Constraints in Film Making Processes Offer an Exercise to the Imagination
- A Pleading Based on Experiences from Denmark

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Abstract
What does the use of constraints offer filmmakers? A screenwriter from The National Film School of Denmark suggests: “I love constraints [...]. I think that’s a great relief, because it offers an exercise to your imagination” (Philipsen 2005: 211). This article hopes to illuminate methods for fostering creativity based on two case studies from The National Film School of Denmark and The Video Clip Cup 2007. In scrutinising these studies I intend to describe what seems to best facilitate flow experiences in film making, and I reflect upon what “individual, team, and institutional scaffolding” can offer a creative film making process as educational techniques. I will outline elements essential to getting into the flow of the film process through the help of constraints and collaboration. Moreover, I focus on the consequences of authorial action. And finally my findings are applied to the work of two professional Danish film makers, Lars von Trier and Jørgen Leth.

Keywords: Media, creativity, learning, scaffolding, National Film School of Denmark

Introduction
I would like filmmakers interested in thinking "outside the box" to recognize that they can benefit from being placed "inside a box." In others words, to work with the help of the didactic tool "scaffolding," which in short is defined as support through constraints applied at different levels (Wood, Bruner and Ross 1976). The scaffolding employed at The National Film School of Denmark helps the students to cope with the pressure of creating film, find inspiration, and attain a flow experience (Csikszentmihaly 1996). Both the participants in The Video Clip Cup and the students at The Film School describe, according to my research, a so-called "positive stress feeling" or simplification. These feelings help them maintain their focus and in flow during a creative process. I consider this an important component in explaining why constraints can facilitate creativity in the film making process in an efficient manner. Concluding the study of both cases, we learn that the film making process is neither (any more) tacit knowledge from instructors or screenwriters who like to be seen as solo players, nor is it something magical or mystical which happens without anyone being able to explain it (the Romantic approach). On
the contrary, modern filmmaking is often a collaborative effort, a common language, and the use of both unavoidable and placed constraints.

A production analysis gap
I find that production analysis is an overlooked field of film studies. Traditionally, film research focuses not on the production, but on the texts. Educational theory has been primarily concerned with the processes rather than the results of learning. In media research, at least in a Danish context, there is no tradition for focusing primarily on the sender of a film and the production of it. The reason for this gap is probably that media science relies mainly on theories borrowed from literature and linguistic fields, which are dominated by aesthetic and semiotic concerns. Yet in the case of network television, more convincing research has been undertaken (for instance Helland and Sand, 1998, Bruun and Frandsen, 2007). However, we still find that in production analysis concerning film we can still encounter a lacuna. The books in this field dwell primarily on the subject of the director's spectacular role. Although some of these publications are interesting, an important question still remains: in what way do constraints and collaboration influence the filmmaking processes? Recent research has begun to flush out this lacuna in Danish media research (for instance Strandvad, 2008, and Redvall, 2008). In a European context, work done by the Director of Research Ian W. Macdonald focuses on the creative processes among screenwriters. So now researchers are beginning to consider filmmaking processes as a possible focal point where notions of negotiation and constraints interact in the development of the film. However, more work still needs to be undertaken on production analysis.

In my own work (Philipsen 2005) I studied the filmmakers behind the productions and the conditions under which they are trained at The National Film School of Denmark. I compared our national Film School in Denmark (located in Copenhagen) with the one in Norway (located in Lillehammer). I researched the underlying organisational structure and the pedagogical methods especially at the Danish school, and I investigated which part they played in the so-called "New Wave in Danish film" (starting in the mid nineties). In this present article, I am primarily concerned with how creativity can be fostered by constraints and collaboration in film production processes are my focal point here as well as in my thesis. I further elaborate on the ways in which one might induce flow experiences. Based on my prior research this article discusses why the didactic term "scaffolding" can be regarded a kind of approach used in both the Video Clip Cup and in the educational programs at The Film School. Through studying "scaffolding" we can enhance our understanding of the ways in which filmmakers realize a more manageable and fun filmmaking process with the use of restrictions. My perspective draws greatly on the research of Mihaly Csikszentmihalyi. He states that: “It is important [...] to understand better what enjoyment consists of and how creativity can produce it” (Csikszentmihalyi 1996: 110). My research to this date has shown that clearer rules for filmmakers often help to make the film process more fun to be in and easier to manage.

Scaffolding and categories - creativity and constraints
In my search for new ways to describe the creative filmmaking process, I "appropriate" some terms from the field of educational theory. My research has illustrated that the terms "scaffolding" (Wood, Bruner & Ross, 1976) and "the zone of proximal development" (Vygotsky, 1935) are extremely useful in explaining, for instance, the didactic methods used at The Film School. "Scaffolding," in short, means to support a person in the appropriate way in a learning process. While "the zone of proximal development" refers to the
knowledge that a person in a learning process needs to be challenged in a suitable way in order to be motivated and actually strive to learn something new. However, these terms originate with research based on learning processes among children, and I would like to emphasize the need for a theory which can describe the filmmaking process among filmmakers. The authorities on learning theory, Wood, Bruner, and Ross (1976), outline six levels of scaffolding, which they categorize as follows: 1) Recruitment, 2) Reduction in the degrees of freedom, 3) Direction maintenance, 4) Marking critical features, 5) Frustration control, and 6) Demonstration. In my thesis I analyzed these levels or kinds of scaffolding in the light of The Film School. Later, I also developed this idea to further distinguish the levels of scaffolding. In examining the ways to "scaffold" filmmakers' creativity, it is useful to employ three more inclusive categories of scaffolding: 1) Institutional scaffolding, describing when an institution such as The Danish Film Institute or The National Film School of Denmark, define conditions for film production, 2) Team scaffolding, explaining when members of film teams guide each other in film productions, and 3) Individual scaffolding, describing when filmmakers define their own rules for a film process and product. After briefly defining creativity, I will seek to locate these categories in my analysis of learning processes in film.

