'I participate, therefore I learn': A process of co-creative graduate supervision in design research in Cape Town

Alettia V Chisin and Mugendi K M'Rithaa

Abstract

Changing pedagogical contexts require a responsive attitude with regard to design research supervision. This article elaborates on experiences and lessons learnt through a co-creative approach to supervision, which draws on an empathic understanding of members in a learning space at a higher education institution in Cape Town. The *Design Research Activities Workgroup* (DRAW) was initiated in 2009, at the Cape Peninsula University of Technology (CPUT), to support postgraduate students within the design departments and to improve supervision capacity. It embraces a collective learning approach while critically re-interpreting the interaction between supervisors and postgraduate students. A narrative methodology and an interpretivist position were adopted to examine and describe the value and meaning of the DRAW forum to participants. A significant finding that emerged from the study is that the co-creative, group supervision approach to design research breaks down power differentials and enhances both the supervisor and student learning experiences in a specific community of practice.

Key words: Collective learning; *Design Research Activities Workgroup* (DRAW); empathy; openness; postgraduate supervision

Now, from time to time that tribe met like this in a circle. They just talked and talked and talked, apparently to no purpose. They made no decisions. There was no leader. And everybody could participate. There may have been wise men or wise women who were listened to a bit more – the older ones – but everybody could talk. The meeting went on, until it finally seemed to stop for no reason at all and the group dispersed. Yet after that, everybody seemed to know what to do, because they understood each other so well. Then they could get together in smaller groups and do something or decide things (Böhm 1996:9).

Introduction

The *Design Research Activities Workgroup* (DRAW) was initiated at the Cape Peninsula University of Technology (CPUT) in early 2009. Its aims were to provide an academic and social support forum for postgraduate students who often experience isolation in the academic context (Samara 2006:116), and to improve limited supervision capacity within the design departments of the Faculty of Informatics and Design. Alternative models of supervision were required to boost existing capacity, by augmenting the traditional and resource intensive one-to-one supervisor-student model (Samara 2006: 115).

An increase in postgraduate student research numbers and 'the central importance of supervision for the successful completion of research degrees' (Hockey & Allen-Collinson 2000:346) requires a flexible and responsive attitude with regard to supervision practices. Information about supervision in the art and design disciplines in particular 'is almost negligible, particularly in the case of practice-based research' (Hockey & Allen-Collinson 2000:346). Following Hockey and Allen-Collinson (2000:346), and reflecting on how the nature of design research and supervision had changed over the last decade or two, a number of aspects pertinent to group supervision and peer-learning were identified in the DRAW forum which are explored in this article. They include the influence, value and meaning of co-creative graduate supervision practice that this forum offered to participants.

Group supervision in postgraduate research

Research supervision has been the focus of studies looking at various aspects of supervision practice such as the roles, strategies and styles, as well issues of gender and power in the student and supervisor relationship (Samara 2006:116). In addition, supervision as a means of support in the wider academic community and to neutralise loneliness in research is of increasing interest (Samara 2006:116). In this context, postgraduate studies and collective forms of supervision were looked at closely. Group supervision models which encourage a collective learning ethos are examined by Samara (2006) and De Lange, Pillay and Chikoko (2011) in education, and Ratkić (2009) in the research area of skill and technology.

Advantages of group supervision include the 'advancement of supervision skills, the impact it has on students' writing process and the facilitation of students'

enculturation into the particular discipline' (Samara 2006:115). For example, Masters students participating in group supervision sessions at a university in Norway supplied their research texts with specific questions to others in the group. Peer feedback is then provided under the guidance of a student group leader and comments are kept concrete and constructive to accommodate the sensitive nature of the process. A time frame and clear structure are adhered to, and a reflective period is built in at the end of each session to evaluate strengths and weaknesses of the session (Samara 2006:119).

Within a South African context, De Lange *et al.* (2011: 18) explore a collaborative supervisory experience involving doctoral students at a South African university. The cohort model of doctoral supervision entails a seminar programme offered over six weekends per year, consisting of presentations, discussions, critique, feedback by peers and reflection. The cohort model is described as making a big contribution in '… developing scholarship and reflective practice in candidates, in providing support and supervision, and in sustaining students towards the completion of their doctorates' (De Lange *et al.* 2011:15).

The dialogue-seminar method, in particular, was refined as a way to incorporate reflection into the professional practice of postgraduate students at a university of technology in Sweden (Ratkić 2009:99). Participants attended the dialogue-seminars as (working) doctoral students wanting to use their own research to change and improve practices at their work places. The skill and technology research area is devoted to case studies involving 'professional skills, epistemology of practical knowledge, and methods for sharing tacit knowledge within organisations' (Ratkić 2009:100).

The 'dialogue-seminar method' involves the reading of texts and the subsequent discussion and 'reflection on practice of research' (Ratkić 2009:99). A written reflection of the texts is produced and members in the group share the reflection by reading it aloud. This produces qualified conversation: 'The flow of thought in the dialogue-seminars is anything but straight', which is intentional (Ratkić 2009:106). The free-flow of thought helps students to connect the content dealt with in the seminars to their own experience. In addition, the reciprocal nature of the method is favoured by post-graduate students – and especially mature students – who prefer participatory rather than prescriptive educational methods (Ratkić 2009:100).

Design research and supervision

Non-prescriptive methods are also favoured by post-graduate design students, but not necessarily participatory group methods, since the designer/researcher may favour working independently and frequently does so. In supervising design research, cognisance ought to be taken of the fact that the discipline of design draws from many different fields. Jonas (2000:44) refers to the possibility of design research as a groundless field. This implies that it has no real foundation and it borrows, possibly opportunistically, from whatever field seems appropriate at the time.

