Designing the Performative Object:
A Study in Designing Mindful Interaction
Through Artefacts.

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I developed the concept of the Performative Object (PO) to describe objects with these qualities of interaction. At the core of the study was the concern with identifying the PO as a separate category of definable design objects.

The paper presents part of a larger study. It presents a summary of the analysis of the problem, of the outcomes of the concept development and of the testing through comparative analysis. It also reflects on the consequences and usefulness of the proposed concept.

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Abstract

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Introduction: Identifying the Problem of the Study

The subject of this study has evolved from observations and reflections on my own practice. The project that has been of fundamental importance for the development of my research has been the "Social Cups", which I completed some time before the proposal for the current research. I developed the "Social Cups" with the aim of mirroring the interrelations between users which I had observed at various occasions around the table, and to make them explicit. The shape of the cups is that of the cuppa of a champagne glass, yet without the foot. Without the foot, the cups cannot stand. Therefore, they each have a little connector with them that carries two suction pads on each side and by means of which the cups can be connected. At least three cups have to be connected to build a stable unit. In this way, people have to communicate and interact in order to operate and use them (Illustration 1).

Illustration 1: "Social Cups".
Kristina Niedderer, 1999.

The finished piece raised some debate and questions about the potential and value of the object to influence interaction. There were doubts about perceptions of predictability with regard to use as well as considerations about the potential of design as a social mediator. Both doubts as well as expectations were raised centring on my intervention with function that somehow subverted the norm. This sparked the desire for a systematic inquiry into the phenomenon described. The assumption was that some objects could influence interaction more actively than others due to the manipulation of function. The aim was to understand better the characteristics of this kind of object, of their impact and design, and whether they could be useful as a wider concept for design.

To articulate and frame my inquiry, hypothetically I have termed the group of objects that I want to investigate *performative objects* (PO). I call them *performative objects* because I assume them to cause the user to perform in a particular mindful way. The concept of mindfulness refers here to the attentiveness of the user towards the social consequences of actions performed with the object.

With this project I set out to investigate the concept of the *performative object*. The assertion is that we can design artefacts that communicate and cause mindfulness of others in the context of human interaction by means of a modification of function and such artefacts should be called *performative objects*. My claim is further that the PO has not yet been recognised as a separate category and therefore it has not yet been put to its full potential use. At the core of the study is therefore the concern with identifying the PO as a separate category of definable design objects.

The Research Questions

In the assertion of the PO I have made three (as yet) unsubstantiated assertions. Firstly that there are POs. Secondly, that they are a separate category of definable design objects. And thirdly, that these objects have not yet been put to their full potential use.

In order to identify the PO as a separate category we first have to find out what POs are by defining their characteristics. We further have to distinguish them from other categories of objects in order to show their originality. And finally we have to try to assess the benefits of proposing this new category. This results in the following research questions:

1: What are *performative objects*?
2: Can we distinguish *performative objects* as a separate/new category?
3: What are the consequences of identifying and designing them?

In summary, the questions ask for the development, analysis and testing of the concept of the *performative object* with regard to its realisation and its distinction from other categories of objects. In the following, I introduce the

problematic of the PO in more detail, starting with the methodological approach taken.

Defining the Methodological Approach of the Inquiry

The next step was to determine the strategy for the inquiry. Most importantly the activity of proposing the PO as a new category determines that the study is one of naming and classification.

Fawcett (1999: 15) explains that naming and classification are descriptive theories. They "are needed when nothing or very little is known about the phenomenon in question" and they "state 'what is'." With the naming, I aim to identify and qualify the phenomenon under question (question 1: what are…?). With the classification, I aim to identify how the phenomenon relates to other [related] phenomena (question 2: can we distinguish…?). Accordingly, the first step of the study was to develop the concept of the PO; the second step is to test the concept.