As mentioned earlier, creativity is often defined as a talent to be able to think "outside the box." I would like to stress that in order to be able to think outside the box, it actually helps to have a metaphorical box (constraints). This perspective on creativity is not a new one; it has been described for instance by the American psychologist, artist, and writer, Patricia Stokes, who defines creativity this way: “Creativity happens when someone does something new that is also useful or generative or influential” (Stokes 2006: 2). From this perspective, creativity results from something that resolves a problem for someone in a broad sense (useful). It should also suggest new ways and engender new ideas to compliment the old one (generative). Moreover, it should change the ways in which some people think about or deal with this thing. Stokes cites Cubism as an example of creativity (Stokes 2006: 3). However, the way she fosters creativity could be criticized, I would argue, and we should not be constrained by her definition. For this reason I will draw on Schön (1983, 2001), and Csikzentmihalyi (1990, 1996) in trying to expand the creativity field. Several different traditions concerning creativity (for instance cognitive, neurological, and psychological traditions) represent various points of view concerning the phenomenon. My own approach is to consider creativity not only as a psychological and individual phenomenon, but also as an organizationally influenced phenomenon. Therefore, I am in agreement with Csikzentmihalyi. Based on his theory, creativity blossoms under the influence of three components: 1) a domain, 2) the experts, and 3) the individual skills. In this formulation a creative person changes a domain into something new or develops a new domain. Based on this assumption, creativity is not an innate quality which is impossible to improve or describe:

[.] an idea or product that deserves the label “creative” arises from the synergy of many sources and not only from the mind of a single person. It is easier to enhance creativity by changing conditions in the environment than by trying to make people to think more creatively. And a genuinely creative accomplishment is almost never the result of a sudden insight, a lightbulb flashing on in the dark, but comes after years of hard work (Csikzentmihalyi, 1996: 1)

Donald Schön, an American authority on urban planning and pedagogy, can be regarded as an exponent of this approach to creativity. From his perspective, creativity is not a sudden and indescribable insight, and often original and useful ideas rise from concepts that are already there, but could be used or combined in different ways. Based on these few definitions, the concept of
Dogma 95 and the outcome of it (films like *The Party* 1998 and *The Idiots* 1999) could be regarded as creative. I would also argue that the way in which scaffolding is used at The National Film School of Denmark has been excellent; it has fostered so many remarkable film makers that other film education institutions would say: “Why didn’t we think of it?” This is yet another element of creativity:

Originality is one of the hallmarks of creative thinking. If asked to come up with names for a baby, or ways to use a paper clips, or things to do at a party, a creative person is likely to give answers that are different from the answers of the majority. But these answers won’t be bizarre. Once people hear them, they are likely to say, “Of course! Why didn’t I think of it myself?” (Csikzentmihalyi, 1996: 369)

According to Stokes constraints facilitate creativity in an efficient way within a number of different fields. In her research (2006), examples are drawn from the fields of music, architecture, branding etc. One could raise the objection, that these case studies are too far removed from one another – and too briefly described by Stokes – to actually illustrate why constraints work. Creativity is linked to being original, as Csikzentmihalyi stressed above, and this perspective seems more important when reflecting upon the creativity of film makers or musicians than an advertising professional.

**A stressful position**

When students are admitted to The National Film School of Denmark they often feel both privileged and lucky, but, at the same time, they also feel very stressed. Only 30 new students are accepted every second year for film education. It is therefore difficult to secure a position and the expectations, especially for those accepted, are enormous. The Film School is a highly respected institution established in 1966 by the Danish director Theodor Christensen who defined its educational philosophy. Christensen had faith in constraints and founded The School on certain principles, which I dealt with in greater detail in my thesis (Philipsen 2005: 32-55). Then in the 1970s, students fought authorities and constraints which resulted in a reduction of the role of the leader and more responsibility given to the students themselves. By the mid-1980s, Henning Camre, along with screenwriter and teacher, Mogens Rukov, reestablished the principles laid down by Christensen in a way. From my research on The Film School, it became clear that this renaissance for constraints was one of the reasons for the success if Danish film in the 1990s. Rukov has been a teacher at The Film School since 1975, and he has developed The School’s own unique kind of so-called “pen tests” (penneprøver), which can be compared with the dogma rules in Dogma 95. Lars von Trier and Thomas Vinterberg (both students from The Film School) should be considered the ones who have made the dogma rules visible, branded them, and applied them to Danish film. However, I have stated, that these rules actually stem from the teaching methods at The Film School, which I intend to illustrate in the next section.

**Constraints offer an exercise to your imagination**

Based on my research, the respondents from The Film School all agree that working within both unavoidable and placed constraints can be a very useful and inspirational dimension of the filmmaking process. During the four years of their course, they normally take eight pen tests. One of the directors in my research explained that initially he found it very frustrating to be forced to work within constraints, such as in the pen tests. He sought to revolutionize stylistic devices, and thereby to create original films. He would become furious if forced to make a scene with a specific theme, within a specific deadline, and...
with specific kinds of other conditions concerning the use of camera, actors etc. (this would be a typical example of a pen test). But, in retrospect, he, along with all the other respondents, was grateful that he had learned to work within constraints. They made him feel secure, inspired, and focused; they also made him experiment, because he wished to make his own personal film and not the same kind of film as the other students working under exactly the same conditions. My study of different results from pen tests, confirm this opinion; the films are very different. So in retrospect, the scaffolding these pen tests offer, helps the students mitigate pressure, get started, and create films with a personal signature. As the respondent stated, it would have been much more difficult to make a film without constraints, where he actually had the opportunity to revolutionize his method with experimental stylistic devices. To work with no conditions would have added much anxiety to the process. That is why he argued:

