

Bringing Action into View: Provocation and Ambiguity in Touch and Talk Sessions

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Abstract

This paper presents a research approach to investigate the body styles, embodied engagements and physical activity that designers bring to their creative work. The approach utilizes a set of designed objects in the context of the study termed “provocative artefacts”. These are under-determined three dimensional artefacts designed to elicit designerly ways of acting and moving in participatory research situations called Touch and talk sessions. This approach is grounded in shared knowledge of both the researcher and participants within the research sessions.

The paper raises questions to be addressed by this approach in relation to a designer’s embodied ways of knowing: What is the body style designers utilise when they engage in the interpretive work of design? And secondly, what is the significance of this body style to the iterative, projective and interpretive work of designing? The broader aim of the study is to extend understanding of design action as embodied ways of knowing that are distinctive to the creative work of design. By placing emphasis on what designers do, that is the physical interactions with designed objects and how they interact with other designers in naturalistic research situations, the research brings into focus the inseparability of bodily comportment, practical activity and emergent understanding within the iterative projection of design possibilities.

Keywords

body styles; provocative artefacts; interpretation; participatory research

Introduction

Research into the thinking processes of designers has been a focus of Design Research for a quarter of a century. This has generated representations of design as concerned with unstructured problems following solution-focused approaches to complex problems. Although this body of research is varied in focus; for example key texts by Cross (2006) proposed “designerly ways of knowing”, Dorst and Cross (2001) developed the notion of co-evolution of problem and solution, while Lawson and Dorst (2009) proposed expertise and levels of design thinking, it forms a generalized picture of design as a cognitive style or way of thinking in relation to complex problems. While this body of research provided important understandings of design as a professional activity there is a need to investigate embodied ways of knowing in relation to design. This paper concerns approaches to investigate designer’s physical interactions with designed things as aspects of a particular way of understanding and interacting with objects that is distinctive to creative work.

Making transpires through the coordination of bodily movements. Movements encompasses a range of bodily movements from direct handling and manipulation of materials directly. When interacting with designed objects the designer may be entirely absorbed in flow of

activity or they may engage in more detached or reflective modes of thinking. Designers are constantly active when designing, sketching, drawing, manipulating or examining materials or objects, looking to relevant information, either individually or collaboratively.

Reference to current practice in many areas of design would suggest sketching features in early phase of design projects. For example product designers, architects, fashion designers use sketching as generative tool. A sketch is quick, economical and flexible. Prototypes also play an important role in early phase design as well. Goldschmidt (2003) found ambiguity or “fuzziness” to be a critical feature of designer’s sketching. The lack of resolution of sketches enables designers to “read off” visual information and interpret the sketches in ways other than the original intention. According to Goldschmidt this new information feeds back into subsequent iterative sketching. Lim, Solterman and Tenenberg (2008) conceptualisation of prototypes also highlights the feature of ambiguity in generative phase of projects. They see prototypes serving two aims. One as “tools for traversing a space in which all design alternatives are held open and the rationales explored’ and the second as, “purposefully formed manifestation of the design idea”. (2008, p. 7:3)

A three dimensional object unlike a sketch brings specific characteristics into consideration, such as appearance, size, weight and function. Designer’s examine and explore the designed object via the body’s tactile perception including kinaesthetic and proprioception as the object is handled. The prototype may be used and in the case of interactional devices utilized in role-playing or body storming type activities. This kind of interpretive and playful interaction enables the designer to consider the potentiality of the object.