Concerning the testing, it had to be decided whether to conduct it empirically or theoretically. In order to decide this, it was necessary to consider what the testing has to show: that the concept of the PO is possible and probably existent, and that it is original. In order to show that the PO is possible, it is necessary to demonstrate that it is possible to cause mindfulness by means of function. In order to show that the concept is original, there is the need to demonstrate that these kinds of objects do not already exist as a category with another name.

Establishing the originality of the concept and category of the PO seems an essentially theoretical process, which is achieved through comparison of examples. Establishing the possibility of the existence of the PO could be conducted through either conceptual analysis or empirical testing. I have decided in favour of the theoretical route that sets out to establish the characteristics of the *performative object* through conceptual analysis. The aim is to develop a framework with which to test the concept of the *performative object* theoretically through comparison. This framework may serve in future for the evaluation of related work on an empirical level.

For the comparative analysis of examples, there is a focus on the drinking vessel due to its distinct position within social interaction. It provides an important model for analysis because its role is sensitively balanced by design and function on the one hand, and its social use and cultural ritual on the other.

Outcomes of the Concept Development

For the development of the concept of the PO, I identified and reviewed three key concepts: interaction, mindfulness, and function. These three key concepts were examined in the context of design.

Interaction in Design

The first key concept evolved from my interest in the impact of the artefact/object on social interaction within and through use. This constellation suggested a triangular relationship between person/human – artefact/object – person/human (Figure 1).

Human-human/
social interaction

| Person/human | | Person/human |

Mediation of
cultural meaning
and interaction

Human-object-
interaction
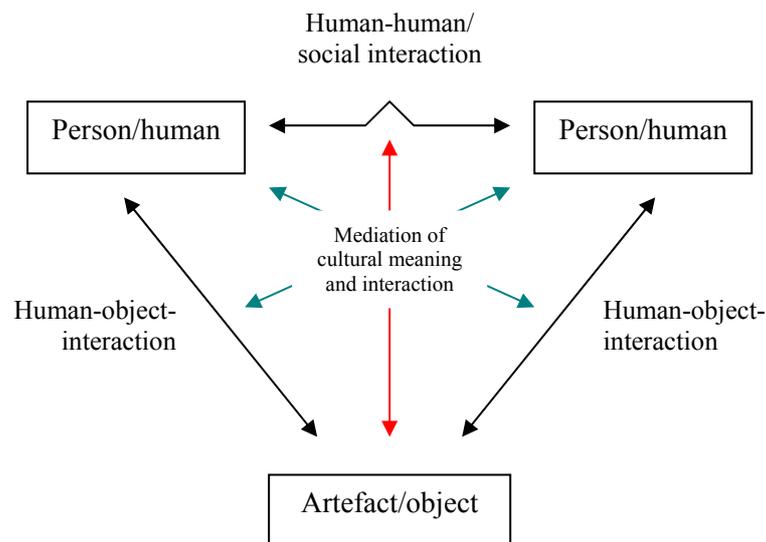
Human-object-
interaction

Artefact/object

Figure 1: The triangular relationship of interaction

The analysis of interaction in the context of design showed that interaction can be understood either with reference to the design process (e.g. designer-user-interaction), or with reference to use (e.g. human-object-interaction / human-object-human-interaction).

Looking at interaction in terms of use, it is common that emphasis is put on interaction with the object or medium and its technological aspects, and on a functional and/or ergonomic level rather than on aspects of human social interaction which it may facilitate. For example, mobile phones are designed and developed with regard to the technical potential and simplicity of use rather than the social consequences of use or abuse. In user-centred design, for example, this takes the direction that objects are designed to make people independent rather than to make dependency and care acceptable as an integrated part of use.

This review raised the question of how an object could be designed to raise awareness and reflection, i.e. mindfulness of the social consequences arising from its use. In order to find out whether and how design objects could be used to cause mindfulness, I reviewed the concept of mindfulness.

