

NORDES 2013 EXHIBITION: LINES & MODELS. EMBODIED DRAWING ACTS

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ABSTRACT

Lines & Models is a ongoing series of analogue, digital and hybrid drawing experiments. The project explores tacit approaches to sketching and drawing by experiments using the body as a drawing tool. In the research project, theory and practice are closely linked. The experiments serve as drawing artifacts and as material for reflections in design research. In this context, the project evolved into an investigation about the involvement of the body while drawing and sketching, and how the knowledge gained can be visualized.

DESCRIPTION

Drawing is a classical art and design practice that is in recent times both methodologically and theoretically rediscovered. The return is accompanied by a redefinition of what may be drawing in the digital age. What role does the latest technological developments of drawing tools play and how can they be used in practice-based research to achieve knowledge? One focus in my design research about drawing is the transfer of analog culture techniques to new media. The experimental set-ups are including analogue and digital media and the use of hybrid technology. But the technology should only serve as a vehicle or tool, because the main focus is on the manual activity.

DRAWING PROCESS

Often I begin a project by producing drawing series, that is creating material, which I can develop a body of work

from and reflect upon. The drawing series were all executed in a non-linear way during a period of time, with the aim to allow hand and body to take precedent over conscious thought processes. Methods such as repetition, transformation and layering were applied, in order to understand the process of drawing in experimental settings. The different elements of the experiments are: First, the involvement of a performing hand using gestures to create drawn objects. Second, the tools used in order to produce visualizations of these processes. And third, the conventions of software visualization which have a significant influence on aesthetics and the results of creative processes. This shifting from analogue to digital techniques played an important role in the experiments and their formal outcomes.



Figure 1: First LINE drawing with the wrist

LINE DRAWINGS

During the process of drawing, the connection between the hand and the drawing tool changes from unconscious action into a very conscious gesture. In these drawings, the body as an instrument for drawing becomes visible, as do its attendant imperfections.

LINES – WRIST, ELBOW, SHOULDER

The conscious and precise use of the joints as drawing tools produces a variety of shapes. These shapes also seem to enclose the movement of the body in space. The images have a dynamic appearance and spatial depth, due to changes in the body movement and resulting differences in the transmission of strength and pressure onto pencil and paper.



Figure 2: LINES Drawing with the shoulder (ink, paper, 1 x 1,3m)

MODELS

The shoulder drawings were scanned and transformed into grid models and three-dimensional shapes using rendering software. The lines of the digitalized drawings were translated into tubes, which define the material thickness in the production process. Stereolithography is a technology used for transforming 3D images into 3D models.

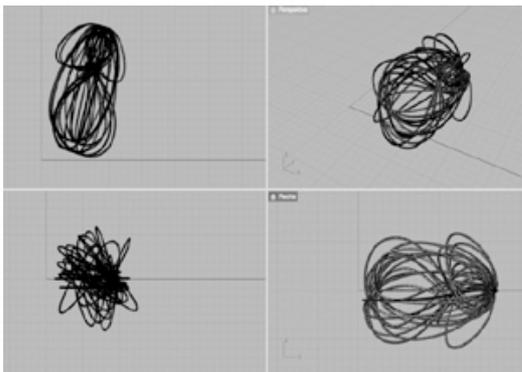


Figure 3: Process of Digitalizing a LINE drawing of the shoulder

The models are based on the drawings and can be understood as spatial interpretations of the movement.

REFLECTION

The act of drawing is performed by the body and accomplished mostly by the hand, which makes a mark

and a trace. In contemporary drawing research this form of involuntary drawing is referred to as graphic trace, which “is a hybrid type of representation: it takes from the index a registration of something unique – an impress of an individual – while incorporating the diagram’s abstraction from what is immediately given in perception.” (Iversen 2012)

Investigating the act of drawing as an embodied design process requires looking at how sketching and thinking are connected. Donald Schön defines “design as a reflective conversation with the situation” (Schön 1983, p. 76). He classifies this conversation in three processes: knowing in action, reflection in action and reflection on action. Knowing in action can be found in the terms of tacit knowledge or know-how. In his book “The Tacit Dimension”, the philosopher Michael Polanyi (Polanyi 1966) points out that there are two kinds of knowledge in the German language: “Wissen” and “Können”. The latter refers to knowledge of how to do something. To act and to know how to do something is a form of embodied knowledge, which Polanyi calls “tacit knowledge”. Schön takes Polanyi’s thoughts further into a professional context and how professionals think in action. Reflection in action can be described as learning by doing. This reflection is taking place during the action itself and is characterized by a flexible and open approach to the problem setting. Methods of repeating and copying – also common in scientific experiments – are important to the process of reflection in action. After the process of doing has taken place, there is space for reflection on action. It means understanding, putting into words and describing the process. This knowledge of reflective practice is helpful in finding solutions and for making the actions fruitful to others. The action performed in the process of drawing is full of twists and turns and is seldom experienced in a linear way. But it is precisely this iterative process, which leads to the acquisition of knowledge. Sketching is a craft, which can and must be repeated constantly in order to learn about how hand, eye and mind are coordinated. The notion of “knowing in action” can thus be applied to hand drawing: The act of drawing, performed by the hand as an embodied process, leads to the acquisition of knowledge, if it is performed and repeated over a certain period of time. The results of this learning process can be perceived as materialized knowledge in graphic traces.

REFERENCES

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