Given a prototype’s ambiguity they remain open to interpretation. Iterative design development and the interpretive work that accompanies it in this sense hinges on the designer interacting with prototypes, models, materials and any other material thing that stands in for a projected design outcome. The designer needs to fashion these materials and objects into a design projection. Coyne and Snodgrass (1997) argue this iterative activity associated with design describes a hermeneutic circle and design is itself an interpretive activity. They utilise Schön’s (1983) account of design activity as a “reflective conversation with the situation” to argue for the hermeneutical nature of designing. They discuss how designing is accomplished by projecting possibilities according to an initial appreciation of the design situation. This projection then talks back and the designer responds by making further iterative projections. A back and forth process involves a circular relation between projections of the whole design situation and its parts enable a designer to make sense of the implications of particular design moves, that feedback into a projected understanding of the whole. In this way understanding of the design situation comes about through constant iterations and the designer’s ability to anticipate the potentiality of particular design moves as well as being open to other potentialities that emerge as feedback.

The feature of ambiguity is also associated with Design Probes. Probes were initially proposed by Gaver, Dunne and Pascenti (1999) and utilised ambiguity to provoke and elicit responses from research participants in field work situations. Probes have evolved into a broad range including technology probes, cultural probes, empathy probes, mobile probes and domestic probes (Connor, Rouncefield, Gibbs, Vetere, & Cheverst, 2007). Probes are used primarily as elicitation devices often with data capture capability. Rather than fulfil a functional purpose they seek to engage research participants in creative activities that results in the generation of rich qualitative data. These activities revolve around recording tasks, that provides personal and often idiosyncratic information about the context and concerns of participants lived context. This data is returned to a research team for interpretation. The responses act as a catalyst for design work. The originators of design probes intended the information retrieved to serve as “inspirational data” rather than providing an objective view of participants (Gaver et al., 1999, p. 25).

Another feature of probes is their ability to allow things to come into view that might otherwise remain hidden. For probes with data capture capacity they make the things normally invisible or out of view visible to the designer (Connor et al., 2007). Dunne & Raby (2001) deploy a series of probes in order to influence people's experience and compoment. These probes register electromagnetic radiation and in doing so bring unintended or invisible effects of design into view.

Following Gaver et al. (1999), Wilde & Anderson (2009, 2010) utilise a participatory approach in the use of a series of body based wearable prototypes called bodyprops. Similarly they make use of ambiguity, in this case highly ambiguous objects to provoke research participants into interpretive work. Bodyprops are upholstered fabric objects used in research sessions where participants are interviewed while wearing the artefacts. The interview process is designed to "probe" responses to the bodyprops and the props intended to provoke strong reactions. Despite their plain looking appearance their size, shape and contouring of the artefacts imply bodily association. According the researchers they aim to produce an "emergent and imaginative space" through bodily interaction while they record on video participant responses to the following questions – "How does it feel? What is it? What does it do?" (Wilde & Andersen, 2009). The responses to these questions are of value to the researchers as prompts or catalysts for future technology design.

Given the broad commonalties between variants of probes, bodyprops in some respects stand apart. Bodyprops require bodily engagement and interaction. As embodied artefacts, participants experience them physically, they can feel the objects upon their bodies, they can manipulate and move them and move in them. It possible to argue, the process of interpretation is tied to an embodied projection of possibility. In other words any imaginative projection of what the ambiguous object might be is an embodied projection of the wearable artefact. The kind of projection in this situation is likely to possess a strong tactile, kinaesthetic and proprioceptive component.

This approach is similar to that utilised in role playing or body storming activities, whereby designers explore contexts and situations relevant to a design project by acting and interacting in design situations themselves or conducting participant observations in context. The approach makes use of the situated experience within actual or simulated contexts and utilizes the capacity for sense making and understanding as an embodied process (Oulasvirta, Kurvinen & Kankainen, 2003).

In the following section I outline the approach to investigate ways of embodied knowing at play in designing. While utilising features of probes such as of ambiguity, provocation and behaviour elicitation they are directed towards understanding design activity, rather than design contexts or users.

A method to investigate embodied ways of design knowing

The research method utilizes ambiguous artefacts that research participants physically engage with and seeks to bring into view designerly ways of acting and moving. That is the physical exploratory activity that designers undertake in the course of their creative work. In research sessions designers physically interact with objects, they explore, appraise, and consider the designed things in a physical way.