Director: How lucky I was, not to get an exercise that said: Bloody hell, you came to this place, because you wanted to add something new to the film language, then add something new to the film language (Philipsen 2005: 211)

Another respondent, a screenwriter, was quick to appreciate the constraints at The Film School. He stressed:

Screenwriter: I love constraints. I might be a masochist or something. [...] But I just think that then a lot of things you don’t have to decide. If I know, it has to be five pages long, and there are two persons, and the alliance switches between those three, and God knows what..., then it's fantastic, then [...] some things are decided already, and I think that's a great relief, because it offers an exercise to your imagination (Philipsen 2005: 211)

This screenwriter argued that the use of constraints in a writing process actually produces a feeling of relief because he has been partly relieved of the responsibility, which apparently frees up energy enabling him to use his imagination in new ways. Both the screenwriter and the director quoted above, along with most of the other respondents, agree that the so-called “natural story” (den naturlige historie) was also a positive outcome of the film programme. In short, the point in using natural stories for creating scenes is that it offers the filmmaker some dramaturgic conditions within which to work. We, as an audience, are aware of the norms inherent to natural stories like: making coffee, going to the toilet, or driving a car. So in watching a character undertake these actions the audience can feel “at home”; they recognise the mechanism of what is happening and they are surprised when the mechanism is interrupted. This is a remarkable dramaturgic “tool” in the filmmaking process because it is an impressive way to capture and then surprise the audience. It is also a significant “tool” for the simple reason that it adds something to the tabula rasa; it gets you started. If some conditions are predefined, then the filmmakers do not have to work everything out from scratch. Some of the respondents called the knowledge about the natural story they receive from The Film School: “a magic formula,” “a trump card,” or “a gift” (Philipsen 2005: 205). They also stated that this kind of knowledge was something that had been very useful for them as filmmakers in the film and television business.

Teamwork are regarded supportive

Moreover, the subjects of my research stressed that their studies provided them with a rich social network. As one of the respondents, an editor, stated: “I probably think it was the social network that was the most rewarding. To
meet these people here [at The School] and people from the film business.” (Philipsen 2005: 187). Respondents also seemed to agree that the film language, absorbed while at The School, constituted another important outcome of the training. An editor puts it this way: “I find the language we are given at the school of crucial importance” (Philipsen 2005: 189). During the programs almost all the pupils from the different courses share lessons and these lessons seem to provide them with the vocabulary essential for understanding and respecting one another as filmmakers. Furthermore, they argued that in the film business it is easier to work with alumni from The School than others. One of the producers in my research even characterised The Film School “a language school” (Philipsen 2005: 207).

Another case study of the film making process, undertaken by a doctoral student Eva Novrup Redvall, points out that a common language and respect for one another’s fields also played an important role in the making of the feature film Little Soldier (2008). In an article Redvall analyses the collaboration between the Danish director Annette K. Olesen and screenwriter Kim Fupz Aakeson and focuses on the way in which reality takes part in the research process (Redvall 2008). Her study is based on a qualitative case study of their development of an initial idea into a finished feature film. Both filmmakers attended The Film School; they emphasise the importance of communication, common language, collaboration, and constraints. Olesen and Aakeson have also created their own set of rules every time that they have made a film together. Such rule-making is evident in shaping the characters in Minor Mishaps (2004), which was inspired by the so called "Mike Leigh method" (a kind of method acting), and the realism in Little Soldier (2008), which posed certain constraints and thereby challenges for the filmmakers.

Levels of scaffolding facilitated by the National Film School of Denmark

In the context of my own research, most of the respondents from The Film School argued that institution scaffolding (rules ordered by the leader or teachers) and team scaffolding (the use of collaboration) were important to them during their studies. If we consult the six levels of scaffolding from Wood, Bruner, and Ross, we find that respondents described level number 2) Reduction in the degrees of freedom, and 3) Direction maintenance, as the most helpful. This kind of scaffolding is very often employed in pen tests and natural stories. According to my research, it seems that the clearer the rules are for the students, the more fun and manageable learning the film making process becomes for them. The Film School may be described as an exponent of educational techniques based on firm rules. If there were no rules and no scaffolding from the outset of training, students might be placed outside the zone referred to by Vygotsky as "the zone of proximal development." Consequently there would be little or no possibility of learning. Constraints at The Film School consist of many kinds of scaffolding at different levels: the team work, the pen tests, the common language, and the natural stories. These help the students to generate a new network, flow experiences, and creative ideas.

Scaffolding in the Video Clip Cup

In Denmark several film festivals challenge filmmakers to create films within a strict deadline. The Video Clip Cup at Odense Film Festival is one such opportunity, and this challenge is popular among amateurs because it gives them the opportunity to improve, to experiment, and perhaps to find a way into the film and television business. I will now discuss the way in which scaffolding is employed at The Video Clip Cup. Every year in August filmmakers can participate in a competition that is a part of the Film Festival.
in Odense. In order to compete, they must adhere to certain rules while producing their film. At the opening of each Festival, the annual theme for entries will be announced. In the year 2007, the theme was "It's noisy." I believe that this theme could be described as a kind of scaffolding no. 2) reduction in degrees of freedom. Furthermore, the term "seeing-as" (Schön 1983) can be applied to this part of the Festival because theme restriction seems to motivate the participants in The Video Clip Cup. Schön stresses, that in situations where practitioners must develop something new, they often begin with something well-known. He calls this process "seeing-as" and, based on his research, he concludes:

Faced with unexpected and puzzling phenomena, the inquires made initial descriptions which guided their further investigations. Where do such descriptions come from? They are, at least on some occasions, outcomes of reflections on a perceived similarity, a process which in the previous chapter I called seeing-as (Schön 1983: 182)

Reflections and research on "seeing-as" describe one approach to studying and explaining processes which would otherwise be mystified or belittled with terms such as intuition or a special gift/talent for creativity (Schön 1983: 187). Moreover, this is supported by my research on The Film School, where theme restrictions are considered to be a source of inspirational as well.