Along the same vein, Nelson (2009:111) writes: 'With design, so often associated with the tangible regimes of manufacture, we enter the borderless'. Although it can be a disadvantage, being 'borderless' also offers advantages. Consequently, depending on the particular aspect of design which is researched, different disciplines may be drawn upon to enrich that aspect. 'The field of design embraces the profession, the discipline, and a shifting and often ambiguous range of related

cognate fields and areas of inquiry' (Friedman 2003: 508), rendering design research almost the chameleon coloured by the disciplinary branch it is sitting on. Since Jonas' (2000:44) groundless field comments, however, when he also referred to 'design as its own ground', design as a discipline had consolidated its foundations to a large degree.

Researchers such as Buchanan (2000), Friedman (2003), Love (2000; 2002), Margolin (2007), Manzini (2009) and Vezzoli (2007) are changing the approach to design, design research and design education. They are active in emerging and specialist areas such as social design, philosophy of design, Design for Development (DfD) and the Design for Sustainability (DfS) fields. Friedman (2003:508) asserts that design fulfils a general evolutionary role in the environment and that 'designers take on increasingly important tasks, design has greater effects and wider scope than ever before'.

Regarding the sustainability agenda, design is an important player and a powerful voice in promoting change. This can be seen in an increasing number of global and local initiatives that are actively promoting change such as the educational *Learning Network on Sustainability* (LeNS)-Africa project which aims to target '… an audience of lecturers and students from various design disciplines in order to orientate them towards pedagogic and didactic applications of Design for Sustainability and Product-Service Systems' (Bergevoet, Maina, Kankondi, Chisin & M'Rithaa 2010:1105). The LeNS-Africa project was launched on 7 September 2009 and provided an opportunity to embed the sustainability agenda in the DRAW forum from its inception.

Fletcher (2008:120-130)) challenges designers to take responsibility by adopting and promoting more sustainable practices so as to ameliorate the damage the profession has occasioned on the planet. This is needed

since designers have often contributed to wasteful production and consumption lifestyles the world over (Thackara 2005; Manzini 2009; Vezzoli, Ceschin & M'Rithaa 2009). Furthermore, the challenge extends to focus on the centrality of people in design, and, in turn, the role of communities in formulating and mainstreaming more sustainable lifestyles (Manzini 2009; M'Rithaa 2009).

Sustainability in design may be defined as the satisfaction of human needs in a responsible way which will least compromise future generations' ability to satisfy their own needs (Vezzoli 2007:13). It is a necessity to guide postgraduate students to think and act in terms of design solutions and interventions which are the least harmful and the most sustainable in future.

Supervision and learning in the DRAW context

In design education, as in business, design thinking has become an indispensable part of innovation (Lee & Breitenberg 2010:55-56). In the DRAW context, we associate it with relevant design theories to help frame our problems and responses to the frequently 'wicked' problems that design seeks to ameliorate (Buchanan 1992:14-15). Design thinking and the designer's role in the expanded field of design (Friedman 2003:509) are used as tools in the forum to assist in meaning making as well as to originate products, artefacts or services. These tools are ontologically aligned to various expressions of socially conscious design, such as DfS and DfD agendas.

Although DRAW Masters students come from various design disciplines, for instance Surface and Fashion design, Graphic design, and Industrial design, their practice-based research and full dissertations are frequently of an interdisciplinary nature. Some student research titles are included[1] to illustrate the multi-disciplinary, yet socially responsive range of topics originated in the workgroup. The contribution of their research projects, however, is not covered in this article.

DRAW participants develop their research projects from a personal, situated perspective (Lave & Wenger 1991), guided by social design and the *Ubuntu* philosophy. Although not a requirement for the postgraduate programme, both social design and *Ubuntu* are embraced as DRAW principles. Most students show a passionate interest in DfS and DfD and in the advancement of the topics. Bergevoet *et al.* (2010:1111) state that DRAW could 'champion the creation of a research niche area around DfS that will take advantage of expansive DRAW membership'. The common interest in DfS created an understanding among participants during the initial workgroup sessions, which, in turn, developed into a collective learning experience.

Format of a DRAW meeting

DRAW participants arrive for the session and set out eats and drinks. Topics that participants have requested for discussion that is, research methods or specific design-related theories, are put on the agenda for action. Depending on the activity, the conversationalist presenter briefs the participants and hands out reading material, proposals or chapters, and continues with leading the discussion or doing the presentation. Others in the group are 'able to reflect on what can be learnt from the research experiences of their peers, and apply that to their own work' (De Lange *et al.* 2011:23-24). The floor is then opened for conversation and participants are encouraged to relate the topic under discussion to their own research, if suitable. This is done by contextualising their respective research in terms of

the methods, theories or philosophies discussed, frequently in a free-wheeling fashion as described by Ratkić (2009:106). The open style of debate and conversation is conducive to forming connections between concepts and from this collective sounding board participants will, in turn, source and share relevant material at the next forum.

The research approach

The largely subjective nature of research in art and design (Nelson 2009:89,113), lends itself to a qualitative, descriptive research methodology. Since we (the authors and supervisors facilitating the collaborative DRAW conversations) were interested in exploring the social and academic support aspects which the DRAW forum offered students and supervisors, a narrative method was decided upon to describe the workgroup experiences from different perspectives. Here we follow Berger and Luckman (1966:130), who argue that it is important to have access to and understand participants' separate social framing of reality, and to examine topics deeply through non-prescriptive conversations based on holistic understanding which, in turn, is anchored in lived experience. Narrative inquiry is 'grounded in interpretive hermeneutics and phenomenology ...' and it concentrates on 'the meanings that people ascribe to their experiences', looking to bring perceptivity that matches the intricacy of human existence (Trahar 2009).

