new answers I believe we could work with familiar things in order to stimulate the brain; it could make us see the new things, which we didn't expect in the beginning. When we get stuck in the frustration phase of a process, we can be certain that afterwards we will be able to look back at it and find more answers than we saw when we were still in the phase itself. Maybe this precise moment, after the frustration phase, provides us with more answers than when we are absorbed in the flow state, since we are then occupied by all the information we get out of the work-in-progress. We can rely on the fact that frustration is part of the process and eventually it will lead us to all the answers we need and even more, or perhaps to more questions that could be useful in the future. I would suggest that we could fake creativity

in order to stimulate the brain to new borders. The brain needs exercise as well as our body.

To be creative is to be able to use spare time in a constructive way and not to end up in a life full of pointless activities. Creativity exists in all layers of society, even though some occupations can be considered as more creative than others. Despite the differences we can experience flow within all areas of occupation. The typical feeling of flow; that feeling of total satisfaction simply by doing, where no external reward is necessary, seems to be universal.

List of references

Books:

- Csíkszentmihályi. M, Flow-den optimala upplevelsens psykologi, 1990
- Csíkszentmihályi. M, Finna flow-den vardagliga entusiasmens psykologi, 1997
- Csíkszentmihályi. M, Good buisness, leadership, flow and the making of meaning 2004
- Klein. G(Sammanställning & kommentar), Om kreativitet och flow, 1990 (Fenyö. E, Boman.HG)

Articles:

- Alsrup. L, Kreativitet-en gåva från den generösa hjärnan, Personal & ledarskap, no.11, 2000
- Mikkelsen. T, Från fuskverk till mästerverk, Illustrerad vetenskap, no.2, 2008

Internet sources:

- http://www.appliedimagination.org
- http://www.eoht.info/page/Psychic+entropy
- http://www.lynchburg.edu
- http://socyberty.com

Further reading

Books:

- Csíkszentmihályi. M, Creativity, 1996
- Edelman. GM & Tononi. G, Consciousness- How matter becomes imagination,
 2000
- Ehn. B & Löfgren. O, När ingenting särskilt händer, 2007
- Gärdenfors. P, Den meningssökande människan, 2006
- Sahlin. N-E, Kreativitetens filosofi, 2001

Articles:

- Smith. G, Mod att skapa, Forskning & framsteg, no.4, 2000
- Rollof. J, Vad är egentligen kreativitet?, Personal & ledarskap, no.11, 2003

Pictures

Front page, jewellery by Lisa Björke, photo by:Lisa Björke 2010

Page no. 15

- 1. Alice in wondeland source: http://s85.photobucket.com/albums/k63/corrinevedder/?action=view ¤t=060918_cal_alice.jpg
- 2. Ceamster 5,her giant by: Matthew Barney source: http://www.cremaster.net/crem5.htm
- 3. Fairytale source: http://allsorts.typepad.com/allsorts/2008/05/domestic-bliss.html
- 4. 'Spring, The Sweet Spring, Is The Year's Pleasant King; Then Blooms Each Thing, Then Maids Dance In A Ring, Cold Doth Not Sting, The Pretty Birds Do Sing. Cuckoo, Jug-Jug, Pu-We, To-Witta-Woo!' 2005 Watercolor, ink and colored pencil on paper by:Jen Liu, source: http://www.upstreamgallery.nl/jen-liu/

Page no. 16

Alice in wonderland, Tim Burton, 2009 source: http://www.filmofilia.com/2009/06/22/more-alice-in-wonderland-images/

Page no. 17

- 1. Object by Lisa Björke, photo by: Lisa Björke 2010
- 2. Object by Lisa Björke, photo by Lisa Björke 2010

Page no. 18

Brooch by Lisa Björke, photo by Lisa Björke 2010

Page no. 24

http://images.worldgallery.co.uk/i/prints/rw/lg/1/0/Ansel-Adams-Oak-Tree-Sunrise-10064.jpg

Page no. 26

http://www.modernadansteatern.se/img/uploaded/hires_200901211428302264.jpg