Two days after receiving the theme in The Video Clip Cup, the filmmakers must hand in a short film. The length should be a maximum of four minutes, and everything in the film had to be produced only by the filmmakers. The first day is used for recording the film and the second day is used for editing the film (they are offered technical support if necessary on this day).12 The support can be regarded as another kinds of scaffolding, mainly no. 3) Direction of maintenance, and 5) Frustration control (Wood, Bruner and Ross, 1976). Then the official jury assesses the films. The results are posted on the Film Festival web site and the winners are rewarded and celebrated at an awards ceremony along with the winners of all the other prizes. The rewards can be either money or a grant to make another short film. The short fiction film Distortion (2007) was awarded as no. three at The Odense Film Festival 2007, Video Clip Cup. The film may be viewed here. Remember, when watching it, that this entire film is developed, recorded, edited and released within only two days.13

Irrespective of whether Distortion is a creative film (in terms of being generative, useful, and changing/supplying a domain), I find it too early to make a final judgment. Still, the end of the film presents something new to the genre of comedy. This is not a traditional feel-good comedy. Furthermore, the
distortion of noise is employed as a kind of sound track expressing both physical and mental noise in this film.

**Feeling motivation and flow**

Competitions like The Video Clip Cup are obviously instructive illustrations of educational techniques in film making that are facilitated by scaffolding. Do these kinds of scaffolding also create flow and fun in the film making process, and what do they teach us about the use of constraints in mediated learning processes? I asked Ursula Lundgren (U) and Trine Lai (T), the directors of *Distortion* (2007), whether it would be a disappointment to them if they had not managed to make a film within two days. Ursula replied: “I just think we felt like that we didn’t have any expectations of ourselves.” When I followed up by asking, whether it mattered what the other film makers in the competition were doing and thinking, she responded: “We simply didn’t have time to think about it.” What I’m trying to locate in my interview is at what level – if any – these participants felt anxiety or pressure in the process of performing and achieving success. When I wanted to know whether they focused on creating a remarkable result, they answered that in retrospect it was important to produce something good. Still, they were simply too busy to even think about this aspect because they were engrossed in the actual production of the film. Trine (as well as Ursala) concluded: “And we were simply so surprised that it ended up like what we had in mind.” Based on the study of creativity, carried out by Csikszentmihalyi, most creative workers are dedicated to their craft irrespective of the consequences or payoff. They love the process more than they love what it produces and the reason for this is: “because it’s fun” (Csikszentmihalyi 1996: 107). This was obviously also at stake for Trine and Ursula. In my interview, they were concerned with the creative process as a possibility for personal growth and enjoyment rather than the prospect that they might win the competition. When they realized that *Distortion* was awarded third place, they were surprised and seemed grateful.

During my interview with the women, I asked them to (try to) reconstruct the film making process, beginning with the night the theme was released. They were eager to answer this question and much of the dialogue proceeded as follows:

T: We had agreed in advance that when they told us the theme, we would leave.
U: Yes.
T: [...] We were talking all the time. As soon we came out we started: It’s noisy, it’s noisy, it’s noisy... - like that was the theme – we talked about that as we were walking. Down the escalator and all along something like came. We started thinking in pictures and, you know, psychic noise. And then we came up with some suggestions about which frames we could use. We didn’t have a story.
[...]
T: Then you said [snaps the fingers] psychological stress, that’s noisy.
U: Yes... [talking both at once]
T: And then you said...
U: Like something..., because in the car I realised that this thing about transporting yourself sometimes can be really stressful... just to transport yourself from one place to another
T: Then you said: Someone who’s late for work.
U: Yes. Someone who is sitting in the car and gets stuck in a queue or something. Well, like anything really.
T: No, but then you said work, and then we said: Ah, it’s not that bad to be late for work. And then we stopped at a service station to buy beer and
candy and crisps, and then we drove on to Ursula’s house. And then just when I was going to park out there, I said to myself: wedding!

U: Yes!
T: You can’t be late for that!
U: No …
T: And then we just screamed: Yeahhh. And then it was just we had reached our goal.

The significant point here is that the women get extremely involved when taking about their brainstorming. They supplement each other and are smiling and gesticulating when recalling the process. One could argue that they (re)experience what Csikszentmihalyi describes as flow in a creative process. If practitioners feel a qualitative experience when engrossed in an activity, this is what he defines as getting into flow.

This optimal experience is what I have called flow, because many of the respondents described the feeling when things were going well as an almost automatic, effortless, yet highly focused state of consciousness (Csikszentmihalyi 1996: 110)

Based on my observations in the editing room on the second day, all participants (not only Trine and Ursula) seemed motivated by this flow feeling while editing. They focused on the display units and immediate decisions instead of surroundings or conflicts. Based on my research, I would argue that The Video Clip Cup is an illustration of the way in which constraints (like theme, deadline, one day for recording, one day for editing, and a maximum length of four minutes) can help filmmakers attain a flow feeling. Csikszentmihaly points out some elements that were often mentioned by his own respondents when describing an enjoyable experience:

There are clear goals every step of the way. […] There is immediate feedback to one’s actions. […] Distractions are excluded from consciousness. […] There is no worry of failure. […] The sense of time becomes distorted. […] The activity becomes autotelic (Csikszentmihalyi 1996: 111-113)

These parameters enhanced what Ursula and Trine also regarded as helpful when they created Distortion: clear goals, concentration, and feedback from one another seem to be important conditions in a filmmaker’s learning process. Moreover, it is worth noting that in these parameters Csikszentmihalyi’s model increases what his respondents described as the feeling of being in flow, i.e. not getting there. I am sure that we all recognize the feeling when in the process of writing an article everything suddenly goes smoothly and the words almost write themselves as if we had transcended time and space. We recognize this feeling irrespective of a crisis in writing. But the question still remains: how did we get there? How did we manage to create the flow feeling? According to my research, many of the feelings that are described in Creativity as inherent to a flow experience may also be described as predefined conditions for gaining the flow experience. Getting into flow in a filmmaking process is the difficult part because many expectations and much anxiety is associated with filmmakers (or any other kind of artists) because they are expected to make something interesting and possibly even original. Learning the best ways to cope with this pressure and complexity through the experiences with scaffolding in a film education or a challenge like The Video Clip Cup, represent two ways to help filmmakers enhance their creativity.