Located within the narrative paradigm, we (the authors) adopted an interpretivist position. The interpretivist supervisor/researcher is central in making meaning of the world and events in it. We were simultaneously trying to construct meaning as participants in DRAW (one author with the dual role of doctoral student and supervisor) and from our position as supervisors in

the forum. Living the DRAW experience for two years resulted in tangible data collected (discussed below) and also intangible nuances observed in the group (atmosphere, body language and mood) which informed and enriched the data. Lived experience reflects the phenomenological position that describes an experience from the participants' point of view and credits experience and the senses to interpret and make sense of things (Leedy 1997:166). Nelson (2009:101, 104) untangles the strands of lived experience and the largely subjective nature of research in art and design by stating that it (subjectivity) is par for the course in that discipline:

> Hence the goal of the research ... is rather subjectively determined. But the goal of the research is not the only element which is subjectively determined

and

> Artists do not always know their goals till they work through a project to the end. Art is highly provisional until it is complete. Poetry and music are surely the same. You can imagine some scholars looking upon the whole process as quite unstructured. You do not know what you want until you have finished. Some method that is! (Nelson 2009:104).

What art and design have in common is certain grounding in subjectivity, and as Nelson (2008:98) argues, creative strivings partner well with ontological notions. In creative endeavours 'research is about you as much as the medium' (Nelson 2009:98). Designers think, write, visualise, create and make sense. Design research is a composite of sensory experience, conceptual and theoretical experience and knowledge. Scholars with a different disciplinary grounding may, therefore, find design and art research methods unscholarly because of the centrality of the researcher in the project and

the weight given to lived experience and the senses (Nelson 2009:104). Yet it is precisely these aspects that constitute art, design and creative practices.

Research methods

We explored the influence, value and meaning of the DRAW forum and group supervision practices in a study that was conducted from March 2009 until March 2011. The DRAW forum is run in an informal manner, meaning that sessions are semi-structured to allow for last-minute requests not on the agenda, and postgraduate Masters students and supervisors join the sessions they choose. The authors are supervisors in the forum and either one or both are present at the sessions. The sessions are convened every week and each lasts about three hours. The agenda is posted weekly in advance (since February 2011) by the blog administrator who is a postgraduate student belonging to the group. The research methods can be divided in two sections, the recorded sessions and the questionnaires, with narrative inquiry underpinning both methods.

The recorded sessions

Conversations, themes and narratives that unfolded during the sessions were recorded by one of the authors (doctoral student/supervisor) over the period March 2009 to March 2011. The recorded sessions were randomly chosen (usually based on attendance) and their structure roughly followed the group supervision models described by Samara (2006:115-129) and De Lange *et al*. (2011:15-30) and the 'dialogue-seminar method' described by Ratkić (2007:99). Reflective journal writing methods were used as a personal record of the sessions (see Appendix 1 for an example of a reflective journal writing entry) and they became

the basis for the thematic narratives which the questionnaire was based on (see Appendix 2 for the questionnaire). Reflective journal writing was chosen since it is fulfils many functions. Boud (2001:9) describes it 'as a form of reflective practice … as a device for working with events and experiences in order to extract meaning from them'. Boud (2001:9) asserts that reflective journal writing in its various forms help us make sense of the world 'and how we operate in it'. It can also be used to record events and experiences with a view to understanding them more comprehensively. The journalised sessions were subsequently discussed by both the authors in conversation during informal meetings and during the DRAW sessions in dialogue with the students.

The questionnaire

In January 2011, all members (numbers fluctuated but at that stage there were 20 students as well as a guest supervisor) were invited to participate in the study through an online questionnaire. The questionnaire aimed to establish the extent of social and academic support that the workgroup provided members with, and the meaning that group supervision held for them. Some of the founding members were preparing for examination submission then, while others started their research activities in 2011. This presented a good opportunity to take stock and explore the influence of the forum at respective stages of research, especially with a view to finishing students. A semi-structured, open-ended questionnaire was posted on the DRAW blog for members to respond to in their own time. Twelve members completed the questionnaire by April 2011, including six local and five international students, and the guest supervisor.

The questionnaire responses were grouped, categorised and coded manually (Huberman & Miles 2002) and are presented according to the thematic narratives which first emerged in, and were recorded during, the journalised sessions (see Appendix 3 for an example of questionnaire coding, May 2010). The questionnaire responses were also discussed by students and supervisors in an exit focus group of three hours (see Appendix 4 for an exit focus group entry). Again the discussion was documented using reflective journal writing by the doctoral student/supervisor. Pseudonyms were used to protect student identities in the text: Batman (founding member 2009), Colette (new member 2011), Comic Sans (existing member 2010), Faizal (founding member 2009), Fatima (founding member 2009), Hendrik (new member 2011), Jasmine (founding member 2009), Jean (new member 2011), Mignon (new member 2011), Rose (new member 2011), Vera (founding member 2009) and Zinzi (guest supervisor since 2010). Permission was obtained to use the DRAW photograph (Figure 1). In the next section the thematic narratives are qualified and discussed, namely social DRAW, philosophical DRAW and supervisory DRAW.

Figure 1: DRAW members. Photo: Waiter 2011.