The sessions aim to establish an authentic as possible situation from which visual and verbal data can be drawn. The sessions are recorded on video. While no research situation can be authentic, the way in which the sessions are conducted removes some of the barriers to naturalistic behaviour. This includes locating sessions within designer's studios. Studios are

material rich environments where designers are naturally comfortable. Participants are also drawn from a creative community and as such already immersed in creative work. In this sense the orchestration of the Touch and talk sessions reflects conventional ways designers interact with each other in communities of practice. The purpose of the session is to create a situation that engenders the kinds of talk and behaviour that practitioners normally engage in within studio settings. Studio talk often revolves around ongoing work and can take the form of feedback or interpretive responses to works in process or reflections on one's own practice.



Fig 1. Provocative artefact

Provocative Artefacts

Provocative artefacts are textile-like objects designed to encourage and enable physical engagement and exploration. They are ambiguous objects with no obvious functionality. This ambiguity is compounded by a rich affectivity. They possess a number of affordances consonant with forms of physical interaction and engagement. They can be held, manipulated, arranged and as articulated structures they can be rotated and explored. The range of materials also affords physical contact. For example components such as large wooden balls and beads, is used in the initial pilot phase. Other materials will be introduced in subsequent sessions.

In undertaking this research there is a necessity to articulate the embodied experiences of the practitioner-researcher and designer-participants within the research. As such the artefacts provide a focus for an exploration of the practitioner-researchers own embodied engagements and are used within sessions with other practitioners involving physical exploration of the artefacts. Throughout the data-collection phase new artefacts are produced that respond to insights that emerge from the touch and talk sessions. In this respect, the research design iterative. This iterative process of data collection opens up the potential to explore specific aspects that come to the fore through this process.

The form of the artefacts is open to ways in which research participants choose to manipulate them. Research participants use physical interaction to explore and understand the artefact.



Fig 2. Provocative artefact

Data is also generated from the making-process of the artefacts. This data will be recorded in form of reflective writing. Pedgley (2007) investigated the use of a “design diary” as a source of data on own design activity finding the diary an effective tool for data generation within the context of a practice based research project. The data takes the form of written reflections on the making of the artefacts and is used to examine the researcher-participants embodied understandings and assumptions brought to the research context.

Touch & Talk sessions

Touch and talk sessions are documented using video as a complement to traditional interview or observation methods. Videography is viewed by a number of authors as providing significant opportunities to access non-verbal or tacit aspects of practice (Harper, 2011; Marchant, 2011; Pink, 2007, 2009). These aspects include movement, gesture, performed skills, interactions with material, equipment and behavior. Furthermore the richness of these activities is captured as a part of an unfolding context, thus retaining richness and authenticity. Pink (2007) argues that the context of the video recording brings together a process where things, people and sensory experience are drawn together. For these reasons it is proposed that videography is well suited to the study of creative work due its potential to shed light on embodied knowledge.



Fig 3. Provocative artefact

Within the *touch and talk sessions* the practitioner-researcher facilitates a dialogue around the provocative artefact, through open-ended interview. This dialogue is recorded on video. The participant is encouraged to explore the artefact physically. The artefacts are presented as an outcome the researcher-practitioner's creative practice. This situation is not unlike the kinds of exchanges practitioners have with one another in the normal course of practice. In creating this situation the aim is to engender a dialogue around the artefact. This may take the form of interpretations of the artefact and reflective responses. For example as a largely under-determined artefact it may be likened to other things or artefacts, or the designer-participant may suggest other possibilities or creative directions the work may take.

The ensuing documentation encompasses a range of visual and verbal data and is examined as an unfolding context of exploratory activity. In this respect, the video record enables an extended examination of the inter-relationships between the practitioner-participant, the artefacts and practitioner-researcher. This can be explored in terms of meanings that emerge within the research context. The data types relevant to the study include aspects of bodily movement, such as position, object handling or movement, posture, modes of activity, as well as verbal statements, identifiable moods or emotion and silences.

