ABSTRACT
What impact does the act of sketching have on thought processes? How may knowledge through sketching be reflected and lead to new epistemic insights? The workshop addresses these theoretical and methodological questions on the basis of specific drawing experiments. During the workshop the experimental use of sketches as a reflective tool in thinking and design processes is introduced. Experimental sketching is a participatory investigation about how knowledge is gained by drawing and how this process can be methodically, theoretically and practically reflected.

BACKGROUND
This workshop proposal is based on the author’s theoretical and practical studies to the genre of hand drawing in the research studio kiii – knowledge through iteration, imagination, irritation.

The research approach is practice-based and combines methods of research laboratories with artistic practices in studios. These spaces enable the production of insights and knowledge mainly through techniques of notation. The project takes into account both the conscious control of manual dexterity and hand-eye coordination, as well as unconscious acts of physical or tacit knowledge. The process of drawing and the methodical approach are documented as “manual” and “toolbox”. kiii research studio allows interested parties to explore drawing across disciplines and aesthetically contribute to an professional and contemporary drawing research.

In the NORDES workshop the model of the research studio kiii will be adopted to the conference situation and discussed by means of theories and experienced through experimental drawing methods.

WORKSHOP PURPOSE
The purpose of the workshop is to provoke ideas of new and contemporary expressions through the act of drawing as epistemic process (see Figure 1).

Figure 1: Diagram of experimental sketching as an iterative and epistemic process

The sketch serves hereby as a direct visual expression of thinking. By integrating experimental sketching in the individual design research process, drawing and visualization can become a method that leads at best to gaining new insights.

The participants will be provided with an introduction of sketching techniques and practical applications in order to visualize, note and experiment in the field of design research. The aim of the workshop is to enable participants to work with sketching techniques on their own research projects and themes. Therefore, the participants should submit a specific research interest. A short description of a research project serves as a starting point for further visual investigation (see participation).

The individual research questions will be approached through sketching in hands-on sections “research through design”). All drawing experiments shall be
adapted and manipulated in order to fit for specific research purposes. A main focus of the workshop will be the visualizing and communicating of abstract ideas through images to other participants.

THEORETICAL INPUT
By means of short theoretical inputs the scope of the artistic practice of “sketching” is clarified.

Three main fields will be theoretically presented: First, the theory of visual thinking; Second, the strategies and techniques of experimental and method sketching; and third, the ideas of practical reflection.

The theoretical approaches refer to visual thinking theory (Arnheim 2001) and writings about practical reflection (Schön 1983). Influences come also by texts on social collaborations (Sennett 2012; Coles 2012), design and artistic research (Albers 1967; Cross 2007; Gansterer 2011; Martin 1993), as well as history of science (Latour 2006; Rheinberger 2005).

A reader of texts on drawing knowledge will be distributed to the participants beforehand the conference. At the conference workshop, the theoretical approaches can then be experienced experimentally.

METHOD SKETCHING
How could a procedure be designed that provides insights by drawing? “Method Sketching” was developed in order to give this question a framework. It mainly deals with hand drawing as a visual medium of knowledge. Therefore visual design basics are combined with process-orientated sketching methodology. Drawing techniques are the starting point for “Method Sketching”, which is based on the authors own artistic experience as much as working with theoreticians, scientists and professional designer/artists. By means of sketches the theoretical basics of drawing are tested, drawing techniques and technological applications are analyzed and analog or digital practices are developed. The applied method of sketching uses the practical experience while drawing. It makes aware how specific knowledge is gained in an iterative drawing process.

The following methods will be actively experienced by the workshop participants through sketching techniques and experimental settings: Strategies such as speculation, scenarios and improvisation. Visual methods such as mind mapping, information architecture, data visualization, visual brainstorming, graphic writing and visual storytelling. The methodology is based on a process-orientated approach and uses methods of notation in science, art and design, which are combined and newly contextualized.

WORKSHOP CONTENT
• Lecture on visual thinking and sketching techniques
• Introduction to «method sketching» and experimental approach of sketching
• Theories and terms of reflective practice with writings on drawing by artists, scientists, theoreticians and practitioners
• Application of visual thinking strategies and methods in individual and collaborative settings
• Sketching techniques and tools for specific research purposes
• Visual presentations and discussion (with sketches)

PROGRAM (TENTATIVE)
HALF-DAY (4H) IN TWO SECTIONS:

SECTION I (2H)
• Collaborative drawing experiment (0:20 h)
• Introduction lecture (0:20 h)
  - sketch-notes
• method sketching for individuals (1 h, each experiment 0:20 h)
  - word vs. image
  - strategies for visualizing abstract ideas
  - sketching your research project
• collaborative method sketching (0:20 h)
  - visual discussion about individual research themes and common interests/themes

Figure 2: Diagrammatic sketch of kiii – knowledge through iteration, imagination, irritation
BREAK (15 MIN)

SECTION II (2H)
• experimental sketching in smaller teams, each team 3–5 participants (0:40 h)
• sketching project poster, individual and group (0:20 h)
• visual presentation of each group and their individuals (0:30 h)
  - visual karaoke
• visual discussion with all participants (0:30 h)

PARTICIPATION
Participants should have a research topic they want to visualize, share and discuss with others. The individual research question (written abstract of 100 words max) is part of the registration. There is no special drawing experience required by the participants. Max 15 participants are accepted.

A reader (PDF) will be distributed to the accepted participants via e-mail beforehand the conference (end of May 2013).

Please sign up with abstract via e-mail: info@judithdobler.de

REQUIREMENTS
Workshop requirements will be announced to attendees beforehand the conference.

REFERENCES
Cross, N. 2007: *Designerly ways of knowing*, Basel: Birkhäuser
Gansterer, N. 2011: *Drawing a hypothesis – figures of thought*, Wien : Springer
Martin, A. 1993: *Writings*, Ostfildern : Cantz