

Style and exemplar

two concepts to improve the study of the design practice

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Prepared for the 16th IRIS conference

Abstract

The ideals and assumptions that designers have play a central role for the quality of systems. If the empirical research wants to improve practice it should have as its objective to change these assumptions and ideals. One way of changing values in practice is by making challenging formulations concerning the designed products. Focusing on the product the concepts of *style* and *exemplar* becomes relevant tools for empirical studies. These concepts are explicitly and implicitly used in various design fields such as art, architecture and industrial design as tools in communicating about, improving and understanding designed products. The concept of style springs out of *comparison* with a commonly shared framework, i.e. a *repertoire* of *exemplars*. One approach in order to criticize the existing products could be to evaluate the persisting *exemplars and styles* within practice. In order to make such an evaluation research needs a framework for comparison. The different paradigmatic analysis that are made within the field of information systems research can serve as this framework for evaluation. With these paradigmatic analysis as a repertoire for comparison, research has a base for making the challenging formulations about the designed products that will improve practice.

1. Introduction

Hirscheim and Klein claim that all systems designers approach the design task with a number of explicit and implicit assumptions about the nature of human organization, the nature of the design task and what is expected of them. These assumptions play a central role in guiding the designer's in the design process. Stolterman (1992) describes the design process from an ideal-oriented perspective that emphasizes that it is the designer's ideal and values that guides him through the design process. The ideal that a designer has is significant for how he chooses to act in different design situations. The ideal constitutes an important foundation for evaluation and judgment of different proposals and products that the designer is confronted with.

I understand the two statements above as recognition for the central part that designers as individuals play in the design process. The designer's personal ability is therefore an aspect of great importance for the quality of information systems. If research has an interest in improving practice the focus for research should be to improve designers ability to design.

2. Design ability

Stolterman (1991) believes that judging and evaluating qualities of products is a central ability for a designer. In every design situation the designer must choose what he or she believes to be the best way to act in order to reach his goal. The designer must have the capability to criticize different proposals and products and therefore needs to have a cultivated taste. This ability is according to Stolterman what distinguishes designers from each other.

Lundeqvist (1992:a) thinks that the ability to judge and evaluate springs out of an *repertoire* of experienced artifacts, i.e. *exemplar*. He also thinks that this ability is included in the *ability to interpret rules* within practice. Rules are distributed through practice as *exemplars*, models and manifestations that are impossible to understand without the underlying context. To be able to understand and exercise the rule one must have the understanding of the situation were the rule is applied. The *interpretation of rules is made by comparison* with a wide range of similar cases were the rules have been applied. The rules and conventions within a practice are however implicit and to be able to point out the rule we need to *depict exemplars* where the rule is well applied.

I understand this as when designers learn how to act in different design situations, i.e. learn the rules of practice, they develop their design ability by comparing artifacts or situations with models and *exemplars* in a context. The way designers act in the specific design situation is then imparted by these exemplars.

3. Problems in the study of practice

Stolterman (1992) sees it as a dilemma that practitioners do not appreciate the research within information systems practice. He has in interviews with twenty systems designers been made aware of the lack of interests for research among practitioners. "Practitioners do not regard research as something of their concern, but researchers regard their research first of all as directed towards improving the practitioners practice." (Stolterman, 1992) Researchers within information systems, who want to improve practice, have in response to this lack of interest been forced to only consider two things as valid. Either helping systems designers in their practice or helping users or buyers to get what they want or need. This is according to Stolterman (ibid) a too narrow focus for research. Since information systems are affecting human activities in one way or another it is in this very broad context that researchers has the responsibility to create understanding and to make the design and use of information systems intelligible.

One difficulty, according to Stolterman (1992), in changing the focus of research and still have as objective to improve practice is the considerable impact that designers ideals and values have on the quality of the products. The ideal-oriented perspective argues that the scale of judgment that exists within practice is essential for the quality of designed systems. To improve the study of practice research needs to influence practitioners' values and to widen *their* framework of judgment. Stolterman (1992) is therefore arguing for a change in focus for research meaning that research should be guided by the objective to *criticize and analyze existing frameworks, and to create new ones.*

So, in order to improve practice, we need to widen the framework of judgement that exists within practice. This can, according to Stolterman (1991), be done by a critical approach to the products designed by practitioners. Many design fields such as architecture; industrial design, and art have an ongoing discussion about different artifacts and their qualities. There is often a history about different styles and exemplars that are used to characterize, define, valuate and evaluate different products. Art science is probably the most established design field that for a long period has used these concepts as a platform to view and discuss art.

One problem of adopting the ideas of art to systems design is that there is no tradition of viewing information systems as products. Ehn (1987) and Stolterman (1991), for instance, have made some attempts on viewing information systems as products. With an objective to criticize existing information systems their views would make a useful platform for discussing and criticizing information systems. Another problem is that practitioners are not aware of that the ability to design is dependent on their ability to evaluate and compare artifacts and situations with a repertoire of exemplars. Because this lack of awareness neither practitioners nor researchers have a formulated repertoire of exemplars that can be used as illustrations of the rules within practice. There is no tradition for viewing information systems as products and no tradition of consciously evaluating the designed products. However existing information

systems can be seen as an existing repertoire for designers and also a commonly shared framework for evaluation, e.g. in how computer interfaces are designed, how systems design is organized and in the increasing interest in using standard applications.