These data types are relevant in terms of how they can illuminate and bring to the fore aspects of embodied knowing.¹ For example, handling an artefact may take on particular meanings within a context of activity. This formulation draws on insights from phenomenology of embodiment that the sensory-motor meaning and movement is one and the same thing. Handling for example within the context of activity may be at times appraisive or exploratory or may be active or passive. At other times it may possess a different meaning determined by its situation within a flow of interpretive activity. The readings of these interactions in the sessions comprise data for analysis and interpretation. This is combined with the data drawn from the making-diary for subsequent analysis.

Emplacement

Emplacement means a researcher becomes immersed within the activity or practice being investigated. This approach makes explicit the simple fact "ethnographic experiences are

¹ An interpretive scheme in the form of a set of research foci serve to illuminate how these data types within the context of activity contribute to a deeper understanding of the significance of physical activity constituting creative work.

embodied” and that “the researcher learns and knows through her or his whole experiencing body” (Pink, 2009, p. 25). The principle of emplacement sits within the wider interdisciplinary field of sensory ethnography and draws on philosophies of embodiment (Merleau-Ponty, 1962) and ecological psychology (Gibson, 1986). Emplacement recognises the embodied aspect of the researcher and research participants. For the researcher it is through emplaced learning as an embodied activity that enables them to become situated within practices thus gaining insights into to others, processes and practices.

There are a number of implications of this orientation. The first is the way in which it recognises the body not as a source of experience through a subsequently rationalising mind, but is itself a source of knowledge and agency (Pink, 2009). This is consistent with insights from phenomenologists who show the body to be something that can be available to first-person experience in ways that transcend an explicit thematic awareness. The second implication is emplacement foregrounds the situatedness of an active knowing body engaged within contexts constituted through practical engagement. The third refers to the ways in which that practices are shared ways of doing things, acting, thinking, feeling and understanding (Rechwitz, 2002).

A number of ethnographers investigating the senses bring a focus to the intersubjective and practical dimension to knowing. Sensory ethnographers ground their approaches given knowledge is held in practices, is experiential, and while constantly changing, is also shared amongst practitioners. This conception of knowledge draws on theories of learning (Wenger, 1998) and suggests knowledge is held within communities of practice, while changing through continuous elaborations of practice. Participatory methods of investigation offer potential to investigate others experiences. For researchers to understand others, they need to become emplaced in order to experience practices with others. O’Connor (2005, 2006) adopts this strategy. Her ethnography of glass practice involved the researcher spending over a year learning to blow glass. The shared nature of practice knowledge indicates practitioner-researchers are well positioned to develop ethnographic informed approaches to researching and understanding the experiences of self and fellow practitioners.

Key concepts

The following section includes discussion of concepts relevant to the research approach. They outline the theoretical orientation underlying the research activity.¹ While the examination of this material is relatively brief in the context of this paper it serves to orient a reader to the significance of the material as a resource for the proposed project rather than providing an extended analysis. The concepts constitute key components of skilful activity and include the *1. Responsiveness, 2. Mobile attentional focus, 3. Practitioners are solicited into optimal situations, 4. Sensitivity to affordances, 5. Affordances reflect disciplinary dispositions and 6. Flow*. Key concepts are developed in relation to work first proposed by (Merleau-Ponty, 1962). His philosophy foregrounds embodiment as the basis of experience and agency in the world, while highlighting the interconnectedness of perception, action and meaning. This orientation is relevant for the study as it places emphasis on the embodied perception, bodily movement, physical interaction and meaning within contexts of action. These are taken to be fundamental aspects of designing under consideration within the study.