Social DRAW: An interdependent homespace

DRAW postgraduate participants indicated that the thematic narratives identified in the workgroup formed 'pillars' of support. The pillars of support were identified as: interdependence reinforcing social DRAW (see Figure 2), *Ubuntu* reinforcing philosophical DRAW (see Figure 3), and co-creation reinforcing supervisory DRAW (see Figure 4). Together, the pillars of support provided a focal point for their research activities and created a platform for opportunity.

Interdependence was seen as an important social support pillar in the workgroup and developed for a number of reasons. Strong interpersonal relationships were formed from the start since sharing and listening to peers with similar concerns helped members to 'overcome issues of insecurity and isolation, [particularly] during the first months of study' (Batman, Fatima, Vera & Jasmine 2011). Regular interaction with each other makes support possible because all DRAW members are 'going through the same process' (Vera & Jasmine 2011).

Participation in the sessions moulded the interaction of members into an interdependent 'space', a conceptual and physical space which Zinzi (2011) describes as a 'homespace' (see Figure 2). The homespace welcomes everyone doing their postgraduate studies into a conducive atmosphere. This atmosphere is characterised by an informal physical space where members are seated around a table, and a conceptual space of openness and debate. A recent study by De Lange *et al.* (2011:23) focusing on a cohort model of doctoral supervision, touched on the idea of a homespace in their discussion of 'a "home" for opportunities and space to talk informally, to present their work, to give and receive critique and also to write …'. Openness emerged as an

important factor during interactions in the workgroup *and* away from the workgroup. Being open to others ensures that DRAW is a forum 'where people talk very freely' (Zinzi 2011), that it 'remains an egalitarian platform' (Vera 2011), and that 'everyone is equal' (Rose 2011). Also, seeing 'eye-to-eye' softens hierarchy in the group and encourages collegiality: 'it is a collegial meeting place in which the lecturer-student dichotomy is broken down' (Zinzi 2011).

Participants concurred that the DRAW space is a safe space but can also be a challenging space; a private as well as a public space. Mignon (2011) responded that she had attended only a couple of meetings, but they *can* be intimidating at first, and Rose (2011) stated that the conversations and discussions are of such an intellectual nature that she did not always understand them. When only a small and intimate group is present and the readings and discussions are informal, members agreed, the space feels private; when the group is big and includes visiting scholars, paper presentations and mock defences, it becomes a public space. Members have to negotiate their way between the two spaces and, with time, enculturation into the discipline and the group eases this negotiation. This is consistent with Samara (2006:115) who asserts that one of the advantages of group supervision is the facilitation of 'students' enculturation into the particular discipline. Supervisors fulfil a key function in this induction process, according to De Lange *et al.* (2011:22), since they guide students over time to 'become part of the academic community through enculturation'.

From an academic development perspective, acquiring the right academic language to describe research and encouragement from the group helped Fatima (2011). When she first joined the DRAW forum, she had a limited command of English and was unable to express herself or explain her research in any coherent fashion.

She commented: 'I found confidence in this environment because I learnt how to discuss my research, and answer the criticizers!' Fatima (2011) asserted that DRAW participation readied her for her first international conference in New Zealand, and her academic development was linked to the value that the DRAW workgroup added. Before the conference she presented her paper several times to the workgroup, and the discussions which followed helped her to refine the presentation which, in turn, built confidence. In harmony with this, De Lange *et al*. (2011:26) advance that a group programme enables the growth of collaborative knowledge in research as a means to grow individual knowledge, which provides 'particular kinds of learning opportunities to support the movement of the student form novice to expert'.

Feedback from peers was highlighted as very useful because supervisors may seem to 'be pushing students too hard' at times (Zinzi 2011). Peer-feedback had an equalising influence and contributed to the concept of group supervision. Vera (2011) maintained that 'around-the-table discussions with input from others encouraged deep discussion of each of our research topics'. She also noted that the interdisciplinary, multi-national and multi-cultural group provided feedback from different points of view and different fields of knowledge which inspired and enriched her research. Although founding members agreed, a participant noted that some new students find it hard to deal with critical feedback from peers precisely because they are peers and not supervisors (Colette 2011). This is borne out by Samara (2006:119): '… other group members are advised to formulate their comments concretely, cautiously, and to refer to the positive elements in the text, as group supervision can be a sensitive process for some'.

Support and a willingness to contribute to other members' research were significant factors to Jasmine (2011). She identified committed

participation during sessions and sharing information in whatever form members were able to, as significant contributors to research success. Engaging with others' research is a valuable tool in developing the individual student's ability 'to express themselves on research matters in an academic environment to develop their own ideas' (De Lange *et al*. 2011:23). Jasmine (2011) also endorses the fact that 'listening only is fine too' and that attentive listening forms an important part of participation. Listening improves a person's ability to put him or herself in the other's shoes and thereby building empathy (Jasmine, Vera, Fatima & Rose 2011).

The value of social activities to induct new members into the group was acknowledged. Particularly the sharing of food and drinks was highlighted as an activity which supported cohesion in the group and strengthened relationships (Vera, Jasmine, Fatima & Batman 2011). The impact of friendships and relationships formed in DRAW was explained by Fatima (2011) in the following way:

> As an international student, I do not think that I was able to find a space better than DRAW where I found my best friends who supported me during my research journey; as I thought I was alone I had someone to rely on, as I thought I had a question which I was too shy to ask I got the answer there, as I thought I had a big unsolvable problem they support me to find a solution.

The need to express identity and culture in the DRAW group was facilitated by narrative approaches. The wide interpretation of narrative in the group included telling stories, doing PowerPoint™ presentations, participating in focus groups, in-depth interviews and producing art work. All of these methods were research tools which, according to the participants, told stories from a personal perspective. In this way, participants had the opportunity to use their life experience to contribute

Figure 2: Social support pillar. Chisin 2011.

to discussions, and life stories validated their individual input. Vera (2011) advanced that 'storytelling made it possible to show my point of view from my specific background and culture in the workgroup discussions'.