One could critically ask, whether, for instance, Ursula and Trine are actually particularly creative and/or gifted persons, who could have made an interesting film under any conditions. I asked them how they thought it would
have worked out if some of the predefined constraints had been missing in The Video Clip Cup, such as no predetermined theme.

I: Would you have made the same film then?
T & U: No!
T: We simply couldn’t do anything before we got the theme. [...] No, we couldn’t do that at all.
U: Absolutely not.
T: That’s the cool part. That you get a theme, we all get a theme, and it’s the same theme we all get, that’s the fun part. Because what..
U: What is each person going to come up with?

Ursula and Trine stressed that without the theme they would have made a completely different film because of the different process. They also emphasize that working within the same restrictions as other filmmakers does not mean they all wind up by producing the same kind of film. They actually put much effort into producing a unique film which, as the respondents from the Film School pointed out, is also an important component in creativity.

Reduction of complexity and stress

An interesting sentence, used by Ursula during the interview, was that she felt “stress in a good way.” She means that in the production of Distortion she experienced positive stress rather than negative stress. In stress research, the same distinction is often made. Coaches, like Hardy and Thomsen (2005), argue that positive stress can be likened to the kind of stress an actor experiences just before going on stage to perform. S/he gets an adrenaline kick which helps his/her brain stay focused. Therefore, positive stress is good for one’s mental health and is a physically hormone-based reaction. This might be what Ursula and Trine experienced in the making of their film. According to psychologists and coaches, negative stress usually occurs in those situations where you feel stressed over a long period of time and gradually become unable to navigate complex situations. As a natural response to this scenario, the brain’s production of stress hormones (like adrenaline) does not cease (Hardy and Thomsen, 2005: 6, 7). Based on this natural response, the body will be impacted in a negative way by the stress hormones and become susceptible to stress-related sickness. In order to avoid such complex and stressful situations, constraints can help manage potential stressors. In accordance with arguments of another stress coach, the American psychologist, Barry Schwartz, it can be efficient and helpful not only to filmmakers, but for people in general, to adhere to certain rules and accept their choices within the contexts of those rules or constraints. He labels people who are not good at making choices "maximizers,” and calls those people adept at making decisions "satisficers.” He points out: “We all know people who do their choosing quickly and decisively and people for whom almost every decision is a major project” (Schwartz 2005: 79). Persons who seek and accept only the best are, based on his research, “maximizers,” and vulnerable to self-induced stress.

As a decision strategy, maximizing creates a daunting task, which becomes all the more daunting as the number of options increases. The alternative to maximizing is to be a satisficer. To satisfice is to settle for something that is good enough and not worry about the possibility that there might be something better. [...] I believe that the goal of maximizing is a source of great dissatisfaction, that it can make people miserable – especially in a world that insists on providing an overwhelming number of choices, both trivial and not so trivial (Schwartz 2005: 78, 79).
The participants in The Video Clip Cup for the most part can be characterized (by the help of institutional and team scaffolding) as “satisficers.” This position produces the positive stress feeling that helps them stay focused and in flow for two days and then gives them a break. Based on my research, one could consider pen tests at The National Film School of Denmark to be an equivalent phenomenon; this perspective might be one important answer as to why constraints are sometimes able to facilitate creativity in learning processes within filmmaking. The Norwegian Film School (Den Norske Filmskolen at Lillehammer University College), which is in many ways comparable to The National Film School of Denmark, even though it is younger (founded in 1997), provides additional evidence to support this point. In the beginning of the history of the school, some students felt dissatisfied with the firm restrictions placed on them. Therefore, the school decided to give them an exercise with no restrictions (but a deadline). “Surprisingly”, no students completed their film and the experiment came to a screeching halt in Lillehammer (Philipsen 2005: 108).

Sometimes constraints can produce more constraints

To sum up, educational techniques in filmmaking carried out by scaffolding like in The Video Clip Cup seem to present filmmakers a set of conditions that make a flow experience occur very fast. Moreover, these conditions allow the participants to experience positive stress and fun while they devote their energies to film production. This way they seem to benefit from the institutional scaffolding created by the Odense Film Festival (theme, deadline, maximum length four minutes, one day for recording, one day for editing, and presentation and awards at the ending of the festival). Moreover, some of my respondents, like Ursula and Trine, added their own team scaffolding to the learning process; they agreed that when the theme had been released that they would immediately leave the room (“We had agreed in advance that when they say the theme we would leave”). They intentionally contrived this rule to ensure that they would choose a seat way up front in the editing room (“because then you couldn’t see all the other display units”). The women made the creation of the screenplay a priority and a shooting list to structure the process on day one. Indeed they managed to structure this only a few hours after the theme had been released. I find it interesting and instructive to notice that these filmmakers, working within predefined constraints, actually added more constraints to the project than given to them by the institution instead of complaining about the rules they were already obligated to fulfill.