1. Responsiveness of skillful performance

Skills are outwardly-directed bodily dispositions ready for use in dealing with things, people and situations within unfolding contexts of activity (Todes, 2001). Skills are what make

possible coordinated action in any practical arena.² The key to understanding the significance of skills to the study is the way in which skills possess a receptive and active dimension. Skills are not merely mechanical action, albeit they can be performed without conscious thought; they demonstrate the body's capacity to act effectively and knowingly in response to changing situational demands. The significance of things we encounter through skilled work come about through our ability to move, orient and direct ourselves as we explore them.

The way skills are present in our activity should not be limited to activity associated with explicitly purposive action. Skills prepare one to be deal with things, artefacts, equipment but also people and events that transpire. Skills manifest on the basis of a background understanding of what kinds of things are likely to happen within situations as well as unlikely ones. Skills reflect the ways in which it is appropriate to deal with anything and that skillful discriminations are undertaken on a situational basis. That is the performance of skill is a responsive and adaptive movement to an unfolding situation.

2. *Shifting attentional focus*

Within perceptual life our attentional focus is neither passive nor static but a mobile and highly flexible mode of encountering the world. A part of this is the way things show up for us against a background. In perception, things are seen not in isolation but are perceived against a background and context. We understand things we encounter as already making sense to us; they already have particular purposes and possibilities.

The tendency to become absorbed in a task a feature of purposive activity. In action we become engaged on articular task. This engagement is a holistic engagement with a task at hand. Merleau-Ponty refers to this as a kind of "attitude" where our entire body is taken up in a task but in such a way that any underemployed body regions are simply "swallowed up" in the activity of our hands (1962, p. 186). Skillful action understood in this way challenges subject-object differentiation, associated with more intentional models of making or those associated with the notion of intuition. Ingold refers to skilled action of a craftsperson as a "form of attention... rhythmically responsive to ever changing environmental conditions" (2011, p. 61).

3. *Practitioners are solicited into optimal situations*

The intentionality of design is neither aimless groping nor a consciously directed activity but is guided by the way designers are always attempting to come to grips with the artefact they work upon. Merleau-Ponty's notion of maximal grip is useful to understand how actions within creative work are always servicing the project as a whole and how they exhibit a forward momentum. Merleau-Ponty argued perception is shaped by a tendency to be solicited into the best possible position. To do anything there are not only better and worse positions from which to do it but optimal ones. This solicitation is a bodily one, where without conscious consideration are drawn into a kind of equilibrium within the situation.

Designers undertake adjustments to their design situation in response to the inherent indeterminacy of the evolving project. The projective work of iterative making is the way in which designing maintains momentum, whereby the practitioner is always moving towards gaining a better grip on the making situation. Such a grip is not always a perceptual one but can refer to the project as a whole.

² The bodily and pervasive nature of skill is borne out by philosophies of embodiment and skill acquisition (H. Dreyfus & Dreyfus, 1982; Latour, 2004; Leder, 1990; Merleau-Ponty, 1962; Todes, 2001).

3. Affordances

Designers see the projective potential of works in process. This perspective can be understood in relation to affordances. Gibson (1986) refers to affordances as the action capabilities of an environment, object or situation. For a designer this means a design situation is experienced in terms of possibilities of creative action. In practice, we experience situations, environments and the things we encounter in accordance with our bodily capacities and skills. For example things may be close or far from us, or they may be graspable or manipulable, in terms of our bodily position and structure. While they may be usable or unusable for a particular purpose, they may be appropriate or inappropriate for others. So for designers a work in process artifact can be understood in terms of particular paths or possibilities of action. Dohn (2006) argues that the epistemological status of affordances is relational, cultural and skill-relative. The implication of this is that what shows up to someone is dependent on the skills, and their cultural and professional background and dispositions they possess. That means that the possibilities inherent in any situation will differ depending on the dispositions and embodied skills and understandings of those within that situation.