Introducing the Concept of Mindfulness in Design

Mindfulness is a term that is increasingly used in psychology and education (e.g. Langer 1989, Udall 1996). It is described as an attitude of both awareness and attentiveness. Mindfulness in the sense of awareness means that, depending on the context, I can be aware of my surroundings or myself, or of something or someone. Mindfulness in the sense of attentiveness usually occurs in the context of social interaction where it is associated with caring attention towards a person (Langer 1989).

Although desirable as an attitude, it seems that mindfulness is not an easy thing to achieve. Langer raises the question why we are not always mindful and how we could promote enduring mindfulness (Langer 1989: 121). Langer (1989) as well as Udall (1996) come to the conclusion that we need to break through established patterns of perception and experience, i.e. preconceptions, in order to achieve mindfulness in new situations (Langer 1989: 19-42).

Whether deliberately or accidentally, this breakthrough to mindfulness usually seems facilitated through an external agent (Langer 1989: 81-114; Udall 1996: 107). This raised the question whether the design object, as external agent, could be designed to cause this breakthrough and thus mindfulness?

Causing Mindful Interaction through Function

Function is the third key concept. I have investigated function under the assumption that it is the means by which mindfulness can be caused. The insights from observation of the use of objects, including my own work, have led me to the assumption that a modification of function can cause a disruption of experience and thus mindfulness. For example in the "Social Cups" (cf. Illustration 1), it is the way in which a disruption of function (in this case the aspect of standing/non-standing) requires the users to interact with each other in order to operate the object.

On a theoretical level, this assumption is supported by Pearce (1995: 166) who argues that the object provides a "plan for action", which normally is laid down in the object's function. This means, a disruption of function could disrupt the common pattern of action and in due course the experiences linked to it. If a disruption of experience is needed to cause mindfulness, and a disruption of function can cause a disruption of the normal pattern of action and of experience, we can conjecture that a disruption of function could serve to cause mindfulness.

Summary of Concept Development

The concept development has shown that we can theoretically define the category of POs. Its characteristics are mindfulness (aim/affect/result) and a

disruption of function (means) through which this mindfulness is achieved. The review of the original study (Niedderer 2004) also showed that a category of PO had as yet not been defined.

The Comparative Analysis

In this section, I give a summary of the testing by comparative analysis. The aim of the comparison is to show that we can distinguish POs from other objects by means of their characteristics. Thereby the characteristics of function (means) and mindfulness (result) provide the framework for the comparison. It was expected that objects which cannot be identified as POs either do not cause mindfulness or cause mindfulness by other means such as a different context.

The first step in the analysis and comparison of objects is the investigation of whether the objects show a disruption of function. The recognition of a disruption presupposes the recognition of a norm and a deviation from that norm. This recognition is further dependent on the context. Assuming POs to be a kind of design object, they would have to operate in the usual context of design, which I have identified as the context of efficient functionality.

For example if we think of the drinking vessel as design object, a standard water glass provides something like a norm of usage for cold beverages (Illustration 2). It is designed to maximise comfort and efficiency within use concerning all aspects of function, e.g. size and volume, handling and safe standing. In this way it guarantees 'transparent' use.

Illustration 2: Water glass.

We recognise a disruption of this norm of efficient functionality for example in a broken glass (Illustration 3). Here the disruption of the pragmatic function causes a disruption of the pattern of action. This is bound to lead the user to some kind of reflection. In the first instance, this will be reflection on the object; thereafter it is likely to be reflection on self as Norman (2002) has shown in his psychological analysis of objects. He found that, where design objects do not function how we expect, most of the time we do not first question the object but our own abilities to handle them (viii). Thus malfunctioning, e.g. of broken or badly designed objects, may cause

mindfulness of self. However, since they do not allow the resolution of the disruption, the questioning of self and of the object seems bound to end in resignation or negative feelings. This begs further questions of how the result of the disruption can become a positive and desirable [mindful] experience within the use of the PO?

Illustration 3: Broken water glass.