The conditions for the Video Clip Cup foster an enjoyable filmmaking process and allow the competitors to think in creative ways within the limits. As Ursula points out, the girls agreed to: “Just think totally outside the box.” My research suggests that in order to help filmmakers in learning processes to think outside the box and get into flow, they (and their films) can profit from being placed “inside a box,” to work with the help of scaffolding at different levels. This is also what is at stake at The National Film School of Denmark, where constraints, both unavoidable and placed ones, consist of many kinds of scaffolding at different levels. This present article has not focused on the institutional level. However, the leader of The School, Poul Nesgaard, recognizes that giving both the teachers and students restrictions within which to work and to trust them within the confines of these restrictions. Thereby they understand his expectations of him and their responsibilities as students. The Film School, I would argue, could be considered an institution that has developed and practiced a certain kind of culture based on a mix on trust and restrictions.

The team scaffolding has been very helpful to Ursula and Trine as well as to my respondents from The Film School in their studies. Presumably, the women would have been unable to make Distortion without each other. Moreover, the students at The Film School mention the network as significant
to the outcome of the courses. One could add that the fact that the teams are actually predefined by the teachers at The Film School and therefore a significant way of using scaffolding. This can be described as either an *institutional scaffolding* (the restrictions that the school imposes on the students) or *team scaffolding* (the members of the teams know; these are the people I have to cooperate with and they each know what role they are to play: the director, the producer, etc.). The third level, *individual scaffolding*, I defined as the level at which the filmmaker dictates his/her own rules for the film process. Here, the use of the “natural story” seems to be important to the filmmakers in my research both at The Film School and afterwards. The natural story helps (for instance the screenwriter) to be inspired. It offers him/her a set of rules supportive of inner creativity and personal expression.

**Auteurism revisited**

Based on both my cases, one can conclude that learning processes in filmmaking are neither a form of tacit knowledge from filmmakers and students who like to be considered solo players, nor are they something magical or mystical that happen without anyone being able to explain it. On the contrary, modern filmmaking processes are often based on teamwork, on a common language, and on constraints. As Csikzentmihalyi states: “an idea or product that deserves the label “creative” arises from the synergy of many sources and not only from the mind of a single person. It is easier to enhance creativity by changing conditions in the environment than by trying to make people to think more creatively” (Csikzentmihalyi 1996: 1). The National Film School of Denmark is a highly instructive and remarkable example of an institution with conditions that facilitate creativity within filmmaking in a successful way. The way they employ scaffolding (for instance in the pen tests) as learning processes, has furthermore inspired professional filmmakers to develop and work within constraints such as Dogma 95, one could argue. Moreover, The Film School has helped initiate a certain team-spirit in the creative film making processes at The School and in the film business. Rather than speaking of an phasing out the notion of the auteur, one could think of it as an enhancement of the auteur notion where The Film School has sought to train people to work within film teams where everyone leaves a personal imprint on the film (Philipsen 2005: 351). This does not necessarily entail downsizing the role of the director. It establishes the role of other filmmakers as co-decision makers, but the director has the final say on the film’s “voice” and/or its atmosphere. The team has to speak with a unified voice without simply taking orders from the director. This yields a film with several signatures produced by a joint effort. Presumably, this team spirit has dominated Danish film for the last decade, and one could argue that instead of only talking of auteurs, one could also talk of “writeurs,” “editeurs,” etc. 

Contemporary film creation can be described as a highly collaborative process that involves many different contributors. Research carried out by Ian Macdonald (2008) deals with the screenwriter’s and the negotiation processes that take place between the screenwriter and the rest of the film production team. Instead of focusing on the screenwriter as a lonely genius (a point of view expressed in books on screenwriting for instance by Syd Fields), Macdonald describes the screenwriter’s position as a part of a creative negotiation process within a flexible work group which forms the screenplay and thereby the film in collaboration. Similarly, research by Redvall (2008) also stresses that we have abandoned the idea of the lonely genius in screenwriting; and, I would add, in the filmmaking processes in general. Looking at my own research within this perspective, neither the screenwriter nor the director (nor other participants of the film team) have a monopoly of the film’s idea. This is a collaborative process which is often difficult, but seems to be more manageable, once members of the group have learned to appreciate obstructions and negotiate and communicate, as I would argue,
they do in the courses at The Film School. So perhaps the concept of auteurism ought to be revisited. According to Macdonald, “Collaboration does not deny the auteur.” Presumably, we are dealing with a kind of auteurism revisited – one based on collaboration and constraints. When filmmakers want to create something original (which is the hallmark of creativity) it seems to be an obstacle if they are working within a free concept like: “Create something original and do it alone.” This notion is rather vague and provides no constructive guidance. In order to reduce pressure and to provide negative stress, filmmakers often benefit from the concepts of constraints and collaboration, which help them concentrate on something else than originality and thereby actually create films which are sometimes creative.

**Further perspectives - playing with Trier**

Although my research is based on learning processes for students and nonprofessional filmmakers, I find that the Danish director Lars von Trier’s work puts my points into perspective and demonstrates that outside *institutional scaffolding* (like educations) other kinds of scaffolding can also be helpful to make sure that filmmakers continue to improve the art of film production. Professionals experience stress and anxiety in their film making processes as well as amateurs, and need strategies to cope with these situations. Lars von Trier was also as a director at The National Film School of Denmark (1979-1983). This does not necessarily mean that he would have been a less successful director without this training. However, there are several interesting parallels between the way in which Trier relies on restrictions and the way in which our national film school utilizes them. Trier is a true master of inventing new rules for every film he directs, in order to drive his own creative process and to the rest of the crew as well. The idea of making trilogies, the use of the Dogma Manifest, and the idea of drawing lines on the floor (*Dogville* 2001 and *Manderlay* 2003), are to be considered as rules of filmmaking which have made the film process more fun and contributed to innovative Danish films. Using lines on the floor in films like *Manderlay* and *Dogville* helped actors to concentrate and be creative inside the frames according to Swedish actor Stallan Skarsgaard. When actors and filmmakers are fully aware of the conditions within which they are working and consider this to be a game to play or a fun challenge, one could argue that scaffolding is put into professional practice, and that new conditions for filmmaking probably create new original expressions *in* the films.