5. Affordances reflect disciplinary dispositions

A number of authors have identified the fact that we have culturally and professionally variegated skills and dispositions (Wenger, 1998). In simplest terms a practitioner will possess disciplinary shaped ways of doing things, acting, thinking, feeling and understanding. These are ways of experiencing the various dimensions of practice and mean they are able to make the necessary discriminations as to what to do and when to do it.

This aspect of our practical engagement is characterized by the way things show up for us³. This capacity to be affected is not pure passivity but actively works within the specific context of our practical dealings with things, objects, situations, persons, events to enable things to show up to us as mattering, being important or significant. Our commitments and concerns are what tune us in to the world in particular ways. The possibilities for action that stem from this commitment will reflect a set of dispositions, skills and sensitivities that are particular to an individual's professional, educational and personal background.⁴

6. Flow

The ability to perform skills successfully as a flow of action relies on the body's ability to coordinate movements in advance of the desired task. That is, the body does not work as a set of independent organs to affect some intervention in the world, but moves in a coordinated manner such that we orient our entire body toward a particular task. For example when catching a ball our entire body prepares for its arrival by orienting the body in the direction of its approach, while lifting our arms and hand in one, for the skilled catcher, coordinated and graceful action. As the ball approaches our hands prepares for its arrival by softening for the impending impact. As anyone who has caught a ball will know a failure to

³ Heidegger denotes the receptive aspect of our being-in-the-world *Befindlichkeit*. This is interpreted as affectedness (H. Dreyfus, 1991) or attunement (King, 2001). This aspect of being-in-the-world is characterized by the way things show up for us.

⁴ Bruno Latour discusses "body talk" and skill acquisition in reference to the French perfume industry. He explains how practitioners in a training scheme are able to distinguish increasingly subtle differences in fragrances, such that they are able to inhabit a, "richly differentiated odiferous world" (2004, p. 207). He attributes the acquisition of a body to the cumulative capacity to distinguish differences. The "nose", as a perfumier is called is acquired through focused exposure to a nuanced range of fragrances. Similarly, within different domains practitioners will develop sensitivities to the material properties of their media. For example a fashion designer may have acquired sensitivities to fabric and how the fabric feels on a body and how it may respond in different situations. That is, fabric is experienced as a set of tactile, proprio-perceptive and kinesthetic possibilities. A musician on the other hand will have a different configuration of sensitivities or attunements aligned to the production, performance and reception of musical composition. This research focus points to ways in which a practitioner is open to the creative possibilities that inhere within a making situation.

provide “soft hands” for the ball will result in a dropped catch. Merleau-Ponty (1962) attributed this ability to coordinate our body as a part of our practical activities to a “body schema” that establishes a unity between the world and our participation in it.

Successful practice requires an ability to anticipate regularities within an unfolding context of activity while managing irregularities that may emerge (O’Connor, 2006). Over a period of time novice practitioners begin to anticipate the regularities of practice such that the body exhibits a pre-reflective practical knowledge – within each action bodily preparations for subsequent actions emerge. In this way the body works to enable the integration of temporally motivated actions into a meaningful whole. Through this incorporation of actions and understandings practice is achieved.

Practice is also experienced as a flow of action. It follows a path that is opened up in the forward-going anticipatory actions of the practitioner. For example, practitioners undertake tasks that although embedded with the project-like structure of practice, are processual. That is a particular project might encompass a wide range of quite different actions, activities and tasks. This could involve the moving around of artifacts or preparing the space for work, examining existing artifacts and effecting changes to those artifacts. Walking around, handling and rotating the artifact effect an appraisal of a work-in-process artifact. Immersion within practice means undertaking any work at all on the artifact is always experienced as the culmination of a flow of activity, rather than discrete movements or actions. Importantly, the activities flow into one another as a mode of circumspection or opening onto the artifact.