Hendrik (2011) argued that storytelling 'can easily become emotional and has no basis in empirical research; academic arguments and common sense seem better tools in research'. Hendrik (2011) does, however, acknowledge that 'narrative is an excellent hook to draw people in'. It is more engaging when narrative approaches are used to explain complex concepts and design issues, since the researchers' topics are contextualised in a personal way. Figure 2 provides an overview of the social support pillar.

Philosophical DRAW: *Ubuntu* and the spirit of communalism

Students struggled more to identify philosophical and theoretical underpinnings in the workgroup sessions, compared to the social underpinnings. *Ubuntu* and the spirit of togetherness were nevertheless seen as a very important philosophical pillar in the workgroup. The *Ubuntu* philosophy is closely associated with the way that DRAW is run and is used in this social and

collegial space as a tool to help students become sympathetic participants even when they criticise (Zinzi 2011). Moreover, its spirit of communalism made Batman (2011) realise that 'discovery of similarities in others' triumphs and struggles helps us to relate to and empathise with them and deal with those aspects within ourselves'.

Although the principles of *Ubuntu* are associated with African roots and expression, its inclusive ethos is accessible and applicable widely. Venter (2004:150) argues that 'the notion of *Ubuntu* and communalism are of great importance in an African educational discourse'. Furthermore, the multi-cultural and multi-national composition of the participants required an understanding of each other on an advanced level in order to benefit from participation in the group. The collaborative principles of *Ubuntu* helped in shaping that understanding: 'I participate therefore I am', or the well-known 'I am because we are' (M'Rithaa 2009:3). Participation in the group became an anchoring activity as members strove to come to grips with their research.

With regard to other theories and philosophies discussed in the DRAW sessions, and whether they helped students make meaning of their research as a learning event, four members indicated 'no response'. These questionnaire responses were in marked contrast to discussions in DRAW when theoretical and conceptual frameworks were used elegantly by students to argue points of view. Design for Sustainability, Design for Development and Participatory Design were regularly singled out in the sessions as important theories and methods. One new participant stated that the underlying principles of research were explained by study leaders and seasoned researchers but that theoretical frameworks, the 'why, value of, and reason for' lack in discussions (Hendrik 2011). The contradictory data

in this section point to a difficulty at times in reconciling theoretical and conceptual frameworks with the personal learning event, and possibly the fact that the social support structures took precedence.

The difficulty of not linking theory/conceptual frameworks with learning was emphasised in student responses to preferred learning approaches, the interpretation of aspects of reality, and questions about the 'deep/surface' learning metaphor (as posed by Webb 2007:197, 206) and discussed in the workgroup. Four members gave no response to this question. That is, they did not relate the notion of deep or surface learning (or both), or the interpretation of aspects of reality to their research. One participant indicated that she used neither learning approaches because her research is still 'a work-in-progress' (Comic Sans 2011), indicating that (for her) learning happens retrospectively upon reflection. Vera (2011) asserted that she was 'mostly searching for in-depth interaction and meanings' in her research. Another participant indicated that he used both approaches because of the nature of his research, which he described as 'a topic of knowledge acquisition and learning or education' (Hendrik 2011). Five members found theories useful to frame their research and Jean (2011) stated that '…[theories] allowed me to see depth and width of design as a practice more clearly, and to contextualise my research in terms of a broader canvas'.

A spirit of communalism helped personal contextualisation in the group which included the iterative process of discovering the self in 'the other' (Webb 1997:197). Two founding members of DRAW agreed that finding 'commonness' in each other despite different backgrounds, cultures and personalities leads to building trust in the group. Building trust and finding commonality takes time and requires respect for diversity. Jasmine (2011) feels that members 'rely on each other because
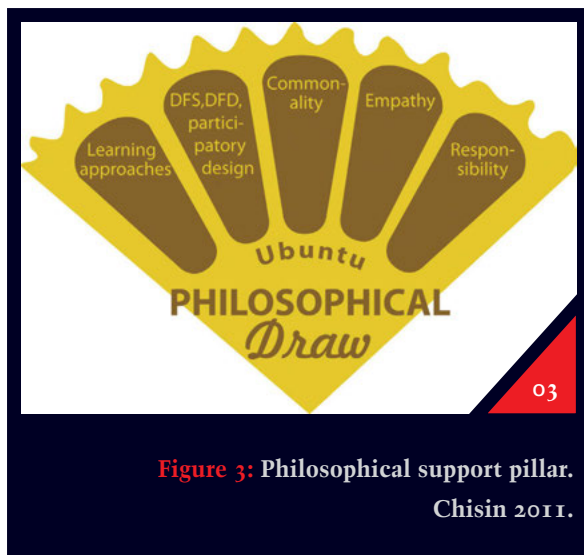
Figure 3: Philosophical support pillar. Chisin 2011.

we trust each other and recognise commonness'. Comic Sans (2011) advanced that an openness and understanding of each others' research topics, for example, an interest in environmental design and in DfS, resulted in strengthening commonality in the group. Using the groups' varied skills and knowledge for problem-solving and improved understanding transcends scholarship development since 'freedom to comment supports the identity of an independent scholar whose "difference" is respected and valued within the learning community' (Scardamalia & Breiter in De Lange *et al.* 2011:23).