Director Jørgen Leth and Lars von Trier in collaboration created the film *The Five Obstructions* (2003). In this Trier offers Leth five obstructions on his way to restruct Leths own short film from 1967: *The Perfect Human Being* [*Det perfekte menneske*]. One could regard this restructing of a certain film a kind of inspiration with the help from “seeing as” (Schön).

Although the creative process illuminated in *The Five Obstructions* obviously was edited for the purpose of the film, it is still instructive to observe and discuss. In an interview Leth stresses that: “Both Lars and I like the idea of a game with rules – and we respect the rules. [...] It is important to understand that our shared assumption is that making films should be fun and exciting, preferably difficult, and never boring” (Hjort 2008: 144). In *The Five Obstructions* we can see the way in which the two filmmakers inspire and support each other in new ways through scaffolding. The filmmaking process that Leth undergoes is both difficult and an eye opener to himself as well as fun and exciting. In this film the creative processes of film making are, as in my own research, described with the aid of rules rather than explained away by “intuition.” Leth calls the rules given to him “a gift” from Trier. He manage to create remarkable results based on these rules, and in the case where Leth is punished by Trier with no constraints (obstruction no. 3, the free-style film), he finds it a very painful and stressful position to be in. Based on this, Leth can
be regarded a “maximizer” forced into a “satisficer” position (Schwartz) by the five helpful obstructions expressed in this film.20

Creative results?

When students at The National Film School of Denmark have finished their learning processes at The School, they can choose to produce their own set of rules in their professional filmmaking, as Trier, Vinterberg and Leth have done (individual scaffolding). I find that the study on Trier and Leth supports my research point on why constraints seem to foster less stressful filmmaking processes: It helps filmmakers to reduce conflict in complex and stressful situations, to gain inspiration and flow, and to stay focused and thereby make a more manageable process. But can it be recognized in the films? Do they actually create better films? Even though I based this study on the filmmaking processes for award-winning films,21 this question is still difficult and yet to be fully answered.22 In spite of the fact that The Five Obstructions is not a traditional documentary, it nonetheless won the award for that genre; it is possible to describe it as a creative film which adds something new, generative, and perhaps useful to the domain of documentary. It is therefore, I would argue, an example of a creative film based on a filmmaking process facilitated by scaffolding. Not all films made with help from scaffolding should be automatically considered to be creative. Still, more systematic research on creativity in filmmaking is required. The better we understand the mechanisms in these processes, the better we can become at facilitating them in ways that might result in greater creativity in future films to come.

As a short epilogue I would like to add, that the director from The Film School, which I quoted earlier in my article, today is working within a creative cross-mediated concept.23 I kept on following some of the respondents from my research on The Film School (2001-2004), and asked them if they still use the scaffolding offered to them when educated. I believe this director’s remarks to be an appropriate conclusion for the article:

**Director:** Now after eight years, I find it harder to pinpoint one thing as being the one thing that I really carry with me in my work as a director. It has become on solid foundation from which I draw instinctively. Of course the concept “den naturlige historie” [the natural story] is a key element, but it has become so integrated into my workflow that I don’t need to think about it a specific tool. Having said that, I find that The Film School really has taught me the joy of using rules or limitations as a creative tool.
References

Csikszentmihalyi, M. (1996/97). Creativity – Flow and the Psychology of Discovery and invention. New York: Harper Perennial.

Frandsen, K. & Bruun, H. (2007). TV-produktion – nye vilkår. København: Samfundslitteratur.

Hansen, J. T. & Nielsen, K. (1999). Stillingser: en pedagogisk metafor. København: Forlaget Klim.

Hardy, P. & Thomsen, K. (2005). Vind over din stress. København: Libris.

Helland, K. & Sand, G. (1998). Bak TV-nyheterne: Produksjon og presentasjon i NRK og TV2. Bergen: Fagbokforlaget.

Hjort, M. (2008) (Ed.). Dekalog – On the Five Obstructions. London: Wallflower.

Hjort, M. & Bondebjerg, I. (2002). Instruktørens blik: En interviewbog om danske film. København: Rosinante.

List, H. (2003). Kamervæt i hovedet: Fear X og Nicolas Winding Refn. København: People’s Press.

Macdonald, I. M. (2008). “It’s not surprising I’m neurotic’: The screenwriter and the Screen Idea Working Group”. Paper at the seminar: “Behind the Scenes of Cultural Production”, 26/9/08, Copenhagen: University of Copenhagen.

Philipsen, H. (2005) Dansk films nye bølge, afsæt og aftryk fra den Danske Filmskole [The New Wave of Danish Film – Influences and Imprints from The National Film School of Denmark]. Odense: Syddansk universitet.

Philipsen, H. (2007) “Autenticitetsstrategier i Trier’s trilogier: Om at skabe afpekt via effekt” in Mediekultur nr 42/43. (ed. by U. From & H. Philipsen)

Philipsen, H. (2007); "En rammefast filmstokkulturet – om dogmer på Den Danske Filmskole”. K&K 104, 2007, Århus: Medusa.

Philipsen, H. & Qvortrup, L. (2007) (Eds.). Moving Media Studies – Remediation Revisited. København: Samfundslitteratur.

Philipsen, H. (2008) "En leg med etik og æstetik i De fem benspænd". K&K, 106, 2008. Århus: Medusa.

Redvall, E. N. (2008). Virkeligheden som råstof og modstand for fiktionen - Om research, readings og improvisationer som redskaber for virkeligheds-drevne filmmanuskripter. Kosmorama, Vinter 08.

Rukov, M. & Christensen, C. (2002) Festen og andre skandaler. København: Lindhardt & Ringhof.

Schwartz, B. (2004). Valgfridhends tyranni. Om at overleve i en verden med ubegrænsede muligheder. Helsinge: Boedal.