Conclusion

In this paper I have presented an approach to examine embodied ways of knowing in relation to the physical interpretive work of design. The research approach draws on a conception of creative design, achieved by iteration and projection through physical activity. The research approach encompasses the design of provocative artefacts and a research situation that provokes the designer to respond, firstly by interacting with the provocative artefacts, secondly to engage in interpretive work involving physical interaction with the artefacts and thirdly, to undertake a consideration of the artifact in terms of its future significance as a designed artifact. This study makes possible an examination of the sense making activity of design and has the potential to extend current accounts of design beyond an intentional, conscious agent to a sense of design as a responsive practice. This has the potential to re-orient practitioners towards attributes of responsiveness, sensitivity and noticing as important aspects of a design to be cultivated. This reframed orientation draws attention to the permeable relationships between design and design contexts and would suggest more flexible and adaptive practitioners are tuned into and more responsive to the shifting complexities of contemporary life.

References

- Connor, G., Rouncefield, M., Gibbs, M., Vetere, F., & Cheverst, K. (2007). *How probes work*. Paper presented at the 19th Australasian conference on Computer-Human Interaction: Entertaining User Interfaces.
- Cross, N. (2006). *Designerly ways of Knowing*. London: Springer.
- Dohn, N. (2006). *Affordances - a Merleau-Pontian Account*. Paper presented at the Fifth International Conference on Networked Learning, Lancaster.

- Dorst, K., & Cross, M. (2001). Creativity in the Design Process: Co-evolution of Problem–Solution. *Design Studies* 22(5), 425–437.
- Dreyfus, H. (1991). *Being-in-the-world: A commentary on Hiedegger's 'Being and Time' Division 1* Cambridge, Massachusetts, London, England: MIT press.
- Dreyfus, H. (2002). A phenomenology of skill acquisition as the basis for a MerleauPontian non-representationalist cognitive science. Unpublished Paper. University of California, Berkeley.
- Dreyfus, H., & Dreyfus, S. (1982). *Mind over machine: The power of human intuition and expertise in the era of the computer*. New York: Free Press.
- Dunne, A., & Raby, F. (2001). *Design Noir: the secret life of electronic objects*: Springer.
- Gaver, B., Dunne, A., & Pascenti, E. (1999). Design: Cultural Probes. *Interactions*, 6(1), 21-29.
- Gibson, J. J. (1986). *The Ecological Approach to Visual Perception*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Goldschmidt, G. (2003). The Backtalk of Self-Generated Sketches. *Design Issues*, 19(1).
- Harper, I. (2011). *Doing and Talking: Articulating Craft*. Paper presented at the SkinDeep - experiential knowledge and multi sensory communication.
- Ingold, T. (2011). *Being Alive: Essays on Movement, Knowledge and Description*. Milton Park: Routledge.
- King, M. (2001). *A guide to Heidegger's Being and Time*. New York: Suny Press.
- Latour, B. (2004). How to talk about a body? The normative dimensions of Science Studies. *Body & Society*, 10(2-3), 205-229.
- Lawson, B., & Dorst, K. (2009). *Design Expertise*. Oxford: Architectural Press.
- Leder, D. (1990). *The Absent Body*. Chicago: University of Chicago Press.
- Lim, Y.-K., Stolterman, E., & J., T. (2008). The anatomy of prototypes: Prototypes as filters, as manifestations of design ideas. *ACM transactions on computer-human interaction*, 15(2), 1-25.
- Marchant, S. (2011). The Body and the Senses: Visual Methods, Videography and the Submarine Sensorium. *Body & Society*, 17(1), 53-72
- Merleau-Ponty, M. (1962). *The Phenomenology of Perception* (C. Smith, Trans.). London: Routledge.
- Oulasvirta, A., Kurvinen, E., & Kankainen, T. (2003). Understanding contexts by being there: case studies in bodystorming. *Personal and Ubiquitous Computing*, 7(2), 125-134.
- Pedgley. (2007). Capturing and analysing own design activity. *Design Studies*, 28(5), 463-483.
- Pink, S. (2007). Walking with Video. *Visual Studies*, 22(3), 240-252.

