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GULLIKSEN, Marte S

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Researching the construction of a formbild

Dr. Marte S. Gulliksen, Telemark University College, Norway.

Abstract

This paper is a presentation and a discussion of the research methods used in the author's research project at Oslo School of Architecture and Design (Gulliksen, 2006). The aim of the research was to describe how a group of people, in this case: students and teaches, come to agree upon what a *good quality form* is. The chosen way of explaining the notion of form quality in design engaged a socio-constructivistic approach, based in the theories of Bourdieu and Foucault and others. It rendered form quality as something constructed by the individual in interaction with artefacts and other individuals. The object of the study was to explore the mechanisms of this construction, separated into dynamical aspects (the actual construction) and the hierarchical aspects (the restrictions) of the constructive mechanisms. Fairclough's critical discourse analysis of communication (verbal, visual and more) about form was the methodology chosen. This paper discusses certain fundamental methodological questions concerning the use of this perspective and this methodology in a design process. It asks in what way it is convenient to study something as material as an artefact's form as something as immaterial as construction, communication and text. The paper is based on specific examples from the thesis presenting the research, ending with a short conclusive discussion concerning the opportunity this perspective gave to avoid a dichotomist basis (in the artefact it self or in the eyes of the beholder) for theories concerning form quality, and to sustain a focus on the communicational and relational aspects of the designing process.

Keywords:

Form Quality, Formbild, Socio-Constructivism, Discourse Analysis, Methodological Considerations.

This paper is a presentation and a discussion of the research methods used in the author's research project: *Constructing a formbild - an inquiry into the dynamical and hierarchical aspects of the hermeneutical filters controlling the formbild construction in design education situations* (Gulliksen, 2006), conducted as a part of the PhD programme at Oslo School of Architecture and Design. For a full record of the study's theoretical and empirical basis and a full discussion of its findings, the reader is encouraged to consult the thesis, which may be downloaded free of charge.

The research engaged a socio-constructivistic perspective on design activity. It approached something as material as an artefact's form as something as immaterial as construction, communication and text. This leads to some fundamental methodological questions, in particular: In what way is this convenient to do?

The main object of this paper is to address this methodological question. The paper is one of three papers which retrospectively discuss different aspects of the inquiry. Another paper, *Teaching form quality to teacher training students* were presented at the Nordic Teacher training Congress in Iceland in May 2008. A third paper, *Under which conditions are we teaching form quality in craft*, will be presented as a Key Note speech at the international conference Crafticulation and Education in Finland, September 2008.

Although the main issue in this paper is the methodology used, the project itself needs to be presented to the reader. The paper therefore begins with presenting the project's background (aim, question and theoretical perspective), followed by a presentation and discussion of the actual methodological consequences for doing the research and the results thus derived. This provides a background for understanding some of the pros and cons for using the method of choice. The paper ends with a short discussion of the convenience of using such a method.

Background of the research

The aim of the research was to explore how a group of people, in this case: students and teaches, come to agree upon what a *good quality form* is. The argumentation for initiating this study was a need of new knowledge of the circumstances under which we are teaching quality of form within the fields of art and design.

Some observations initiated the venture into this territory. I am a teacher at a university college (a profession-university) in Norway, teaching design, craft and research methodology to students becoming teachers in the school subject *Kunst og håndverk* (*Arts and Crafts*). Walking through the exhibitions at the university college, whether they happen to be examination-exhibitions or public exhibitions, a certain kind of kinship was visible in the artefacts displayed by the various student groups. It was often possible to see which group had been guided by which teacher. Such observations are not uncommon within this subject where different benchmarks for quality of form have existed over time and at the same time. Therefore, what in one area of the subject was or is regarded as a good form may in other areas be regarded as poor.

The same types of disagreement may be observed in the history of art and material culture. Here such differences in judgement of form quality most often are referred to as *styles*. In society different styles are recognisable during different periods of time (as in the Baroque period, the Renaissance period etc), and it is possible to recognise different styles at the same time in different areas of the society. Gombrich writes: "The art historian's trade rest on the conviction once formulated by Wölfflin that 'not everything is possible in every period'." (Gombrich, 1993)

These observations led to the questions: Why is this so? If everything is not possible, then something must condition what is. Further, if judgement of quality of an artefact's form is conditioned by something, how do these conditions work, and how are they developed?