The value of shaping the research process through an empathetic understanding of strengths and weaknesses was articulated by most members, and Jean (2011) explained that 'understanding strengths and weaknesses allows students to tailor their practices to their strengths which results in a stronger personal research capacity'. Challenge and contestation in the higher education discourse 'requires openness to the views of Others' (Webb 1997:201). It is in the spirit of openness that empathy flourishes, recognising strengths and weaknesses in the group means drawing on different abilities and an empathetic understanding makes asking for guidance easier (Zinzi 2011). She observed a more lateral

appreciation of each member's contribution and also that students appreciated multiple responses to their research questions. Zinzi (2011) and Fatima (2011) both added that students were able to distil feedback, raise concerns and defend their position, which means that ultimately students are able to take responsibility and are in charge of their own projects. Figure 3 provides an overview of the philosophical support pillar.

Supervisory DRAW: Co-creative supervision practices

Co-creation was seen as an important supervisory support pillar in the workgroup. Group supervision models which encourage a collective learning ethos (Samara 2006:115-129; Ratkić 2009:99-109; De Lange *et al.* 2011:15-30) resonate with the co-creative perspective. Members in the DRAW forum commented on changes in pedagogical contexts, student/lecturer interaction and supervision practices, and identified several factors responsible for the changes. Among these were a growth in university postgraduate education globally, a multi-national postgraduate fraternity, an overall relaxation of formality in the academy, the fact that postgraduate research is characterised by collaboration, and that no right or wrong answers exist in research. These factors are borne out by Samara (2006:116, 117), Murphy, Bain and Conrad (2007:219, 224), Ratkić (2009:100, 101), and De Lange *et al.* (2011:19).

The concept of a multi-national and multi-cultural student body, and the question of how teaching and learning is accommodated amidst the notion of 'global citizenship' is interrogated by Tsolidis (2002:213) as she explores inclusive pedagogies appropriate for global citizenship in the context of an increasingly internationalised and multi-cultural student cohort. Tsolidis (2002:213) argues that we have to place our students' best interest at

heart and 'prepare them for a future where global citizenship is assumed'. To do this, educators need to 'develop ways of teaching to the cultural fluidity which characterises globalization' (Tsolidis 2002:213). Co-creative supervision and collaboration in the DRAW forum attempt to speak to cultural fluidity and globalisation.

Co-creation implies that supervisors do not fulfil a dominant or overly authoritative role anymore, according to the DRAW participants (see Figure 4). Rather, they function as 'discussants' and 'understanding guides' (Zinzi & Faizal 2011). Guiding creates a space for all participants to lead with comments, critique and guidelines. The student/supervisor relationship is dynamic, including their roles. The student becomes more knowledgeable during the development of the research process, and he or she brings that new knowledge into the group as the expert on the topic: 'roles open up and reciprocity happens' (Zinzi 2011).

This is consistent with Lave and Wenger's (1991:29) argument of legitimate peripheral participation which gives way to full participation over time. Learning in this sense is a process of social participation (not so much knowledge acquisition by individuals) and the situation impacts greatly on the process (Lave & Wenger 1991:29). Reciprocity and the flat power structure in DRAW results in a balanced interaction between supervisors and students which, in turn, leads to an enhanced learning process because students do not feel intimidated (Jasmine 2011). Members stated that the open, flexible and informal approach to supervision and the fact that supervisors share their own research activities in DRAW, also enhances the learning process.

Peer-learning was actively encouraged and was identified by members as a strength in the group. The interaction of local students and international students

Figure 4: Supervisory support pillar. Chisin 2011.

provided a richer background, expanded content knowledge and lived experience to the advantage of all. Vera (2011) indicated that her participatory/co-design approach to research is based on the lessons learnt in DRAW: 'A mutual learning experience is a strong strategy to make a real change … in design research, designers arrive at collaborative solutions to design problems'. Peer support also provides psychological comfort which makes the Masters journey less lonely, according to Batman (2011), Vera (2011), Faizal (2011) and Fatima (2011). Figure 4 provides an overview of the supervisory support pillar.

Consolidating the DRAW model

As can be seen from the narrative data presented in the previous sections, aspects other than subject matter expertise during supervision are significant contributors to learning and research advancement. Particularly with postgraduate research, autonomy in owning and managing the research project and taking responsibility is key. From the authors' perspective – as reflective practitioners – strength and direction was drawn from the collective DRAW experiences. The sessions offered moments

of insight, enjoyment and professional growth as we explored group supervision based on collaboration, dialogue and regular interaction. The consensus among participants was that the DRAW forum created an atmosphere in which an empathic understanding of others was realised. Inasmuch as students developed 'care' and 'authentic openness' (Webb 1997:197) over time, so did the supervisors. A seamless conflation of supervision and learning activities occurred as supervisors too engaged in collective learning. With regard to the development of empathy and an understanding of the 'lifeworld of "the Other"', Webb (1997:197) advances that:

> The history of hermeneutical understanding has emphasised the exploration of the role of the researcher within the research situation and the intensely human element contained in the development of empathy. The process is intricate, self-reflective and progressive. It requires time and the development of … "care" and "authentic openness" to the Other.

Openness was possible initially because participants perceived themselves to be in the same boat, and an understanding developed around mutual research interests which were consolidated over the two years that members participated in the forum. The DRAW community was 'created over time by the sustained pursuit of a shared enterprise' (Wenger 1998:45). In this community, care and authentic openness had to be nurtured and maintained. This was achieved through DRAW members being actively involved in dialogue as conversationalists. It is in the role of conversationalists that Webb (1997:197) argues that understanding grows as each person 'discovers and re-discovers him- or herself in "the Other"'.

