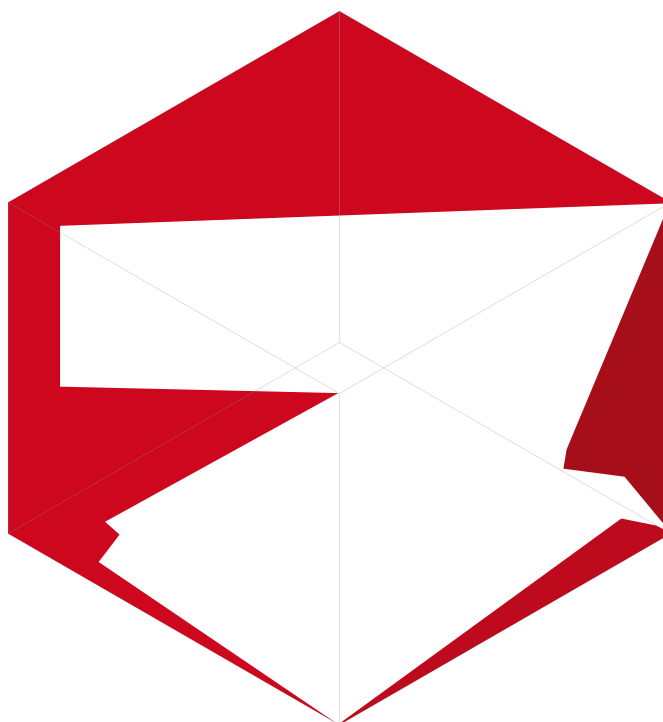


# Studies in Material Thinking



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## Volume 09 Inside Making

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### Living in the Material World

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#### Lillegerd Hansen

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*Abstract: This article is written from the perspective of a maker. It focuses on the maker's reflections on and during making. The artist/author records her process during the making of Volum, a development project completed in 2011. Volum was an art project, and the focus in this paper is on the process of making; the experiments in various textiles and techniques; the agony of choosing and rejecting and the search for visual effects able to communicate the expressions aimed at. Additional material is included from a separate study of artists' and designers' processes undertaken in 1995. That study aimed at discovering how artists made use of their knowledge in a specific assignment, how their work evolved from the beginning to the finished products, and how they reflected on their processes. An examination of the author's own artistic process, alongside those of participants from the previous study, revealed many similarities. That is, the ways in which we talk and think about making processes, and how we use and enhance our knowledge and experiences in action in the studio, are comparable. The aim of this reflective, praxis paper is to find ways of making some of our tacit knowledge explicit.*

*Key Words: Making, the process, experiments, reflecting, tacit knowledge*

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**Introduction**

Artists and designers rely upon a vast reservoir of expert skills, knowledge and techniques, but they work in experimental, intuitive ways that embody tacit knowledge, a degree of unstructured “mess” and risk-taking. This means that they constantly engage with their practice through actions, experiments and intellectual processes, creating solutions appropriate to the specific situations of a challenges or problems. Working like this makes it hard to break each thought and action into parts and articulate them coherently. This is one reason why it may be challenging for a professional to instruct a student or a co- worker. Even when practitioners do their very best to describe a process, show procedures, or talk about rules and theories, much of their tacit knowledge slips through their fingers and remains unarticulated in the realm of silence. Tacit means “silent”, and silence is not always golden, especially for those of us who teach students who are later to become professionals. A practice without words or theories could become very exclusive, a bit like a secret society or a sacred brotherhood.

The basic idea of tacit knowledge, according to Matthew Crawford (2009), is that we know more than we can say. This goes for most practitioners, their knowledge is tied to the experiences they get practicing their craft in real situations. Although the knowledge of artists contains a number of technical and practical skills, there is a big portion of knowledge that remains tacit, sometimes because the practitioner truly believes that it is an impossible task to make the knowledge explicit. Richard Sennet (2008) calls it “The Stradivari Syndrome”, named after the famous violin maker whose expert skills died with him.

As an artist and a teacher I realize the need for improving the way in which we talk about our processes, experiences and knowledge. Is there a way to bring parts of the tacit dimension out into the open? A “language” would be helpful for artists when sharing experiences from their practice and for teachers trying to guide students to a deeper knowledge and a better practice. We need to find methods to communicate what we do, and how and why we do it, to share and discuss our ways. This might help open our fields of knowledge to new and better procedures, products and projects.