- Pink, S. (2009). *Doing sensory ethnography*. London: Sage.
- Rechwitz, A. (2002). Toward a Theory of Social Practices: A development in culturalist theorizing. *European Journal of Social Theory*, 5, 245-264.
- Schön, D. (1983). *Donald. The Reflective Practitioner: How Professionals Think in Action*. New York.
- Snodgrass, A., & Coyne, R. (1997). Is designing Hermenetical? *Architectural Theory Review*, 1(1), 65-97.
- Todes, S. (2001). *Body and World*. Cambridge M.A.: Massachusetts Institute of Technology.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.
- Wilde, D., & Andersen, K. (2009). *Doing things backwards: the OWL project*. Paper presented at the Proceedings of the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group: Design: Open.
- Wilde, D., & Andersen, K. (2010). *Part science part magic: analysing the OWL outcomes*. Paper presented at the Proceedings of the 22nd Conference of the Computer-Human Interaction Special Interest Group of Australia on Computer-Human Interaction.

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Paul Denison, Teesside University, UK

Strand 4: Performativity & Research Process

- ❖ **Generating Space to Articulate the Value of an Artists' Practice**
Helen Smith, Robert Gordon University, UK
- ❖ **Accessing Experiential Knowledge through Dance-Writing**
Astrid von Rosen, University of Gothenburg, Sweden
- ❖ **Participatory Art Based Research as a Tool to Restructure Notions of Participating Second Generation Immigrant Youth**
Helena Oikarinen-Jabai, Aalto University, Finland



interpretation of professional practices or artefacts within research, for example research exhibitions, performances, etc.?

- What frameworks are there to guide the communication of procedural knowledge?
- How can skills in different professional disciplines be shared and/or applicable to one another?
- What differences are there between the articulated first-hand experience of an expert practitioner, that of an amateur and that of a researcher?
- What issues evolve from criteria of research such as repeatability and transferability for the foregrounding of tacit knowledge in research in the creative disciplines?
- What means and methods can be utilised to transfer and replicate tacit knowledge?
- Is connoisseurship involved in knowledge transfer/replication?
- How can the judgmental power of connoisseurship be integrated and utilised within the framework of research?
- What differences/relationships are there between research-driven judgment and judgment driven by connoisseurship?

Responses

As in previous years, the conference call received a great international response with submissions from 16 countries including Australia, Belgium, Canada, China, Denmark, Finland, Germany, Hong Kong, Ireland, Republic of Korea, South Africa, Spain, Sweden, Taiwan, UK and USA.

Submissions were interdisciplinary and stem from a variety of disciplines and discipline areas including fine art, applied art/craft, architecture, performance and drama, film, product/industrial design, graphic & communication design, knowledge management, education, philosophy and social sciences.

For the conference, contributions were selected in a two-stage process, comprising abstract and full paper selection, through a double blind review process by the conference's international review panel. From the contributions, the following eight strands emerged:

Strand 1: Expert's Embodied Knowledge

Strand 2: Understanding & Articulating Experience

Strand 3: Objects, Expertise and Connoisseurship

Strand 5: Performativity & Research Process

EKSIG 2013: Organisation

EKSIG 2013 is organised by members of the DRS **Special Interest Group on Experiential Knowledge**, and supported by the **Design Research Society**. The conference is hosted by **Loughborough University** and co-organised by the **University of Wolverhampton**. The conference is further supported by **Cumulus Association** and by the **Design & Culture Journal**.

Conference Organisers:

Dr Nithikul Nimkulrat, Loughborough University, UK
Dr Kristina Niedderer, University of Wolverhampton, UK
Dr Mark Evans, Loughborough University, UK
Prof Seymour Roworth-Stokes, Coventry University, UK

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Dr Faith Kane, Loughborough University, UK
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