Schwartz, Barry (2005); The Paradox of Choise – How the Culture of Abundance Robs us of Satisfaction, HarperCollins Publishers, USA.

Schön, D. A. (1983). The Reflective Practitioner. New York: Basic Books.

Stokes, P. (2006). Creativity from Constraints - The Psychology of Breakthrough, London: Springer Publishing.

Strandvad, S. M. (2008). Inspirations for a new sociology of art: A socio material study of development processes in the Danish film industry. Ph.D. thesis. Copenhagen: Copenhagen Business School.
Vygotsky, L. (1935/1978). “Interaction between Learning and Development”. *Mind Society*. Cambridge: Harvard University Press.

Wood, D., Bruner, J. & Ross, G. (1976). "The Role of Tutoring in Problem Solving". *Journal of Child Psychology and Psychiatry and Allied Disciplines*, Vol. 17. Oxford: Blackwell Publishers.

1 As in Kameraet i hovedet: Fear X og Nicolas Winding Refn (List 2003) [The Camera in the Head: Fear X and og Nicolas Winding Refn]; or Hjort and Bondebjerg’s *Instruktørens blik: En interviewbog om danske film* (2002) [The View of the Director: A Book with Interviews on Danish Film].

2 Ian W. Macdonald has not yet published his research on screenwriters, but his paper: “‘It’s not surprising I’m neurotic’: The screenwriter and the Screen Idea Working Group”, was performed as a speech at the seminar: “Behind the Scenes of Cultural Production”, 26/9/08, University of Copenhagen.

3 Fields of learning theory and creativity theory do have much in common, but the main difference between them is that creativity is defined by the consistence of something new, generative and useful.

4 This is based on the famous exercise that Henry Ernest Dudeney’s created, where the challenge was to connect nine dots with four lines without lifting the pencil. To award the challenge you have to draw outside the frame made by the dots. That’s why creativity it is called "outside the box.”

5 There are similarities and differences in their approach to the phenomenon. My approach though, is not to debate creativity definitions, but to be able to describe what best facilitates creativity in filmmaking according to my case studies.

6 More definitions could be mentioned based on research: Frank Barron (1969), Teresa Amabile (1988, 1998), or Chris Bilton (2007). However, I am not concerned with debating the different criteria for creativity or theories on the phenomenon.

7 I have made observations and interviews with teachers and students at The National Film School of Denmark (in the period 2001-2004).

8 Unavoidable constraint could be letting the students work in teams, due to the fact that film making processes are team work and could not be carried out by a single person not in a learning process, nor in real life. However, placed constraints are for instance illustrated in the fact, that the teachers of Film School define which students should be in which groups, in stead of making this a choice of their own. Both kinds of constraint can be considered helpful based on my research.

9 However, this point of view depends on which course they are enrolled. Producers seem very fond of the relations to the business established at The School. In contrast, the rest of the students stress the importance of the social network inside the walls of The School. These inside connections were (for some of the respondents) people with whom they would have preferred to work after completing their studies.

10 Aakeson and Olesen have worked together on four films: Minor Mishaps 2002 [Små ulykker], In Your Hands 2004, [Forbrydelser], 1:1 2006, and latest Litte Soldier 2008 [Lille soldat]

11 I made observations and interviews during and after the Video Clip Cup 2007.

12 In 2007 they used the program ‘Avid XPRESS Pro’ on computers at The University of Southern Denmark.

13 Normally, it would probably take two days to even find a church as a location and a priest who wants to participate in a fiction film. But the women, Ursula and Trine, told me, that they didn’t even have the time to consider, whether it would be inappropriate to call a priest and ask for this favour. Thus, instead of regarding this, a stressful and problematic situation, they called several priests right away, and it didn’t take them long to actually find one who volunteered.

14 The National Film School of Denmark was founded in 1966.
Thus, in my article “En rammefast filmskolekultur – om dogmer på Den Danske Filmskole”, in Kultur & Klasse 104, 2007, I elaborate on exactly this aspect.

Research by Redvall (2008) illustrates, that the feature film Little Soldier (2008) was based on a filmmaking process where screenwriter, Kim Fupz Aakeson, played an important part together with the director, Annette K. Olesen. If one studies the films where Aakeson has been a co-decision maker, it is obvious that he definitely added his own signature to the films as a kind of a “writeur.”

This is a quote from the speech and paper of Ian W. Macdonald: “It’s not surprising I’m neurotic; The screenwriter and the Screen Idea Working Group” performed at the seminar: “Behind the Scenes of Cultural Production.”

This perspective is elaborated in my thesis (Philipsen 2005).

Interview with Skarsgaard offered as extra material along with the DVD Dogville. This I elaborate on in Philipsen and Qvortrup 2007: 69.

I elaborate on this perspective in an article on The Five Obstructions in K&K no. 106, 2008.

The films made by my respondents from The Film School, were also awarded at different festivals. You can read about this in my thesis (2005), whereas in this article I prefer to keep the respondents and their films anonymous. Awards do not validate a film’s creativity, but they give a stamp of quality and provide criteria, or “constraint,” for my own research. Although it is of course interesting, to what extent the films are creative, in this article I am not able to focus on all the films which are the results of the processes.

This is the case when respondents from The Film School presented, and also The Five Obstructions and the short fiction film Distortion (Landgren and Lai, 2007). The Five Obstructions was awarded at: Durban International Festival 2004: Best Documentary, Guldlok 2004: Gold Dok of the Year, Odense Film Festival 2004: Grand Prix, Zagreb Motovun Film Festival 2004: FIPRESCI Jury Prize (Hjort 2008: xxiii).

I elaborate on this creative concept in a chapter for a future publication: Designing New Mediated Learning, Communication and Innovation, which it is planned to be published in January 2010 by Academica.