**Donald Schön:  
A Theory of Praxis**

In 1995, I used the analysis of Donald Schön to try to make sense and order out of my participants’ descriptions and reflections on their work. Today, his theories continue to give useful analyses of practice that resonate with both my way of thinking about my own practice and the way participants from my earlier studies talked about their practices. His studies resulted in a theory on “reflection-in-action” presented in two books; *The Reflective Practitioner: How practitioners think in action* (1983) and *Educating the Reflective Practitioner: Toward a new design for teaching and learning in the professions* (1988). Schön argues that professional practitioners have a capacity for learning by doing and for developing strategies for continually enhancing their knowledge. His books from the 1980’s initiated interest and resulted in a considerable output of papers relating to his theories well into the twenty-first century. His position is, therefore, not uncommon today in fields related to art and design.

In presenting the process of the Volum project, I will introduce some of Schön’s terms. When referring to my survey of 1995, I will elaborate more thoroughly on his theories and terminology.

**The Volum Project**

Like Madonna, I am a material girl, and my material is textile. And like every true addict, I love everything about my obsession: the touch, the texture, the weight and the lightness, the smell and the visions of what it can do for me. My father was in the textile business and he brought home fabric samples for me to cut and sew, and my mother made dresses for my sister and



me when we were little girls. This seems to have been my destiny! Now I teach textile art and design and I am a maker of textile based art and design objects. As a teacher, I also do art development projects. The project presented here, finished in 2011, is called *Volum*—not as in loud and noisy, but as in voluminous and tactile. I try to put into words how I worked through the process and show some of the results.

The way in which I have worked in this project does not differ much from my work pattern in other art or design projects I have done in the past. Very often I start out with a vague idea, a concept or a theme. At other times a project can be triggered by a specific material or technique. I often examine how far I can push a technique or a material. Testing and manipulating the materials shows me how much they can stand, and the technical manipulations and abuse I put them through tell me if they are capable of evoking associations, emotions, memories and/or expressions of any kind. I lean heavily on my technical skills and my former experiences when starting a project—that is, in Schön's terms, I depend upon my repertoire.

Skills and experience are valuable assets for any artist, but can be overrated, even deceitful. They are so easy to trust, but sometimes they stop one from discovering new and surprising ways of working, making one repeat the same old tricks. Being a curious person I always try to include something I have not yet mastered. This approach is often frustrating and difficult, but it provides chances to keep things fresh and come up with new and surprising results. I need inspiring challenges, and in the *Volum* project, I found it in costume and dress history. Having worked as a dress and costume maker, the history of dress has always been an inspiration. My approach to these historical archives in the *Volum* project was like a child's to a box of chocolate, I granted myself the liberty to pick and choose according to purely subjective preferences. The historical facts about the costumes were not relevant in this project, so I will not go into detail about them. This time my initial inspiration was the embellishments on the dresses; the frills, the ruffles, the laces, the trimmings and other details, mainly those found on frocks and gowns from the seventeen and eighteen hundreds because they were so richly decorated and adorned.

In the pictures below I show some of the historical dresses next to my own work to indicate how they influenced it.

Stealing from historical archives like these can result in delightful copies while learning old handicraft methods, but they remain mere copies. I wanted to make them contemporary and attractive to the modern eye. This process required some rejuvenation. Whilst I tried to emulate some of the more traditional techniques, I then needed to work out a more contemporary approach. In other works, I just had a long, hard look at the originals before making my own contemporary version.

### Experiments-In-Action

Not to lose sight of the landscape, I often start out as a natural scientist with constants and variables by varying the techniques on only one kind of material at a time, one after the other, or varying the material with one technique at a time. In the *Volum* project I started out testing the same techniques on three different materials: plain, white cotton, wool and silk. I did not want to be concerned with color or texture at this point. My focus was to master the techniques and see how they appeared on the various textile qualities. Examining the results made me eager to see how they would appear on other, more complex, types of materials, or what would happen if I improvised using the original techniques as a base. Now I could start varying the techniques, find new materials, or combine both materials and techniques in various ways. This is a sure recipe for chaos and mess— but abandoning control, at this point, is essential for the good stuff to happen. Like a tango dancer, I must follow the lead, which in this case, is the will of the materials and techniques. I must go with the flow.