In addition, the narrative technique of 'listening and holding the space' or 'leading from any chair' (Kaos-Pilots [sa]:[sp]), supports conversationalists in their exploration.

It is open, tentative and intuitive, and is used to promote enculturation of members into a community of practice (Samara 2006:15) and to equalise power differentials in a group. The process reflects a critical pedagogic approach, an approach which aims to break down hierarchical structures that result in power differentials between lecturers and students (Trahar 2009). Any member of the group can lead activities, and the default position of supervisor/authority as leader is shared. The technique, consequently, consolidates activities and cohesion within a community of practice, and was introduced to the authors during a leadership workshop facilitated by the KaosPilots presenters in March 2010 and March 2011.

The narrative technique is in keeping with the 'dialogue-seminar method' (Ratkić 2009:99), group supervision practice (Samara 2006:116) and the cohort model described by De Lange *et al*. (2011:15). Supervision as a group activity carried out in a community of practice, offers advantages. Apart from facilitating enculturation into a particular discipline or group, De Lange *et al.* (2011:27) maintain that 'alongside the traditional one-to-one supervision relationship [community supervision] opens up other voices'. It helps the transition from newcomer to experienced member and the 'movement of student from novice to expert' (De Lange *et al.* 2011:26). In DRAW this was done by encouraging participants to lead sessions with narrative and individual subject expertise. In the topic origination phase, biographical significance of the topic and immersion in the research process was emphasised. Pedagogical learning approaches supported various stages of the research. For instance, the 'deep approach' to learning which focuses on a holistic perspective and is meaning-making was primarily used, complimented by the 'surface approach' which is concerned with attention to detail and the studying of new material (Webb 2007: 205, 206, 207).

Figure 5: Consolidated DRAW support model. Chisin 2011.

Figure 5 provides an overview of the consolidated DRAW model. The unnamed circles represent potential to engage with other communities in the university and away from the university. With some DRAW members eventually returning to home countries, these circles may well be populated with alumni and industry fields.

Conclusion: Real change happens when there is a strong strategy

The DRAW forum was initiated at the CPUT in early 2009. It aimed to provide an academic and social support forum for postgraduate students who often experience isolation in their research, and to improve limited supervision capacity within the design departments. The aims were realised since the DRAW forum increased supervision capacity. This was achieved by sharing the load between the two supervisors and postgraduate students. All the forum participants negotiated and

re-negotiated the format and styles of supervision which developed as open-ended, inclusive and empathetic activities. Roles were unpacked and exchanged as participants experienced being expert at times and novice at other times, as roles changed from newcomer to established member. The flat power structure of the forum strengthened this reciprocal relationship in this community of practice, since it broke down power differentials.

The social support pillar in the DRAW forum was based on interdependence among the members and gave rise to:

• an empathetic home-space

• openness

• egalitarianism

• collegiality

• academic development

• sharing food and drink

• participation and

• narrative conversation.

Ubuntu and the spirit of togetherness were seen as important philosophical support pillars in the forum. The uncompromising foregrounding of socially responsive design models such as DfS and DfD, underpinned by the *Ubuntu* ethos, represented a strategy to promote sustainable design. Change in design to make it more sustainable can only become a reality if the agenda is actively promoted in the academy, in the community and in industry. With the DRAW focus on encouraging holistic learning approaches, sustainability, building commonality, empathy and taking responsibility, a strategy for social change is advocated via the graduates entering industry or returning to home countries and practising design there. Interrogating these concepts in the university is part of the work of DRAW,

since the workgroup embodies design thinking as a practical change agent.

Co-creation emerged as an important supervisory support pillar. As DRAW participants we concur with Nelson (2009:111) that the designer's vision 'meshes with, or grows out of, an apprehension or intuition of how activities might better be served or realized'. As a community of practice, we used our intuition actively in the co-creative activity of group supervision to guide candidates to the successful completion of their research degrees. Five of the seven founding DRAW members were capped with their Master in Design degrees in the September 2011 graduation ceremony. Another graduated in April 2012, and the remaining forum members will be guided to completion through the DRAW support structure. Borrowing from Böhm (1996:9), we gathered in a circle and talked. We knew what to do because we understood each other well. Each session and each member offers scope for healthy introspection. This has resulted in DRAW remaining an open, empowering and mutually supportive space that continues to contribute towards a tolerant, inclusive and discursive dialogue. And through the spirit of reciprocity and respect that underpins the *Ubuntu* ethos, 'we participate, therefore we are …'.

Future directions

The DRAW forum is continuing in 2012 with its seminars based on conversational and narrative methods to support postgraduate students. Opening the forum up to other disciplines in the Faculty of Informatics and Design, namely Public Relations and Information Technology, will add yet another dimension of interdisciplinarity, complexity and collaboration to one of the

biggest Design Faculties in South Africa. This different context with a wider audience may offer insights from alternative perspectives. In this way, the forum will continue to deepen the personal and professional insight of the participants by respecting and valuing 'difference' in the learning community (De Lange *et al.* 2011:23).

Notes

1   This paper was originally presented at the Design, Development and Research Inaugural Conference at Cape Peninsula University of Technology in Bell-ville, Cape Town, 24-26 September 2011.

Student research titles in DRAW include:

- Delen, A. 2011. Service design challenges in home-based health care in the Western Cape: A case study.
- De Flamingh, F. 2011. The role of textiles in sustainable South African residential architecture.
- Foudazi, F. 2011. Eco-friendly air-conditioning systems for different climates in South Africa.
- Kankondi, A. 2011. An exploration of opportunities for design interventions to reduce crime: A case study situated in Bridgetown, South Africa.
- Maina, M. 2011. Human experiences affecting governance in energy-efficient buildings in Cape Town's central business district.