The example of the broken glass has shown that something more than a mere disruption is required to cause mindfulness in our sense. I have used my own practice for exploring this aspect of function (Niedderer 2004). It has emerged from the inquiry that, additional to the disruption, a means of compensating for this disruption was required. For example in the "Libation Cup" (Illustrations 4 & 5), the function of holding liquid is disrupted in a similar way as with the broken glass. However, the users can close the five holes with their fingers thus restoring the function of the cup. Besides causing mindfulness of the cup, the cup evokes an additional level of meaning through the additional action required. We can therefore conclude that we can cause mindfulness through materiality.

Illustrations 4 & 5: "Libation Cup". Kristina Niedderer, 2001.

We can distinguish the twofold process of function that causes mindfulness, i.e. that causes awareness and guides reflection in further examples. As indicated earlier, in the "Social Cups" the rounded foot causes a disruption (not-standing), which can be compensated through the connectors (Illustration

6). We encounter the same phenomenon in "La Grolla" (Illustration 7), which is a traditional drinking vessel from the north of Italy. It is still in use today and can be ordered in the local trattoria. "La Grolla" is served with the number of spouts according to the number of diners who pass the vessel around and drink directly from the spouts. The action symbolically links the diners. The question arises whether this is a ritual object or performative object. Perhaps in this case the context might be decisive. Within its traditional context, "La Grolla" might work as a ritual object, reinforcing values rather than causing reflection, especially since it seems to offer just one way of use. On the other hand, the action seems to be embodied in the function of the vessel. Therefore, in a new context, its functional arrangement might cause reflection within use and cause participants to question their interaction; thus mediating interaction in a new way.

Illustration 6: "Social Cups. Kristina Niedderer, 1999.

Illustration 7: "La Grolla".

The example of "La Grolla" raises the question of what distinguishes the PO from a ritual object? The difference becomes clear when we think of the probably best-known ritual object in western culture: the chalice. Although visually significant, the chalice does not show a disruption of function. I would argue therefore that the mindfulness in this case is caused by the ritual context. If it was not the context but the object, how could some Christian groups use an ordinary glass to the same effect of causing mindfulness? Or how could a trophy cup, which shows a striking similarity to a chalice of the same period, be used in an entirely different and secular ritual?

Conclusion

This is a report of a larger study, it was therefore only possible to explain the main concepts and argument briefly.

In summary, the outcome and contribution of the study is that we can say what the PO is and that we can distinguish it as a separate category of definable design objects by means of its characteristics (i.e. mindfulness as caused by a disruption of function).

We can also conjecture the consequences for both society and designers. With regard to society the aim of the PO is to shift consumption towards a more mindful, i.e. socially-reflective approach, thus transforming the role of the user into that of the participant. Concerning the designer, the main question is who gives the designer the right to design mindfulness?

This study offers a number of possibilities for further research into the concept of the PO. Firstly, it provides the theoretical basis for empirical testing, including the design, development and empirical evaluation of the concept of the PO with regard to the established characteristics. Secondly, future research may be concerned with the application of the concept, for example its application to interactive design might be of particular relevance. Thirdly, future research may be concerned with the exploration of the ethical issues which arise with regard to the responsibility of the designer. Finally, in the longer term a study might aim to assess the benefits for society concerning sociability and community.

References

Fawcett, J. 1999. *The Relationship of Theory and Research.* Philadelphia: F. A. Davis Company.

Langer, E. J. 1989. *Mindfulness.* New York: Addison Wesley Publishing Company.

Niedderer, K. 2004. *Designing the Performative Object: a study in designing mindful interaction through artefacts*. (PhD Thesis). University of Plymouth.

Norman, D. A. 2002. *The Design of Everyday Things.* New York: Basic Books.

Pearce, S. M. 1995. *On Collecting. An Investigation into Collecting in the European Tradition.* London: Routledge.

Udall, N. 1996. *An Investigation into the Heuristics of Mindfulness in Higher Art and Design Education.* (PhD Thesis). University of Surrey.