I loved this part of the project; working away without evaluating or worrying about the results, good or bad. But there is always a deadline and, at some point, I have to stop and be hard on myself. Everything is pinned to the wall; the good, the bad and the ugly—mostly bad and ugly at this point. I cannot stand to watch it, so I leave the workshop. When I return,



some of it is not as bad anymore, but it still has to hang there on the wall for a while, like fruit on a tree waiting for the harvest. I have to work up the guts to make the painful choices...

### Decisions and Directions

After a while the harvesting begins. Some of the samples are rejected, a few lucky ones are chosen and a lot is on the "maybe" list. I still dodge the crucial choices, but sooner or later I have to get down to business: What topic or idea do I really want the project to address? What is to be the focus of attention here? Does this project aim at purely formal qualities such as color, shape, composition and form, or does it want to be a comment on something, an expression about something in the inner or outside world?

It is time for the painful process of choosing and refusing. This is the most frightening and vulnerable part of most projects, because it is during this part that interesting results worthy of further exploration may or may not become evident. Maybe all the hard work has been for nothing and it turns out that I am a lousy artist? The feeling of doom and futility is almost unavoidable, and throwing everything in the trash may seem to be the only sane option. Most artists have to face this situation. Luckily, I have been here before, and know my way around this desert. As an experienced traveler, I have learned to recognize the landscape and hold on to my faith, that my work will yield something worthwhile.

I have noticed that some students tend to stay with their experimenting far too long, repeating themselves, and getting lost. One may very well interpret the reason as a need to hold on to a strategy to avoid this day of doom. As they get more experience, they seem to accept that there is no way around it. When they find out this is all a necessary part of the process, and that most artists suffer these attacks of low self-esteem, it is a comfort. The "angst" belongs to this community of practitioners.

### Take me to the water, or the troublesome back-talk of the situation

I have to decide on a theme, a subject matter, in which to apply the experiments. Otherwise, they would remain no more than sweet nothings, all dressed up and nowhere to go.

Examining the samples on the wall for the *Volum* project, I saw waves, seaweed, corals and strange organic forms I could imagine living in the ocean. Obviously, this had to be the subject matter of the project. Therefore, for a while, I dived into the wonderful world of documentaries and books about the strange inhabitants of the sea. Searching the internet, I found a completely new world of amazing colors, shapes, and textures, and to my eyes, most of them had textile qualities. This might be a case of "you expect what you inspect", but it was thrilling! The path from the old gowns, via the rejuvenating processes I put them through, led me to water in all senses of the word. Nature has always been an inspiration to artists, and will probably be so for a very long time. Romantic painters referred to nature as a symbol of ambiguity and alienation between man and God (e.g. Caspar David Friedrich), or, like Constable, focused on the sensuous qualities and the feeling of harmony nature could provide: "Our minds are nourished and invisibly repaired" (Constable quoted in Honour & Fleming: 2005, p. 612).

Contemporary artists still use references to nature for much of the same, and conflicting reasons, as evidenced in Anselm Kiefer's anxiety provoking paintings opposed to the lush landscapes of David Hockney. In this time of climate changes and dying coral reefs, there is also an underlying eco-political aspect in references to nature that is hard to escape. After my close inspections of the experiments and the various sketches in preparation for *Volum*, it became clear to me that the intention of the project were to convey the ambiguity of the sensuousness and the fragility of nature.

When I figure out the purpose and meaning of a project, many things fall into place. The experimental samples from the *Volum* project were chosen for their ability to express the intended meaning, and I struggled to find suitable visual forms. Sometimes that meant that I had to go back and forth in the process, refining my techniques, changing the fabrics, colors, or textures from the original experimental samples. Sometimes, I was blessed by happy accidents; strange, unintended things happened that proved exactly right. Whether these "accidents", and many others in various other works, are a result of my repertoire, happening because I have skills and experiences hidden away in my tacit consciousness; or they are just plain coincidence is hard to say. But paying attention to them, reflecting on the hows and whys, will make it easier to include them in my conscious vocabulary later on.



At this stage in the *Volum* project, I did a lot of speed sketching to decide on composition, size, proportions, and selection. The textile experiments set their own boundaries. Some of them begged and shouted to become big works. Those were often the ones where I had blown up the original technique on a sturdy material, and they would have looked cramped and too bulky in a small format. The samples minutely done in delicate, flimsy materials had to be allowed to become small, sometimes three dimensional works. Not all of the experiments were as predictable, some of them insisted on being cast a bit out of character; they had to be taken down or grow in size although it seemed illogical, given the quality of the materials and techniques employed.

### The Agony of Choice

Choices are tightly connected to, and made, according to the intentions of the project, no matter if the maker is a craftsperson or an artist. Most makers are also concerned with quality. Defining what quality is and deciding on the best practice is tough. Michael Polanyi (1998 [1958]) claims that the tacit dimension of a practice could impair the judgment of quality because the criteria of judgment becomes an internalized and frozen habit based on traditional norms, clouding the vision of the experienced practitioner, making him unable to see the qualities in new and maybe better solutions. According to Polanyi, the way to counteract this tendency is to activate the ability to reflect upon one's criteria of judgment.

That is not a bad piece of advice! It is tempting to claim that the "gut feeling" tells you what to choose, that you know by instinct what the right choice must be, because that is the way it actually feels. Examining my initial choices in this project, however, I found that my guiding principle was going after the pieces that most clearly could provide a visual expression of both sensuousness and fragility. Sometimes that meant that I had to choose the quality of color over texture or fragility over size, at other times I had to stay away from some beautiful textiles because they would fade when exposed to sunlight in a gallery. My main concern was to make a selection of works that could convey my theme as a whole. But choosing is such a painful and difficult thing to do. It means that something has to be left behind—which feels like leaving your children by the roadside. The only comfort is that the stuff that is rejected can be picked up later and used in another project. Most makers keep an archive of abandoned samples for future inspiration and reference.

Having some experience, I must be suspicious about my choices. As Polanyi points out, there is a danger of repeating oneself and choosing the solutions that have previously worked nicely. The final step must be a showdown with "my darlings", to send them packing. Working with more design related products such as dresses, the choices depend on a wider set of criteria. Searching for visual expressions is important here as well, but a dress made for a human body needs qualities other than those of a purely visual nature. Finding shapes and materials that mutually reinforce each other, that can be visually stimulating while being able to follow and withstand the movements of the body and endure processing by techniques and tools without getting damaged and be both ecologically and practically sustainable are all important elements when making choices.

All these elements cannot carry equal weight in one dress. Something has got to give. Making a show piece, I give the visually stimulating qualities first priority. A dance costume, on the other hand, must be comfortable and be able to tolerate a variety of movements. It must also be washable. In contrast to art works, practical qualities must come first. The search for the best possible quality can be a bitch. It is not uncommon to be obsessed by it. In the example of the dance costume the practical aspects may well lead to loss of some amazing and dazzling visual qualities that the maker has a hard time relinquishing.

Richard Sennet (2008) has some good advice for obsessive makers. He suggests that, instead of seeing limitations as obstacles, we should welcome them and see them as opportunities to create something fresh by stepping out of our comfort zone. He also warns us about pursuing a problem too long. Such perseverance can easily take on a life of its own and put the unity and harmony of the project at risk. Perfectionism is another danger, as it could lead to focusing more on the workmanship than on what the object in question is supposed to convey or do.





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Clockwise from top left.

Figure 1. Dress from a painting, *The Reception*, by James Tissot 1879. (From Fukai. *Fashion: A history from the 18th to the 20th century*.) Copyright: Musée d'Orsay, Paris.

Figure 2. *Volum*, Lillegerd Hansen.  
An experiment in flounces and frills in silk organza. The sumptuous embellishment of the skirt made me want to recreate the impression of "too much".

Figure 3. Sleeve of a sack-back gown, ca. 1760. (From Hart & North. *Historical Fashion in Detail*.) A scalloped, pinked and slashed sleeve of an English gown, from ca. 1760. Copyright: Victoria & Albert Museum, London





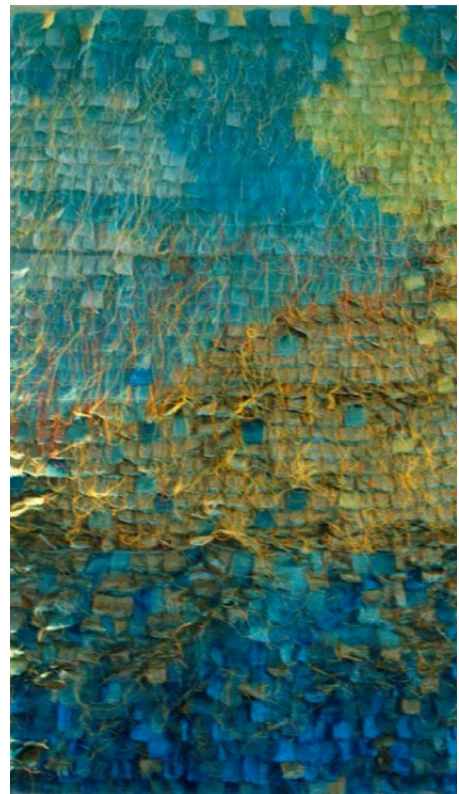
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Clockwise from top left.

Figure 4. *Volum*, Lillegerd Hansen  
Painting on canvas that has been slashed and cut in spiral shapes. Hoping to create a lively, but calm expression, I organized the cut out spirals in rectangular units.

Figure 5. French Cape, ca. 1890. (From Fukai. *Fashion: A history from the 18th to the 20th century*). A French cape from ca. 1890. The slit down the back is decorated with tiny, feather elements that inspired my work. Copyright: The Collection of the Kyoto Costume Institute.

Figure 6. *Volum*, Lillegerd Hansen.  
A detail of a larger piece made from tiny organza and chiffon patches. The threads are left hanging to imitate the softness of the feathers and to create motion on the surface. Lillegerd Hansen







Clockwise from top left.

Figure 7. Back of Polonaise gown, ca. 1770. (From Hart & North. *Historical Fashion in Detail*.)  
A detail from a polonaise gown made in England or France, late 1770s. Copyright: Victoria & Albert Museum, London.

Figure 8. *Volum*, Lillegerd Hansen  
The rosette resembled some corals I had seen in photographs from the Pacific and I used it as a point of departure for my work "White corals". The work is made in plain, white canvas ribbons in order to obtain a "Claire/obscure"-effect.

Figure 9. *Volum*, Lillegerd Hansen  
The work "Magenta" is my attempt at uncovering the enigma of the "Delphos" dress by Fortuny.

Figure 10. "Delphos", Silk dress by Fortuny, France/Italy ca. 1910. (From Fukai. *Fashion: A history from the 18th to the 20th century*.)  
"Delphos" dress by Fortuny (ca.1910). The "Delphos" dress is made of pleated silk. The legend says that nobody but Fortuny mastered the art of making permanent pleats in silk. Trying out a technique of crumpling and boiling silk was a failure; the crumpled surface could not stand water the way that synthetically manufactured textiles can, so I had to use polyester. Copyright: The Collection of the Kyoto Costume Institute.





Figure 11. Silk taffeta day dress, ca. 1845. (From Fukai. *Fashion: A history from the 18th to the 20th century.*)  
A day dress in silk taffeta from ca. 1845. The waist is smocked in a "honeycomb" technique. Copyright: The Collection of the Kyoto Costume Institute.



Figure 12. *Volum*. Gown by Lillegerd Hansen and Sissel Isachsen.  
The corset top of the gown is done in fake leather in a modernized smocking technique. The skirt is made of boiled tulle.

### Reflective Conversations

I mentioned earlier that I would try to see if Schön's theories could shed some light on contemporary artistic processes. That is the reason for describing my process so carefully. However, by referring only to my own process, I risk becoming too short sighted and subjective. I want to examine the generalizability of my practice to other artists' creative processes. To do this, I refer to a research project called "But is it art?" which I carried out in 1994-95. The occasion was the Olympics in Lillehammer, Norway, in 1994, and my participants were a group of artists and designers participating in a catwalk show and a gallery show of wearable art. Although the artists had a given theme, they had a lot of artistic freedom with no limits on the types or numbers of outfits, materials, techniques, colors or ways of presenting the works.

My aim was to find out how they used and reflected upon their skills, experiences and knowledge in this particular assignment. The survey consisted of observation of the works presented in the shows and qualitative interviews with the participants. Examining the information from the participants, I saw that the theories of Schön would serve as a useful and meaningful tool to interpret and make sense of their stories. The way in which the participants described their processes made me confident that Schön had captured something essential about artistic practices, which applied to these participants and to my own process. This section comments on the similarities and differences among my participants' practices and my own. My aim is not to canonize Schön, or to make him a genius who definitively captured the essence of artistic practices, but to acknowledge that his analyses, categories and terminology can help us articulate our practices more coherently.

One may question whether a survey from 1995 analyzed through the lens of a theory from the 1980's can still be useful and valid in 2013. I feel confident that it is still relevant because I continue to find so many similarities between the reflections of the artists in 1995 and



my own reflection after completing the *Volum* project. The conditions for an artist working in her studio now do not necessarily differ much from those of an artist back then, but of course there have been changes. Most contemporary artists may now employ computer-based technology, which they use especially for sketching, trying out color schemes, composition experiments, getting information and sharing their work online. However, makers working in “old fashioned” materials such as wood, clay, metal and textiles still have to go through most of the nitty gritty procedures directly associated with their chosen materials. Some of the materials may be new and some of the tools may be improved, but the processes are still as experimental, chaotic and elusive as ever.

### Repertoire

One of Schön’s main theories is that educated practitioners have a repertoire consisting of techniques, tools, skills, procedures, theories, and experiences. Some of this knowledge is explicit, and some of it tacit, gained through experience. Practitioners see it as something already existing in their repertoire. At the same time they see novelty in a new situation and use the familiar to interpret the new. By using the repertoire, the “toolbox”, in new ways and combinations, according to new situations, practitioners add to their knowledge. That is, by doing and by giving full attention to the new, their knowledge is enhanced.

### Naming and Framing

“Naming and framing” is one of Schön’s key concepts. In both my own process and in my former participants’ processes, one must “name” the task; find a problem worthy of our attention. Creating a problem and imbuing it with meaning is a part of the repertoire of artists. Within traditional, western epistemology founded on the natural sciences (“technical rationality” in Schön’s terms), not everybody accepts artistic knowledge as true knowledge, because it is often viewed as subjective. Schön’s term “technical rationality” could be compared to Max Weber’s term “goal rationality” (Molander: 1993, p. 141)—the kind of rationality that demands that the means to an end must be as efficient as possible. This is a type of instrumental knowledge aimed at a very specific and tightly formulated goal, very far from the way an average artist works.

One of the artists in my survey tried to work with a tailor. Tailoring is a traditional craft ruled by strict conventions and correct procedures. This teaming was not successful. As he explained: “Tailors; they really learn the difference between right and wrong. I noticed that there is not much spontaneity going on. He had a lot of trouble adapting to the experimental nature of the situation, to finish a work that in his eyes, seemed unfinished.” (my translation)

Another participant, a textile printer, admitted that she had trouble freeing herself from the rules of her own training and entering the scary realm of chaos: “I had to practice for half a year on paper to develop the speed and spontaneity I needed to complete my project. By the end of that time I had lost my fear, and all concepts of right and wrong.” (my translation) As the jazz musician John Coltrane once said in an interview with the French journalist Ratliff: “I start from one point and go as far as possible. But, unfortunately, I never lose my way.” (Coltrane quoted in Gjerdi: 2012, p. 4)

Maybe one of the differences between art and craft practitioners and others is that the artists see the need for and the gain in breaking rules? Another of the participants in my survey said:

The goal is not always to make a product. I examine shape, and form, and the nature of the materials, which often leads my work in other directions. It’s important to let myself be led by the process. The goal is to enhance my knowledge and understanding of my craft...to make something new. (my translation)

In the *Volum* project, I also found that “going with the flow” took my work to new and exciting places. Finishing my “apprentice pieces” on the white textiles, I had to let go of control.

### Further Experiments-In-Action; Something New!

Once the process was started and “named and framed”, the practitioners talked about it both in a concrete and practical way and in terms of research. As one of them stated: “The process is like research where choices are made, and the outcomes of the choices influence the next step...the answer is put together bit by bit.” (my translation)



Using strict, positivistic criteria like measurability and verifiability, as criteria for research, eliminates artistic research like that mentioned above. Experiments-in-action count as research for the artist. The actual work with techniques and materials is what makes the process move forward, as this artist explained: "A lot of exiting things happened while working... and if something came out 'wrong', it got even more thrilling. My principle is 'random control'; doing something within a framework, but allowing a lot of coincidences." (my translation) I interpret the "framework" in this quote as referring to the boundaries set by the materials and techniques, and by the knowledge, expertise and experiences of this artist (and here I think of Schön's term "repertoire"). But the artist broke out of this "framework" in order to create a new, personal expression. Because unforeseen things happened within experiments-in-action, the problem changed to one of the situation "talking back" (Schön, 1983). By reflecting on the new situation, the artist can find new ways of enriching his work. In this regard, another participant stated: "Using familiar techniques on various textiles I investigate things; for example how much I can dilute the glue before it stops working." (my translation)

In my observation, as previously indicated, artists use the repertoire they have previously acquired alongside exploratory experiments in new situations. Schön claims that practitioners "see as" and "do as" they have done previously, but also see every situation as new and unique. So how is it possible to act on routine but simultaneously see a situation as new and unique? This can make sense to me only if the familiar situation is seen as a metaphor or an example, used as a point of departure for the new situation. The trained eye can spot similarities and the repertoire is used as a base of knowledge-in-action. Previous experiences give artists, including the one above, confidence to try something new that could go either way.

The uniqueness of the situations, for example "if something came out 'wrong'", makes the artists alert and attentive. The knowledge and experience in the repertoire toolbox, can only take them so far. To make something new, they must pay attention, experiment, change their routines, and adapt to the new situation. In my process, I found myself the victim of "happy accidents". These are comparable to the "coincidences" and "wrongs" the above practitioners mentioned. Without being open to the unexpected, it is hard to develop new expressions. The repertoire is enhanced, new ways of doing things are added, and the artists learn continuously.

Other researchers, among them Dreyfus & Dreyfus (1986) have opposed the idea of a continuous learning process. Their claim is that a professional does not need to reflect much; that this is what makes them professionals in the first place. Their competence and knowledge is internalized and embodied; they act on routine, almost automatically, instinctively and immediately according to their repertoires. In my opinion, this view is rather depressing as the tools in the box will never be replaced or renewed.

### **The Parts and the Totality**

An artist working in a process over any length of time is a completely different story. Perhaps the difference lies in the field of knowledge and the intention of the work. For example, a medical doctor needs to be certain that her actions are predictable, and that they will lead to a very specific goal— namely to save lives. An artist, like the one below, needs different goals for her very different intentions, to create something new and truly amazing.

My process is exploratory; I start out searching for the right material, searching for the shapes. I must work in three dimensions at an early stage, not only because it needs to be sculptural, but also because the human body is the point of departure, posing its own limitations. After some time I search for strengths and weaknesses and use my gut feeling to guide me to an expression with which I am comfortable. (my translation)

This artist starts by developing several possible actions, searching among many possible materials and shapes. Then she goes back to the totality, the problem worth solving which, in this case, is the sculptural dress for a body in motion. From playing around with many options, she has to consider her choices and realize the consequences of what those choices will do for the totality of the work in progress—both weaknesses and strengths. Then, she



must go with the gut feeling. I relate this to my own “pin it to the wall” stage, where all my experiments and options need to be narrowed down to a few choices, which eventually will lead to a result.

In Schön’s book *Educating the reflective practitioner* (1988, pp. 101-118), he tells the story of the architect/teacher Quist and his student Petra. Petra is stuck in a task of designing a children’s school. Quist tries to make Petra go from the totality of the assignment to its various parts, and back again. The process spirals from totality to parts and evolves through what Schön would call “the back-talk of the situation”—that is, the problems talk back. If Petra changes one part, the change will have an impact on the totality, and the whole thing has to be reconsidered. Do other parts need to change because of changing that one part? The dialogue becomes reflective: If I do this, then what happens? The practitioner considers what might happen and what should happen according to the totality. She can embrace the choices and work out several different approaches, reflecting on the consequences for the entire assignment, from horsing around with the parts to a more committed choice, from exploratory experiments to a final decision. In this dialogue, the action is the language, and it is hard to distinguish between reflection and action.

The artists in my own study have also been playing around with the parts and the totality:

I plan carefully, but once I get started, I forget about it and there is a lot of chaos before everything falls into place, and the results turn out completely different from how I planned them. The results turn out the way they have to according to how the materials and the processing actually behave in action. Sometimes the results are not far from what I planned, but I don’t find them as satisfying. It is the uncertain and unexpected things that happened in the process that are the reasons for me to employ the techniques, the folding, the draping and such, directly on the body. The red [dress] wanted to go its own way; that is why it became more sculptural than practical, but I am more pleased with that one than the green one. It is the uncertain and unexpected things that happened in the process that are the reasons for me to employ the techniques, the folding, the draping and such directly on the body. (my translation)

Although this artist plans carefully, with a clear vision of the results, the process turns into chaos—and fast! The plans are abandoned, and the actions rule the progress. Chaos, in this situation, could be the foundation for creating a worthwhile problem. In Schön’s terminology, it’s “a ‘mess’—the situation is unique and uncertain.” (Schön: 1983, pp. 15-16) In the quote from this artist, it is evident that she has figured out that the way she works and what Schön describes above will lead to the results she is looking for. This way of working leads her to unexpected results, results she is more pleased with rather than results that “stick to the plan”. In this respect, Schön (1983, p. 132) says: “But the practitioner’s moves also produce unintended changes which give the situation new meanings. The situation talks back, the practitioner listens, and as he appreciates what he hears, he reframes the situation once again.” The unexpected happening-in-action is appreciated, and this appreciation brings the process a step further. For Schön (Ibid.), the “process spirals through stages of appreciation, action, and reappreciation. The unique and uncertain situation comes to be understood through the attempt to change it, and changed through the attempt to understand it.”

Another participant told me that her contributions to the shows in Lillehammer were a result of seven years studying both Japanese and Norwegian folk costumes. She had an immense repertoire. All the same, describing her processes, it became evident that she chose not to lean solely on routine and her already existing repertoire. She intentionally chose a way in which to work that would lead her to the unexpected, and would constantly enhance her repertoire. As she said: “It’s important to let myself be led by the process. The goal is to enhance my knowledge and understanding of my craft...to make something new.” (my translation) Having such goals, her way of working becomes obvious, and she has discovered this through actions in the studio. Her choice of actions have become an active and intentional part of her repertoire, as well as her knowledge of materials, techniques etc.



This confirms Schön's idea of the practitioners' "double" ways of using their repertoire; both to "see as and do as" from similar previous situations, and to see each new situation as unique and new.

While writing this paper, I tried to divide Schön's various themes, such as "naming and framing", "reflection in action", "exploratory experiments-in-action", "totality/parts" and "back-talk of the situation" into sections, but the terms resist any neat and orderly categories. Every attempt at neatness shatters. Every category gets too small or bleeds into the next. The situations talk back and refuse to shut up. It is hard to divide the "naming and framing" category from the "experiments- in- action" category because they both include experimenting. The totality/parts and the back-talk of the situation may also lead to further experiments. There is no way to use Schön's categories as a recipe to a successful process. The *Volum* project started with a period of experiments-in-action, whereas most of my participants' projects started with a period of naming and framing. This verifies that the categories must be seen as interchangeable elements. Perhaps it makes more sense to avoid calling them "categories" and to rename them "frames of reference". In artistic processes, like those I have described above, everything is mixed together; the experiments are not limited to one definite period, the situations talk back and will NEVER shut up. Unlike theories on creativity from the 50's and 60's, Schön's analysis makes it clear that it is impossible to divide the actual works of artists into stages.

Does this mean that Schön's theories and analysis are useless for helping us describe and articulate our processes? If we are looking for a chronological, orderly recipe on how to work our way through an artistic process, we must look elsewhere. And we will probably come up empty handed. The beauty of Schön's framework is in his leitmotif: REFLECTION.

### Realizing Reflective Practice

The terms "reflection in action" and "reflection on action" are impossible to pin down to certain periods or to specific elements of an artist's process. Reflections go on constantly: in the "naming and framing" sequence, in the experimental periods, in the back talk of the situations and in considering the totality and the parts; and even when it comes to the repertoire: what tool to pick up from the toolbox to solve each new situation. The reflecting in and on action goes on and on, just like the oscillation between totality and parts. As Schön would have said: "It's a mess".

The common denominator is the reflections. When a process goes according to plan, there is not much to reflect on. The fun begins when a routine response produces a surprise and leads to an unexpected outcome. It is mostly when something goes wrong or something unexpected happens that we stop and think about what we did, or what we should have done instead.

The outcomes of reflection may develop a new way of doing something, learning a new skill or clarify an issue or a problem, so that a new cognitive map may emerge. Artists need to revise and reinterpret their understandings and strategies in order to make something new, which may be one of the reasons why they choose to work in such messy and chaotic reflective practices.

My aim in writing this article was to find ways of transforming some of our tacit knowledge into explicit knowledge. There is a gap between what we think we do ("espoused theory"), and what is actually going on that we need to reflect on. Through reflection in and on actions in artistic processes tacit knowledge may be brought up to the surface and be "named and framed". Looking at our experiences, connecting with our feelings and attending to our theories in use, we may hope to find a basis of a language and a framework that allows artists to communicate with each other, and thus articulate the key elements of artistic practice for students.



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