4. Style and Exemplar – an overview

Style is often used as a synonym with a characteristic way of doing something or a general category based on somewhat similar characteristics. The etymology of the word style originates from the Greek word *stylos* and the Latin word *stilus*, which both, according to Ylimaula (1992), has the origin from words meaning an upright expressing object.

The style concept is not just associated with artistry and art creation but also with design of social environments, ways of living and everyday thinking. When the concept of style is discussed it is automatically connected with the emergent properties in the designed object. These emergent properties can among others be the shape, the content or the function. What properties, that are of importance for a particular style is decided by persons that by tradition or by their social status has the possibility to evaluate the important properties.

Georgio Vasari was, according to Ylimaula (1992), the first to use the concept of style by dividing art into historical styles from the 13th century up to the 16th century. Vasari thought of the direction of art as being a lifecycle. He divided art history into three phases that we today know by the names Antiquity, Middle Age and the Renaissance. The relativity of style was acknowledged when the concept of style was used to arrange artistic work according to different cultures and ways of living. Instead of seeing the history of art simply as flourishing peaks and declines, each period was given its own value and it was admitted that art expressed the essence of a period. The term that was invented was Romanticism. This tradition was very much inspired by Hegel's dialectics and aesthetics. There were two sides of a work of art: the materialistic one and the spiritual one. The value of art was in combining content and form and the concept of style should be used to evaluate, guide and improve this combination.

According to Webster's dictionary style can be explained as:

"... a quality that gives distinctive excellence to something and that consists especially in the appropriateness and choiceness of the element combined and the individualization imparted by the method of combining." Webster (1986).

This description of the concept of style fits well with what Ylimaula argues for in her dissertation *Origins of style* (1992). She claims that the concept of style constitutes much more than just different periods that follow one another. Rather:

"Style is order and movement of thoughts, which come out within practice." (Ylimaula, 1992)

According to Ylimaula (ibid) the Swiss art historian Heinrich Wöfflin realized that a living architectural style inevitably reflect the reality of its time. Changes in style

emanate from changes in popular sentiment. This suggests that the few periods in history that have created styles are those periods when humans have been able *to experience and understand the collective feelings of their time*. There are also other researchers that have similar ideas about the concept of style as for instance, Malmer (1983), Enkvist (1983) and Hermerén (1983).

Malmer (1983) believes that the concept of style shows how humans in a certain era perceive their surroundings. He thinks that although the style in art or in buildings does not deliver the whole truth about the culture of a time, it is seldom or never isolated from the culture or the society. The styles have an intimate connection with at least some other part of society *and it is usually an important part*.

Similarly, Enkvist (1983) argues that the fundamental thesis for the concept of style is that all style experiences spring out of comparison. When we observe an artifact we consciously or unconsciously compare that artifact with earlier exemplars of similar artifacts. We have a cultural and social built reference for comparison. He believes that the relationship that we find is based on either substance and theme, or function, or the technology through which the artifact was made. The material of comparison is something that the observer has, on basis on his/her earlier knowledge, made to a reference system, which can be called a network of values. Only a common network of values can lead to a common style.

Lundeqvist (1992:a) and Scruton (1979) have the same assumptions of how different styles occur. Lundeqvist means that the commonly shared *repertoire* is the framework for a specific style and Scruton (1979) argues that style is a social repertoire of exemplars, experiences and good examples. The existing style of an era constitutes the framework that the individual designer needs for judgment and evaluation.

5. Style and exemplar in the study of practice

Today it is an emerging interest of classifying and categorizing different approaches and theoretical foundations in the research field of information systems. These categorizations, often called paradigmatic analyses, have a variety of objectives that are of importance for the quality of information systems. Among others: Bansler (1989) who categorizes different research traditions, Hirscheim and Klein (1989) who distinguishes different assumptions that designers have and Iivari (1991) who classifies seven schools of IS development. These different categorizations are all made by researchers in order to gain a better understanding for the field of information systems, but are not so far used as tools for analyzing and criticizing existing information systems. It is not even sure that the classifications that already exist are very good for this purpose. Thus, they can be used as exemplars when the framework needed for practice is to be formulated.

I assume that the paradigmatic analyses that are made within research field of information systems are researchers way of indicate what properties that are of importance for improving practice. The problem so far is that research does not have the tradition of influencing and evaluating what properties that should be recognized as important in practice. The concepts of style and model as tools for empirical studies

could serve as the initial platform for research in order for researchers to gain a greater impact on what properties that should be taken into consideration in information systems design.

If the practitioners themselves are not encouraged to critically approach all products and situations they are confronted with, this is what researchers should aim for. To encourage practitioners to develop their ability to evaluate and judge different information systems by making challenging formulations about the designed products is what the research within information systems should aim for.

6. Concluding remarks

If we want to improve practice the concepts of style and exemplar could be used to stimulate practitioners to widen their framework of evaluation and judgment. One possible way of using these concepts is by criticizing the different products that are designed. To be able to evaluate and criticize the existing products in society, research needs a commonly shared platform for evaluation. The paradigmatic analyses that are made in the research field of information systems may serve as the initial framework. Another way of widening the framework of practice is to depict the exemplars that designers use as guidance to develop their tradition within practice, i.e. what exemplars they use as illustrations of a good or bad application of the rules. As researchers we should aim at classifying different artifacts according to specific styles, comparing different artifacts to each other and develop different styles as framework for evaluation of products.

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