Different theories of form quality was studied and rejected as tools for explaining the observations. More often than not, these theories could be

grouped into one of two main categories: 1) the form quality is in the object itself and 2) the form quality is in the eyes of the beholder (Gulliksen 2006). Thus, it seemed, that any question of form quality could be related to a Kantian dichotomy between "artefact" and "I": "das ding an sich, das ding für mich" (Kant & Vorländer, 1924). This, as a basis for assessing form quality seemed insufficient as a full explanation, especially based in the observations that the benchmarks of quality are changeable.

A new position was needed, without this dichotomist basis. This may be referred to as a third way of explaining form quality, but it may also be understood as a combination of the two through a negation of the dichotomy.

This alternative position, regards styles in art and design, as *renaissance style*, *classicism* and so forth as examples of form quality assessments that to some extent are fixed. They might be said to be *black boxed*, a metaphor used by the French philosopher and anthropologist Bruno Latour (Latour, 1987) to explain how we understand scientific *facts*. When something is recognised as a scientific fact, it means that we accept that it is so, or, at least, that we accept that this way of understanding it is a functional explanation. Thus, it is unnecessary to remember or know how the fact became a fact. This black-boxing-strategy is often used for functions or mechanisms that are highly complex (such as x-rays, atoms, the specific link between certain enzymes and certain hormones etc.) "In its place they draw a little box about which they need to know nothing but its input and output" (Latour, 1987, p3). Black-boxing facilitates further discussion, because one can accept the black box as truth, and use it as a foundation stone on which new knowledge may be built. It is, in fact, the actual transformation of a field of knowledge to science, Latour writes. Consequently, when studying science per se, in the manner of Latour, the challenge is to open these black boxes and study them specifically. A close analysis of their inner structures will reveal how singular scientific facts perhaps began as ideas, hunches or hypotheses. By checking, testing, re-checking and re-testing they were eventually formulated and transformed to functional scientific explanations.

In the thesis presenting the research, it was assumed that it is possible to understand art and design styles as such black boxes. Styles are first recognised post-facto: i.e. it is only when enough artefacts have been produced whose forms possess similar form indicators that a style starts to emerge.

From such a black-box perspective, it becomes possible to study our judgement of form quality in a different way. Instead of studying form post-facto in artefacts or in specific styles, the focus may be turned to the act of *constructing* the different styles (individual or cultural). To circumscribe Latour: when studying what constitutes the principles of form quality assessment within a particular style, the challenge will be to open the black box and discover how it was constructed, how it functions and how it changes.

To understand why there are different, parallel, understandings of what good form are, we can, based in this perspective, turn to the people using these different understandings and ask: How does a group of people construct their judgements of form quality?

Thus, the focus of a research discussing form quality may be turned to the maker (for example the artist or designer) whom, in the same way as a scientist, begins with an idea, a hunch, or a hypothesis, and develops it by testing and re-testing it until it evolves into a finished artefact.

The design- or art educational situation was assumed to be a key to understand this construction process. As was discussed in the thesis the intentionality of teaching and learning design or art renders the constructive process more explicit. In these situations students and teachers negotiate agreement/disagreement about what is good/acceptable form.

Formbild: The concept used for maintaining a chosen perspective on form quality as a constructed position

In order to address these questions on a function level and to maintain the chosen perspective, tools were needed: We need functional concepts by which to discuss the matter at hand. Concepts already existing in the field of form studies (as style, genre, ideal etc) all have several connotations and adhered meanings. This makes them problematic as analytical or theoretical tools in our particular setting. The answer to these considerations was in the thesis to introduce a new concept.

Consequently, the concept *formbild* was introduced to maintain this constructive focus. A formbild is a neologism defined as a *constructed set of principles for judgment of form quality*. The concept is presented and discussed in the thesis (Gulliksen, 2006), with support of some previously published articles (Gulliksen, 2004, 2005). This section of the paper is a short presentation of the concept.

The word 'formbild' itself, is a Norwegian word which roughly may be translated to English as an 'image of form'. Formbild is a philosophical notion, to be understood as a conceptualisation of form. A person can have a formbild, meaning an affinity to a certain style, genre, artistic direction etc. This affinity can be shown in an artefact the person makes through recognisable form indicators in the artefact which display kinship to other artefacts. Form indicators of a formbild may be recognised in all types of artefacts: pictures, installations, sculptures, other three-dimensional objects as utility articles etc, and other designed (or artistic) expressions.

A formbild is developed and constructed in the interspace, the in-between-world, between individuals, and between individuals and artefacts. A person, the maker, makes an artefact, and while doing this s/he develops the form of the artefact according to the principles of good form quality s/he follows. At the same time the maker assesses his or hers principles to those found in the socio-cultural context through observation. The artefact in turn, displays recognisable features of the formbild the maker of the object had. Hence artefacts function in part as representations of a person's formbild.

The individual has two roles: the maker and the observer. The maker makes artefacts in the formbild he has and develops his formbild as he makes the artefacts. The observer understands or recognises the artefact's formbild and develops his formbild in the meeting with these artefacts. The maker is always also an observer. The observer is always also a maker. The choice of the word "making" relates this perspective to the concepts *making professions* and

making disciplines (H. Dunin-Woyseth & Michl, 2001; Halina Dunin-Woyseth & Nielsen, 2004a, 2004b)

The formbild guides the artist or the designer in the creative process both before and after the actual production. It is not necessarily a conscious creative force in the maker, but may as likely be a vague idea that is continually developing. This idea gradually takes shape, after some time has passed or in a long series of products, as form indicators in the product.

A formbild is personal, but it is related to larger directions, as for example *styles*. This is because the maker is always a part of a social practice that s/he continually observes, and expresses him- or herself in relation to. Whether this is deliberately utilized or not will vary from individual to individual and from situation to situation. Through specific actions, the formbild is constructed in this social practice.

A formbild is continually constructed

- By the individual in his or her creative process, through the continual negotiation process in the making of an artefact.

- By the individual in his or her contact with other individuals, through the continual communication (through verbal-, symbolic-, visual- etc. language) about form.

- By the individual in his or her contact with other artefacts, through the continual observation, evaluation, admiration or aversion of certain forms.

Since the formbild is constructed in a social practice, it is a socially constructed phenomenon, dependent on the acting individuals, their positions in the field, structures in the field and communication in the field. Formbild construction therefore covers both the *selection* (of a set of principles for judgement of form quality) and *development* (of this set of principles when developing an individual artistic expression) that is constructed by the creative individual and is reflected in the made artefact.

The process of formbild construction is the process which was the issue of the inquiry. This paper will not present further discussion on the concept formbild, but turn to the main issue in this paper: the methodological consequences of this perspective.

How the research was conducted

Methodological consequences of the chosen perspective

The interest in the process of constructing a formbild, led to the choice of social constructivism as theoretical basis. Burr's four conditions for social constructivism were used to discuss some consequences of this basis: 1) A critical stance toward taken-for-granted knowledge, 2) historical and cultural specificity, 3) Knowledge is sustained by social processes and 4) Knowledge and social actions go together (Burr, 1995). Cultural constructivism were also relied upon (Cobern, 1993), as was studies from within a design theoretical perspective applying a constructivistic perspective (Boujut & Tiger, 2003;

Heaton, 2002; Herneoja, 2001; Koskennurmi-Sivonen, 1998; Larson, 1993; Lawson, 1990; Lundequist, 1992).

This constructivistic perspective has two main methodological consequences. The first one has consequences for the overall way of understanding formbild-as-construction; the second has specific methodological consequences for how-to conduct the actual research.

The first methodological consequence is that construction as a social activity is based in the relations between the individual relational aspects. Here, the theoretical foundation draws upon Bourdieu's theories, as he states "(t)he real is the relational", meaning that it is in the relational meeting between the subjects (the agents), each with their own habitus, their own capital and their illusio, that the field itself is created (Bourdieu, 1996; Bourdieu & Johnson, 1993; Bourdieu & Wacquant, 1992). Based in this, and in several theoretical examinations of the activity in design education (Borg, 2001; Johansson, 2002; Lindström, Borg, Johansson, & Lindberg, 2003) which focuses on the social aspects of the activity, the formbild construction was seen as interaction and negotiation. How this relational construction function were a main issue in the inquiry. This was referred to as the dynamical aspects of the formbild construction; how it worked.

But this relationship is not "free", if by "free" is understood without limitations or rules. Especially in an educational situation, elements of power are influencing how the mechanisms may work. The thesis refers to this as the hierarchical aspects of the formbild construction. All relations are power relations, according to Michel Foucault (Foucault, 1996, 1999, 2000; Foucault & Gordon, 1980). Power is a functional mechanism in the relations between all individuals, and controls how different positions and roles are related to each other. A power relation in it self is not evil, yet it is an unavoidable factor in relations "Power is a machine in which everybody is caught, those who exercise power, just as much as those over whom power is exercised." (Foucault & Gordon, 1980, p156)

Understanding this, in Foucault's terminology, *microphysics* of power (Foucault, 1987, p18) is important in order to maximize this force's potential without misusing it. Within the field of education, this is particularly effective according to Foucault and Illeris (Illeris, 2002). Foucault's concept pouvoir-savoir (power/knowledge) was drawn upon in the thesis to expand on this theme.

The second methodological consequence of the socio-constructive perspective had a more practical impact of how-to do the actual research: Our construction of knowledge of the world is a condition for understanding it. This renders reality itself only accessible through our constructions. That is, our categories. Our knowledge of the world is therefore a product of our ways of categorizing it. This again has the consequence that the concepts we choose to name these categories cease to be descriptive, neutral labels for artefacts, phenomena or ideas. Rather, they contribute to our understanding of what these artefacts, phenomena or ideas are. The concepts are constructed in a specific social context, and they participate in changing this social context by continually changing themselves (Alvesson & Sköldberg, 2000; Andersen, 1999).

This methodological consequence lead to a focus on the communicative practice in the relations, and opened for the possibility to use a discourse analytical method. The concepts are as such, a part of a discourse. The concepts or the *text* are the product of a communicative process. The *discourse* on the other hand is the particular communicative process. The communicative process is a *social practice*. But social practice is more than just communication (Fairclough, 2003). As such, the various definitions of formbild, or 'good form quality', in society and culture may be seen as positions in discourses about form. Studies from within the fields of design and architecture which had applied a discourse theoretical approach were consulted in order to se limitations and possibilities for adopting such a perspective (Hubbard, 1995; Larson, 1993; Michl, 1995, 2002; Takala Schreib, 2000). This consultation concluded that a discourse analytic approach in studies of form could be useful when used to describe the relations between the individual designer's expression and the cultural and historical society they were a part of (Gulliksen, 2006, p65).

Fairclough's critical discourse analysis was chosen to analyse the material (Fairclough, 2001, 2003). This method asserts that that there is a reciprocal relationship between the specific manifestation (text), the discursive practice and the social practice. "Text" is used in a broad understanding, including written or spoken words, "simply what is said in a piece of spoken discourse" (Fairclough, 2001); other symbolic actions (vocal and non-vocal), and, what is shown in a visual discourse, as the type, style or typology of a symbol, a drawing or an artefact. See figure below.

Text						
Word		*Other symbolic actions*		*Artefact*		
Writte n	Spoke n	Vocal	Non-vocal	Typ e	Styl e	Typolo gy

"'Text' as used in this study" (Gulliksen, 2006)

The text is the *product* of the discursive activity. The discourse is the *process*: "the whole process of social interaction of which a text is just a part" (Fairclough, 2001). According to Fairclough, two dimensions should be focused on when analysing discourse: the *communicative event* (the texts, the discursive praxis and the social praxis), and the *discourse orders* (the sum of the discourses, the discourse types and genres).

Carrying out the research

The methodological consequences of this theoretical perspective led to the adoption of a flexible research strategy combined with a reflexive methodology (Alvesson & Sköldberg, 2000). Several aspects of this methodology were discussed, especially regarding the role of the researcher. Further this led to the choice of case studies as method for gathering empirical knowledge (Latour, 1987; Latour & Woolgar, 1986; Yin, 1994).

The cases studied were chosen from educational situations at university colleges teaching students becoming teachers in the Norwegian school subject *Art and Design (Kunst og håndverk).* Case 1 was a group of students and teacher in the university college programme "Design and dressmaking", Case 2 was a group of students and teachers in the programme "Wood and metal Work". Although I, the researcher, also am a teacher, these were not my classes. I had never visited them before. Still, taking a position as a participating observer, my credibility as a researcher was supported by my teacher background: The students and the teachers knew that I knew their situations, their limitations and their aims. This also left me biased in certain ways, as discussed in the thesis.

The number of people in the studied group were small (Case 1 N=18, Case 2 N=16). This was deemed a sufficient number because "it is not the size of a sample that is interesting, but the close study of nuances in possibly quite a small number of accounts." (Alvesson & Sköldberg, 2000, p206) The thesis presents thoroughly the criteria which formed the basis of making the selection of the two cases. In short the cases should be examples of good/excellent teaching within design at university college level.

Observation and note-taking were the principal source of documenting (Angrosino & Mays de Pérez, 2000). Photographs and videorecordings were also used in combination with collecting or documenting in other ways the handouts and the content of the rooms in general. Still, since the aim of the study was to describe the actual constructive mechanisms of the formbild construction, not the content of the different existing formbilds in the group, it was chosen not to show photographs or examples in the thesis. The photographs were used as background material for the analysis only. Collecting material was deemed to be a process of exclusion supported by the flexible research strategy: What is considered useful and necessary to write down. The thesis discusses in length some consequences of this.

The analysis had two main steps: the first was to draw a map of the discourses within the field, and the positions taken in these discourses, through a detailed text analysis; the discursive practice (= the discourse orders). This was referred to as *dynamical aspects*, defined as movement and development in the formbild construction. The second step focused on what effects the demands in the framework behind the mechanisms in positioning had on the activity; a Foucauldian analysis of the social practice (roles and scenography) (= the context of the communicative event). This was referred to as hierarchical aspects, defined as framework in and around the formbild construction in the social practice.

Results – the short version

The full version of the results was presented in the thesis (Gulliksen 2006). In this paper only enough results are presented to enable the reader to follow the methodological discussion. The analysis yielded several findings. There was found a clear dynamic in the communication concerning form. This dynamic had a converging structure, consisting of three phases: (1) inclusion/exclusion of formbild (from where to start the designing process), (2) stabilising the chosen formbild and (3) cementing a norm. Five strategies for bridging gaps in

positions were found. The brackets behind each strategy refer to the primary users of the strategy (S= student, T= teacher):

1. Changing position in order to agree, explicitly or implicitly. (S)

2. Not changing position, explicitly or implicitly, but giving the impression that a position has been changed (S)

3. Redefining the problem or the conditions in order to avoid conflict (T)

4. Advising from an assumed agreement in order to avoid conflict (T)

5. Leaving the gap to linger. (S and T, in one instant only)

The result of the analysis of the dynamical aspects showed that every change in positioning is towards the teachers' positioning. This led the constructive dynamic to converge towards the teachers' position. Though not a surprising finding given the educational circumstances, it was unanticipated that the dynamic was so strong. This strength of the dynamic seemed to contradict the fact that the teachers activated their role differently in the two cases: Case 1: "There is no set answer" (i.e.: you, student, are the designer, you decide) vs. in Case 2: "We have a formbild and we wish to communicate it clearly" (i.e.: we know what you, student, should decide to do).

There was also found a recognizable structure of role activation within the cases scenographies. The active roles registered could roughly be divided into three main groups: the *teacher* (and the master), the *student* (and the apprentice) and the many different variations of the *performer* (the *designer*, the *modeller/craftsman*, and the *artist-genius, artist-craftsman, artist-researcher, and discussing-participants-in-a-creative-forum*). There seemed to be some confusion as to which role to activate or which role to expect others to be in. This led to cross-role-expectations, role-mix-ups and altercastings (Goffman, 1959; Lynge, Beck, Flor, Steihaug, & Rossiné, 1997), rendering the rules of the play in the scene somewhat unclear. The teachers had the strongest power of definition as to which roles the participants should take. They could define which roles the students were in.

On this basis, the thesis proceeded to the first statement, that to participate in a situation was to invest in the rules of this situation. You have to trust that the rules are for your benefit (both as a student and as a teacher). And it was found in the material, that when the conditions and demands of this situation were unclear they functioned more limiting than if they are clearly stated.

This led to the second statement that the role activations (which role you take: student, teacher, performer) in the situations were subordinate to the role expectations, hence neutralising the teachers' activation. This could explain the mentioned strength of the dynamic.

Based in the discussion of these two statements, the final conclusion was that formbild construction in the empirical material was controlled by the Art and Design educative situation. That is, that not everything was possible, neither for the students nor for the teachers, because of the social setting they were placed in. This also implies that a study of formbild construction in another social setting probably would present a different dynamic and a different hierarchy of the formbild constructive mechanisms. This would be an interesting path to follow in another research project.

Looking back on the methodological choice

This paper's short conclusive discussion of the usefulness of the chosen methodology, begins with the observation that the focus on the emerging process of formbild construction enabled the study to yield detailed knowledge on a) the actual mechanisms of construction, b) the factors restricting/limiting them, and c) knowledge of how the formbild construction in the empirical material was controlled by the specific situation. As such the method of choice in the study was useful for the intended purpose of the research (Gulliksen, 2006, pp. 221-223).

But is the knowledge thus derived useful also in a broader design research context? As stated in the introduction of this paper, a fundamental question to ask is:

- How is it convenient to study something as material as an artefact's form as something as immaterial as construction, communication and text?

The formulation of the question reveals the position that to discuss the aspects of *how* one or other method is convenient is more important than to argue for some or other method to be *the* most convenient method for study designer's form giving.

When having the ambition to understand conditions for formgiving processes and conditions for teaching students about form quality when designing, this is a kind of research *into* design (Frayling, 1993). "Design" here used in the sense "the activity of designing".

When defining form quality assessment as socially constructed set of principles for judgement of form quality, this turns the focus away from the artefacts themselves and towards this activity. This was further underlined by avoiding using examples from the artefacts produced in the studied situations in the thesis and in this paper. The artefacts were in this methodology understood to have two communicative functions: 1) function of a medium presenting form indicators of the maker's formbild, and 2) function of a source for the observer to recognise a individual's or a collective's formbilds. Both functions are communicative functions and may be read as positions in discourses about form.

Choosing to avoid using pictures and examples from artefacts, has the methodological consequence that the reader or fellow researcher is deprived of more detailed information of the formbilds in question and the possibility to check if his or her assessments of the formbilds in question co-variance with mine. As standard research ethical principles state, external reviewers were given opportunity to check the empirical material before the research was accepted as a finished PhD study. Thus, formally everything is in order. But that does not change the relevance of methodological question. I will therefore give some comments as to the convenience of a methodology. What did I seek to obtain by making this choice, by removing pictures and examples of artefacts, and did I obtain it?

In the thesis, the choice of loosing the artefacts themselves enabled me to sustain a focus on the communicative and relational aspects of the designing

process, rather than on the substantial aspects. This is an immaterial focus, although the immaterial focus also in this study was materially contingent.

Also, this focus on the communicative aspects of form quality enabled the study to avoid the dichotomist basis of the problems of discussing form quality as presented in the beginning of the paper. After the mental turn of focus was done, it was relatively easy to maintain this focus. It was useful to extent that it enabled me to discuss form quality on another level than for example substantial, ethical, moral, or subjective levels. It was therefore possible to discuss form quality as such, not the various externalisations that have emerged at different times and in different periods. As such, the methodology of choice was useful and convenient because it provided a new vista on a long debate.

As a teacher, this vista and the knowledge thus derived provided me with new insights in some of the conditions for teaching form quality. Most of all is this linked to the possibility to get a more distant focus on the activities going on. This gives me the opportunity of making the students reflect more openly and critically upon their designing processes, which forms they are making, what they are taught in the designing schools, and what they are making – as teachers or as professional designers – in their future lives. As mentioned earlier, a study applying the same methodology on how professional designers construct their formbild would be interesting in order to understand more fully the actual formbild-as-construction process in another setting.

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Dr. Marte S. Gulliksen

Dr. Marte S. Gulliksen, educated in Norway at Bergen Teacher Training College, Telemark University College, Oslo School of Architecture and Design (PhD in 2006) has worked at Institute of Aesthetics at Stavanger University, and is currently working as Associate Professor at Telemark University College, Department of Art and Design Education. Here she teaches design theory,

craft and research methodology to master students at the teacher training programme.