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Appendix 1

Example of a reflective journal writing and documentation: May 2010:

AW MEMBERS: RETURN DATE 15 APRIL 2011:
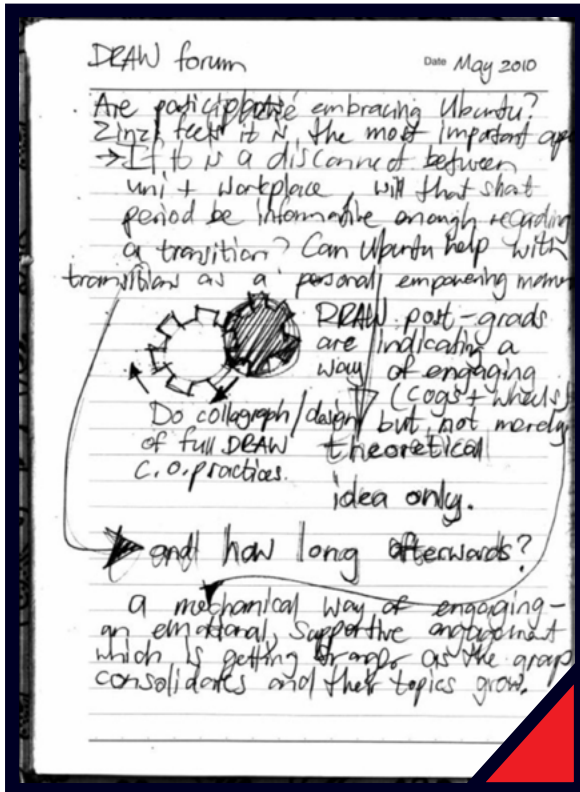
Drawing the line: When students design learning and supervisors eat cookies

The questionnaire for DRAW members, data of which is to be used in the above paper written for the CPUT Design, Development and Research (DDR) conference that we are hosting in September 2011. Yes, supervisors too need to reflect on their practice and write about it. So do students, please take time to think about your responses and know that now the shoe is on the other foot! Depending on your answers, you will be busy for about 30 minutes. Please sign after completion on the form for consent.

As designers we use terms such as 'design thinking' and 'design' to describe what we do when we make meaning of the world through our practice, or when we produce artefacts, products and services. When we extend that space to include design research, we also make meaning of our world in a different way. Now we may concentrate more on underlying concepts and theories to help us frame our problems and responses. One of these spaces in our case is the DRAW space, where we share common goals and vision.

1. Social DRAW:

- What do you like about the DRAW space?
- What do you not like about the DRAW space?

Appendix 2

- Which of the social activities in the group supported you during your research, and which of the social activities hindered your progress?

- How would you describe the social DRAW space in terms of the friendships and relationships that members form?

- If inter-dependence is one of the social DRAW pillars, what would you say are the other pillars?

2. Philosophical DRAW:

- The terms 'deep learning and surface learning' refer to different learning styles. Webb (1997) states that students fond of a deep learning approach try to understand and make meaning from a learning event (as opposed to memorising information without contextualisation). Have the theories and philosophies discussed in DRAW sessions helped you to make meaning of your research as a learning event? If so, in which way, and which theories in particular?

- The 'surface' learning approach also has its place, Webb (1997) argues. This is more concerned with the obvious (and mechanical) as opposed to underlying concepts and holistic understanding. Were you aware of using these two different approaches in your research, and, if so, explain how and why you made use of them.

- In the DRAW context, do you think that an empathetic understanding of the strengths and weaknesses of members in the group shaped the research process of the candidates in a particular way?

- Empathetic understanding hinges on a person's ability to put him- or herself in the other person's shoes. Cochran-Smith (1997) links this, in turn, with story-telling and making one's voice heard. Were you able to use story-telling to make your voice heard in DRAW, and did you use narrative in your research as a tool? Can you recall a specific example?

- What role did story-telling play in the DRAW sessions?

3 Supervisory DRAW:

- In a changing world supervision (and the way students and supervisors interact) cannot remain unchanged. In your opinion, which factors are responsible for changes in student/lecturer interaction and supervision?

- Do you find that supervisory practices are different in the DRAW/CPUT context to supervision in other countries where you did research?

- The DRAW sessions aimed to create a space where conversations and collective learning were deployed as a research method. Did this method add value to your personal research strategy, and, if so, how did it help? In turn, did you add value to others' research strategy, and, if so, how did you do that?

- What was the supervisors' role during the DRAW sessions?

- What would you like to have seen more of from the supervisors during DRAW?

- What aspects of supervision did you like during the DRAW sessions?

- Webb (1997) argues that an empathetic understanding of others requires time and the development of care and authentic openness to the 'other'. This, in turn, leads to discovery of him- or herself in the 'other'. How do you understand this concept and do you think that DRAW succeeded in achieving this or not? Why do you say so?

- As postgraduate students, did you feel at times that you were experts in the group and that the role of expert and novice rotated? How did it happen?

- Any additional comments that you would like to make to offer insights into the DRAW research experience?

Thank you very much for taking the trouble to complete the questions!

Biographical details will be kept confidential and identities will be protected. Names do not have to be supplied if you wish not to.

Alettia and Mugendi

_____

Student name:

Country of origin:

Level of study:

Duration of contact with DRAW:

Activities participated in/events organised while in DRAW:

_____

Appendix 3

Example of questionnaire coding: May 2010:

Appendix 4

Example of documentation for exit interview: 11 May 2011: