

Reflections 16

Content

Preface by Dag Boutsen 5

Introduction by Johan Verbeke 8

Contributions by Tutors

Gerard de Zeeuw: *The carapace* 15

Halina Dunin-Woyseth and Fredrik Nilsson: *Creating stronger awareness of traditional academic and “by design” scholarship* 19

Ranulph Glanville & Michael Hobl: *Notes from the reflecting workshop, St Lucas, June 23rd – 25th, 2011* 29

Adam Jakimowicz, Johan Verbeke: *Knowing by Making* 41

Rolf Hughes: *Belgium conversations 2011-12* 55

Contributions by Participants

Participants: ‘batch 2011’

Gisele Gantois: *QUESTIONING or how RTSessions are stimulating the act of wondering and doubting* 69

Ivo Vrouwe: *Textiles Revised* 77

Marijn van De Weijer: *Large, detached dwellings in Flanders: A testing ground for practice-based research* 89

Nina Taghavi: *Storytelling* 95

Tüüne-Kristin Vaikla: *Spatial Snapshot* 105

Veerle Cox: *Research by design on West-Flanders, the workshop re-visited* 113

Participants of RTS 2010

Cristina R. Maier: *Interactive Design* 123

Petra Pferdmenges: *City Hacktivism* 131

Pieterjan Gincjels: *SPEED SPACE* 139

Participants of previous Research Training Sessions

Karel Deckers: *Unheimliche architecture: frictional interior in between encounter and belonging* 157

Colophon 176

Preface

Dear everybody, or whoever's reading,

Let me start by quoting Rolf Hughes' 'reflection' for Reflections: "One can only truly understand walking by walking".

Research professionals and practice professionals will increasingly come to be the same people, according to Halina Dunin-Woyseth and Fredrik Nilsson, presuming that a more operative definition of "doctorateness" can be developed.

Gerard de Zeeuw talks about research on judgments and other emotional engagements.

Knowing that PhDs keep on targeting significant questions in the field, Johan Verbeke's introduction expresses a confident looking forward to a positive future.

All the authors in this edition of Reflections discover, revise or criticize 'research'. And by doing so, they extend the horizons of research.

Sint-Lucas School of Architecture is busy transforming itself into a Faculty of Architecture. The 15th faculty of the KU Leuven.

Step by step we are rediscovering ourselves. The whole process is a matter of increasing our self-awareness. Self-Awareness means having a clear perception of your personality, including your strengths, weaknesses, thoughts, beliefs, motivations and emotions. Self-Awareness enables you to understand other people, how they perceive you and your attitude and responses to them.

Step by step, we are constructing and understanding this road by walking down it.

I want to thank all the people who have been involved in and supported RTS and this edition of Reflections for their energy and efforts.

introduction

Introduction

Another year.

Another issue of *Reflections*.

Another set of contributions from our participants and staff.

Another step in the development of our research program.

Another nice set of projects and ideas.

Another step towards research excellence.

As I write this text, we are just finishing the '2012.1 GRC-Toonweekend'. Some 45 PhD Candidates have presented their research, and their work has been discussed by international panels. The quality of the presentations and the research has truly been growing over the last couple of years. It seems the process of continuous peer review is starting to pay off.

We started to develop a research program linked to designing and practice in 2005, publishing the first *Reflections* in 2006. Since then, we have come a long way. Over this 7-year period, more and more colleagues have 'taken the plunge' and started working on a PhD. These colleagues are structurally positioned in a variety of settings, and it is becoming more and more apparent that these settings have an enormous impact on the direction in which their work is developing. Sint-Lucas has always confronted its masters degree students with a variety of visions of architecture. It only seems logical to extend this approach to the PhD level and confront those candidates, as well, with a variety of methods and ways of looking at research. Although this variety seems in the first instance to delay the initial research work, its advantage is that it forces the researchers to explore and develop their own position in the field.

We are happy once again to present a new edition of *Reflections*: a pocketbook, chock full of texts and images – a pleasure for the eyes and food for thought. The significance of producing such a 'mini-volume' on research each year should not be underestimated. There is an impact on at least three levels:

- 1) For the participants themselves, the publication creates a deadline for formulating their research interests. They need to find an appropriate way of communicating their ideas and actions.
- 2) For the research climate at Sint-Lucas: all the colleagues are reading one another's contributions. The transfer of ideas and approaches to research is an important aspect of developing a research culture. It helps to clarify approaches and ideas. In this sense, it's a pity that not more former RTS participants keep contributing to *Reflections*.
- 3) For the international community. It's happening more and more often that people contact me about *Reflections* and our research program. Recently, a master's degree student in Brazil sent me a very interesting

email. It seems that *Reflections* and our work is becoming more and more widely known. I also believe that it is of utmost importance for the future that we keep a good record of our activities and actions. I'm sure that such a record will prove to be of value for the development of other schools of architecture in the future.

Quality in research is a very difficult issue. Also in other disciplines, it is based on peer review and peer assessment. But for architecture (as well as for arts and design), the interaction with and impact on society and people is of crucial importance. Hence, it is important, when discussing research quality, to incorporate practicing architects (experts) and the general public as well.

In analogy with artistic research in the field of arts, research by design should be research in which designing and practice play a crucial role. On the basis of the work of Henk Borgdorff, the EAAE Research Committee came to the following conclusion:

"Any kind of inquiry in which design is a substantial part of the research process is referred to as research by design. In research by design, the architectural design process forms a pathway through which new insights, knowledge, practices or products come into being. It generates critical inquiry through design work. Therefore research results are obtained by, and are consistent with, experience in practice."

(see www.eaae.be/web_data/documents/research/FrameworkResearchEAAE.pdf accessed on 2nd May 2012)

As research by design is developing and becoming a prominent part of the research endeavors of the schools of architecture, the ideas behind research by design are being blurred by research which includes neither design nor practice.

More and more of our researchers are focusing on the very fundamental questions of the discipline. What are the key developments in the field? What is the added value of Architecture, Interior Architecture and Urbanism? Who are architects/designers? Where do designers want to go? What is critical in a design practice? What is important for people? The method includes the specific but also the general, the context and a frame of reference, interaction and discussion. It explores possibilities and develops proposals for the future.¹ I believe that when we keep contributing to these questions and to the central areas of concern in the field, our research will become more and more significant, visible and recognized. Many of the PhDs are targeting these questions and will be concluded in the very near future.

So, we look confidently forward to the future.

To the coming year.

To coming issues of *Reflections*.

To future contributions by our participants and staff.

To further steps in the development of our research program.

To more innovative projects and ideas.

To a further step towards research excellence.

Johan Verbeke

¹ J. Verbeke, Afterword in L. van Schaik and A. Johnson, *Architecture & Design. By practice, By Invitation. Design Practice Research at RMIT*, 2011, onepointsixone.

contributions
tutors

The carapace

The literature abounds with complaints about the lack of success of research in new fields, for example in the arts. This may explain the abundance of proposals to re-define research so that it – minimally – covers the interpretation of anyone who engages with such research. It also suggests that there is no definitive proposal for such research yet, one that resolves all difficulties and guides progress for the next century. Introducing one more such proposal may seem trivial, therefore. There is always the chance, however, that it will be noticed and even lead to a re-arrangement of previous proposals. The proposal outlined in this paper concerns research on judgements and other emotional engagements.

While researchers have a single objective (doing high quality research), practitioner-researchers often wish to realise two objectives, i.e. do research and also contribute to what people prefer in their own situation and in the here and now rather than as a part of a general and long term endeavour. As this split often proves uncomfortable, one is easily tempted to allow the practical objective to dominate and to think that one has done research once one has solved a single problem or answered a direct question. This clearly is not correct. The double objective implies linking the practical objective to all that may impede its realisation, i.e. to a class of research problems.

Solving the latter usually is conceived as identifying the link between two sets of observations such that the one defines the boundaries of the other. Although people claim to see 'planets', for example, what they actually see are some moving lights. Research has taught them to link the two sets ('planets' and 'moving lights') in a unique way – unique in that no other set is linked in this way to the 'moving lights' (such as angels or small holes in the night sky). In contrast, researcher-practitioners tend to focus on identifying unique links between sets of experiences other than observations such as smell, touch and – quite importantly in areas like the arts – experiences of beauty, preferences and other emotions.

Many links of the latter type have been found that are highly valued in daily life. Examples include the games that people play as well as how people increase the quality of paintings, buildings and dinners. They also include the development of systems to deal with practical problems, like the legal or democratic system. Contributions from researchers-practitioners to these developments seem to have been fragmented, however, possibly to the tendency to solve single problems rather than their classes. This deficit may be resolved when it is realised that the links constitute carapaces or shields to social activities and to the organisation of feelings of beauty and other preferences. It is proposed that searching for carapaces supports the work of researcher-practitioners. There are important advantages. While observational links make it possible to find collective observations (observations that people can imitate), searching for collective preferences and emotions has met with serious difficulties. Constructing a carapace makes individual preferences cohere without the need for such a collec-

tive preference. They solve the class of research problems by protecting its respective solutions against disturbances and errors. This is achieved via the coordination of individual contributions such that the latter become uniquely linked to the carapace. Its presence allows for a collective competence as the result of the researcher-practitioner's effort.

Gerard de Zeeuw

Creating stronger awareness of traditional academic and “by design” scholarship. Investigating ‘Doctorateness’ in Belgium, Sweden and Norway.

Over the years, research in the ADA fields (Architecture, Design and Arts) has become more and more mature, with this research producing field-specific scholarly knowledge, both in the traditional context of dialogue with disciplinary knowledge and in the context of “research by design”. The issue of higher standards of scholarship has been addressed in organised research education, where they have been taught, debated and negotiated. One of the key aspects of mastering this scholarship is the strengthening of the creative abilities of the doctoral students; another is training in research craft. Both these aspects are assessed by adjudication committees for the purpose of evaluating the final product of the doctoral work, most often in the form of a thesis. These committees investigate whether a thesis has achieved a satisfactory level of “doctorateness”.

There has been much discussion of the concept of “doctorateness” in recent years, both in the traditional academic disciplines and in the creative fields, and there is still much debate about how to define this concept in the contemporary situation (Denicolo & Park 2010; Stock 2011; Philips, Stock, & Vincs 2009). This short article is a brief report generated out of the midst of an ongoing project, which we hope will contribute to how “doctorateness” could be defined in our own field of architecture, design and arts.

As early as in 1997, the UK Council for Graduate Education brought out a report on the quality of doctoral work in the creative and performing fields, in which it defines its standards of “doctorateness” as follows: “The essence of ‘doctorateness’ is about an informed peer consensus on mastery of the subject; mastery of analytical breadth (where methods, techniques, contexts and data are concerned) and mastery of depth (the contribution itself, judged to be competent and original and of high quality)” (Frayling et al. 1997, 11).

Eight years later, the European Ministers adopted the Framework for Qualifications from the so-called “Dublin descriptors” (EHEA 2005). In the third cycle of higher education, the doctoral studies, these qualities or competences were defined as: a systematic understanding of a field of study, including mastery of the skills and methods of research; the ability to conceive and pursue a substantial process of research with scholarly integrity; a contribution through original research; capacity of critical analysis and evaluation; and an ability to communicate with peers, with the larger scholarly community and with society in general.

While the first set of criteria addresses in a more pronounced way the final product of the doctoral work, the second concerns strengthening the doctoral competences to be

achieved during the process of doctoral studies. Combining these two sets of criteria of doctoral standards is how we tentatively interpret the concept of “doctorateness”. Historically speaking, the doctor’s degree was a licence to teach in a university as a faculty member. This has of course changed, and today it is more about certain abilities and capacities in relation to research, as well as the position in a certain community. The doctoral degree proclaims that the recipient “is worthy of being listened to *as an equal* by the appropriate university faculty”, and to be a ‘doctor’ means “to be an authority, in full command of the subject right up to the boundaries of current knowledge, and able to extend them” (Phillips & Pugh 2005, 20–21). Someone with a doctorate is recognised as an authority by the faculty and by other academics and scholars outside the university, and doctoral education is today about becoming a professional researcher in your field and acquiring what can be called research competence. This mostly concerns the learning of skills, rather than of certain knowledge. “You have to be able to carve out a researchable topic, to master the techniques required and put them to appropriate use, and to cogently communicate your findings. So there are craft skills involved in becoming a full professional, which, like any skills, have to be learned by doing the task in practice situations under supervision.” (Phillips & Pugh 2005, 20–22)

The first time we introduced studying and evaluating doctoral theses as an assignment in research education at the Sint-Lucas School of Architecture in Brussels was in 2008, as a module of the independent research education unit we set up on the theme of “Scholarly craft and criticism” (Dunin-Woyseth & Nilsson 2010, 75–76). In 2011, together with a group of international doctoral candidates, we embarked on a more thorough investigation of the “doctorateness” of several recent Scandinavian practice-related doctoral theses in architecture and design. This investigation itself was the beginning of a new research project.

This research project is empirically based on the series of doctoral courses which we offered to groups of architects and designers in Belgium, Norway and Sweden in the years 2008–2011 (Dunin-Woyseth & Nilsson 2009; Dunin-Woyseth & Nilsson 2010; Dunin-Woyseth & Nilsson 2011a; Dunin-Woyseth & Nilsson 2011b). These courses were an attempt to train the doctoral students in the art of scholarly assessment as a mode of developing research competences and, thus, to prepare these students to be creative and competent in producing the final product of their doctoral studies – a thesis. The courses were built around the study and evaluation of already accepted doctoral theses in the design fields, which served as empirical material for our research project. The doctoral students were requested to work in groups of two or groups of three. This “peer learning” was intended to train the students in the ability to communicate, argue and give scholarly criticism, as well as to get them more acquainted with the different perspectives from which they as doctoral candidates approach the ADA field. The PhD students were guided in this work by a set of criteria defined by us as teachers. With regard to these guidelines, which include our interpretation of how the competences are embedded in the final product of doctoral

work, the students were requested to discuss and evaluate the following: the research problem of the thesis; the knowledge status in the field; *the “research design”* of the doctoral project (the relations between the object of study, the theoretical frameworks used, the traditional or the “by design” approach to the research); the description and *self-evaluation of the “route mapping”*, i.e. the research method applied and the arguments for the chosen approach; *the scholarly craftsmanship* materialised in the thesis; *the communicability* of the thesis; *the importance of the project* to the building of knowledge in the field, and whether it has brought about new original knowledge; *the potential for further development* of the results of the thesis; and *the value of the thesis outside* the scholarly and designer community.

At the end of each assessment seminar we asked the PhD students to assess the value of this type of research training. We also asked them how they interpret the concept of “doctorateness” after having analysed and discussed the thesis they were assigned to evaluate during the seminar. The conclusions drawn by four different groups, each working on one of three different theses, can serve to elucidate the aims of the project.

A group of doctoral students from the Ardhi University in Dar-es-Salam who studied a traditional thesis (Syversen 2007) wrote: “The assignment on the doctoral thesis review was useful in self-reflection on our own research projects in addition to imparting knowledge on how we can assess other scholarly works”. Their

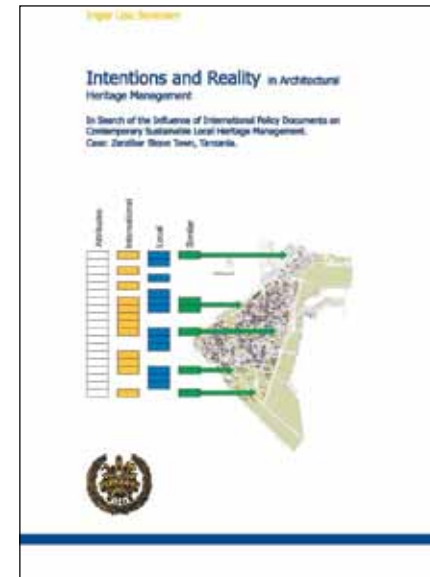


Fig1- Doctoral thesis: 'Intentions and Reality in Architectural Heritage Management', by Inger Lise Syversen, 2007.

understanding of the concept of “doctorateness” emphasised its dependence on the academic context of where a thesis was written: “Doctorateness’ is a demanding scholarly endeavour that largely relies on the prevailing traditions in a specific university / institution”. (1)

A Swedish architect, working part time in practice and part time doing an industrial PhD, who studied a thesis based on “research by design” (von Busch 2008) reported that his study of the thesis had been problematic for him. He browsed through it many times, though not in a sequential way, and then discussed its contents and form with his co-partner in the assignment. He was not sure whether he had understood the thesis as it was intended to be understood by the author, but in spite of that he found his study of the thesis to be interesting and fruitful. The PhD student highly appreciated the assignment, and he thought that his course colleagues did too. He also found it of value that the course participants had had the opportunity to learn about more than one thesis during the seminar, in which all the theses studied were presented and discussed. He felt a kind of uncertainty with regard to the concept of “doctorateness”. He believes that the “degree of doctorateness” can be measured

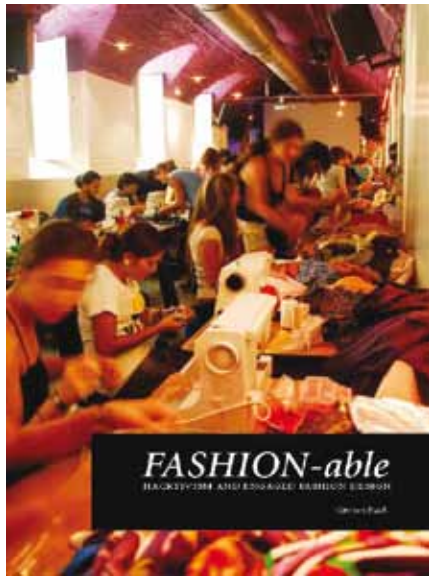


Fig2-Caption: Doctoral thesis ‘FASHION-able: Hacktivism and Engaged Fashion Design’, by Otto von Busch, 2008.

by the degree of the author’s awareness of what research generally deals with in an academic and cultural context and how the author understands the specificity of his own field of research in relation to other fields. He believes that the course has highly improved this awareness in the participants. (2)

A group of doctoral students at the Oslo School of Architecture and Design (AHO) studied an early example of a thesis that is close to being research-by-design (Redström 2001). They comment that, in retrospect, it is possible to argue that the epistemological position of the author might be viewed as in a by-design or performative paradigm, but that there is an uneasy connection between practical experimental design and theory in the thesis. Even though the thesis often claims that its theories, arguments and design philosophy are based upon the outcomes and the processes of the practical experimentation in designing and building the artefacts, there is little evidence in the thesis itself as to how the practical work influenced and formed the theory. “The artefacts then act more as illustrations, as starting points for discussions by the authors and for the presentation of ideas, rather than as experimental design efforts that in themselves seek to explore, investigate and probe

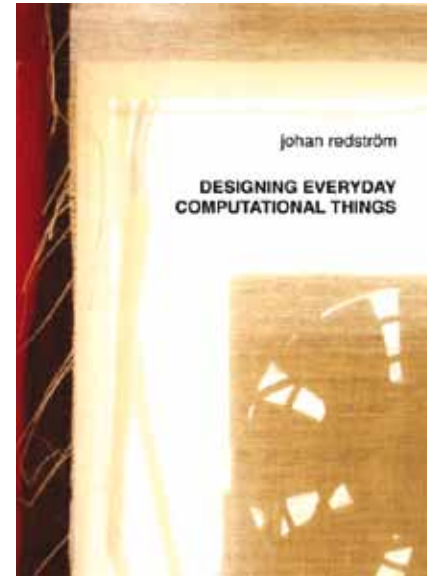


Fig 3: Caption: Doctoral thesis ‘Designing Everyday Computational Things’, by Johan Redström, 2001

certain topics." In their reflections on "doctorateness", they emphasise the importance: (a) of having knowledge of the research landscape; (b) of understanding traditions of research structures, cultures and languages; (c) of having the ability to communicate across disciplinary and professional borders; and (d) of being able to demonstrate criticality, rigour and appropriateness of the structure of the presentation. (3)

Another group at AHO, which also studied the thesis by Otto von Busch (von Busch 2008), highlighted "doctorateness" as something that distinguishes or makes the link between research and the professional practice of the research field. "To us, the analytical breadth is crucial in deciphering the essence of doctorateness as it is this that separates the practice from the research." They argue that even though we as individuals may only work with one method, the understanding of the breadth of methodology and our positioning within this mesh of theories is critical in order for us to properly be a master of our own craft of research. And: "In the future we may be confronted with work that may demand a different methodological approach." (4)

During the seminars, we as teachers put emphasis on the research design of the doctoral theses written in a traditional academic manner, and on how these theses differed from doctoral theses based on research by design. We found it important that especially those PhD students who set out to approach design research in new ways have to be aware of what the traditional approaches are. We regard this awareness as being necessary for building generic and field-specific research competences among the doctoral students. This awareness is also essential for being able to communicate their research and new knowledge to others within the field of architecture and design, as well as to those in other fields, and only by doing so will they succeed in gaining recognition for the field-specific knowledge and approaches that they have developed.

Our research project is designed to proceed in several stages. The first stage was the analysis of the assessment assignments carried out by the doctoral students at various universities and schools of architecture in three different countries – in Belgium, Sweden and Norway. All of them examined the same set of doctoral theses, and it is this first stage we are briefly reporting on in this paper. The research project will now continue into the next stage, which will be to analyse the assessments written by the adjudication committees for the same doctoral theses at the universities where they were defended. While the first group of informants are novices in research practice, the second group are experts in the practice of assessing research at the doctoral level. The third stage of the project will be dedicated to comparing the different results of the assessments made by these different groups of assessors. In our studies we have adopted the approach that is called 'integrative research review' (Cooper 1984). This approach is a form of scientific inquiry similar to the primary research process.

This research project is to a large degree based on sensitive information (especially in the case of the experts' assessments, which can be studied only with the permission

of all parties involved). For this reason, throughout the entire project, the authors are following the ethical rules of conduct as formulated in several European guidelines, (for instance, the Code of Good Practice in Academic Research, European University Institute 2011).

Already at this stage, we can see that the importance of having an awareness of the knowledge landscape through which one as a professional researcher has to navigate cannot be over-emphasised. This awareness is crucial for "doctorateness". It is essential for being able to position oneself and to extend the knowledge in one's field. And what is equally essential is the increasingly important ability to communicate and to get into dialogue with peers, professionals and other knowledge producers, both in one's own discipline and in others. We presume that one result of this project will be a more operative definition of "doctorateness", which will be used both as a pedagogical tool in research education in the design fields and in dialogues between the research professionals and the practice professionals, who will increasingly come to be the same people.

Notes

1. The PhD students Joel Msami, Sarah Phoya and Daniel Mbisso studied the doctoral thesis "Intentions and Reality in Architectural Heritage Management" (2007) by Inger Lise Syversen in October 2011.
2. Architect Nils Björling and architect Stefan Lundin, both doctoral students at Chalmers Architecture, studied together a doctoral thesis by Otto von Busch: "FASHION-able: Hacktivism and Engaged Fashion Design" (2008), in October 2011.
3. The doctoral students Anthony Rowe and Jørn Knutsen at AHO, the Oslo School of Architecture and Design, studied the doctoral thesis by Johan Redström: "Designing Everyday Computational Things" (2001) in December 2011.
4. Nicole Martin & Lothar Diem, doctoral students at AHO, studied the doctoral thesis by Otto von Busch: "FASHION-able: Hacktivism and Engaged Fashion Design" (2008) in December 2011.

References

- von Busch, Otto (2008) *FASHION-able. Hacktivism and Engaged Fashion Design*. Gothenburg: Gothenburg University.
- Cooper, Harris M (1984) *The Integrative Research Review: A Systematic Approach*. Beverly Hills: Sage Publications.
- Denicolo, Pam & Chris Park (2010) *Doctorateness - an elusive concept?* Gloucester: The Quality Assurance Agency for Higher Education. <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/doctorateness.pdf>.
- Dunin-Woyseth, Halina & Fredrik Nilsson (2009) 'Visual Thinking as Bridge Building. Testing a Pedagogical Concept, Drawing Some New Insights', in *Reflections +9*, ed. Sarah Martens, Adam Jakimowicz, & Johan Verbeke. Brussels: Sint-Lucas Architectuur.
- Dunin-Woyseth, Halina & Fredrik Nilsson (2010) 'An Emerging Research Culture - Building Doctoral Scholarship in Architecture and Design at Sint-Lucas', in *Reflections +13*, ed. Adam Jakimowicz, Sarah Martens, & Johan Verbeke. Brussels: Sint-Lucas Architectuur.
- Dunin-Woyseth, Halina & Fredrik Nilsson (2011a) 'Research by Design: Progress in establishing

- field-specific research in architecture and design - an update on four national scenes', in *Reflections +15*, ed. Gudrun De Maeyer. Brussels: Sint-Lucas Architectuur.
- Dunin-Woyseth, Halina & Fredrik Nilsson (2011b) 'Building (Trans)Disciplinary Architectural Research - Introducing Mode 1 and Mode 2 to Design Practitioners', in *Transdisciplinary Knowledge Production in Architecture and Urbanism*, ed. Isabelle Doucet & Nel Janssens. Dordrecht: Springer.
- EHEA (2005) 'A Framework for Qualifications in the European Higher Education Area'. <http://www.ehea.info/Uploads/Documents/QF-EHEA-May2005.pdf>.
- European University Institute (2011) *Code of Good Practice in Academic Research*. Fiesole. <http://www.eui.eu/ServicesAndAdmin/DeanOfStudies/GoodPracticeinAcademicResearch.aspx>.
- Frayling, Christopher, Valery Stead, Bruce Archer, Nicholas Cook, et al. (1997) *Practice-based Doctorates in the Creative and Performing Arts and Design*. Lichfield: UK Council for Graduate Education.
- Philips, Maggi, Cheryl F Stock & Kim Vines (2009) 'Dancing doctorates down-under? Defining and assessing "doctorateness" when embodiment enters the thesis', in *Dance Dialogues: Conversations Across Cultures, Artforms and Practices. Refereed Proceedings of the World Dance Alliance Global Summit, Brisbane, Australia, 13 - 18 July 2008.*, ed. Cheryl Stock. Canberra: Australian Dance Council & Queensland University of Technology. <http://www.ausdance.org.au/resources/publications/dance-dialogues.html>.
- Phillips, Estelle M. & Derek S. Pugh (2005) *How to get a PhD*. Berkshire: Open University Press.
- Redström, Johan (2001) *Designing Everyday Computational Things*. Gothenburg: Gothenburg University.
- Stock, Cheryl F (2011) 'Approaches to acquiring "doctorateness" in the creative industries: an Australian perspective', in *Pre-Conference Proceedings*, ed. Lorraine Justice & Ken Friedman. Hong Kong: Hong Kong Polytechnic University. <http://www.sd.polyu.edu.hk/docedudesign2011/doc/papers/344.pdf>.
- Syversen, Inger Lise (2007) *Intentions and Reality in Architectural Heritage Management*. Göteborg: Chalmers University of Technology.

Notes from the reflecting workshop, Sint-Lucas, June 23rd – 25th, 2011

In this text we set out to describe the reflection workshop from our perspective. Additionally we are adding our own reflections to the process of reflecting and comments about the role of reflecting by educators such as Donald Schon, John Dewey and Maxine Greene.

This was the first time Michael Hohl assisted Prof. Ranulph Glanville in conducting this Research Training Session on Reflection at Sint-Lucas Architectuur. As Ranulph has been conducting workshops on 'reflection' for several years now this was a good opportunity for Michael to learn more about this distinct 'format' of a 'recursive' workshop in which we actually reflect on reflection. Michael's questions were: How does one 'do' reflecting (what is reflection in action)? What goes on when we do reflecting? And especially, how can we reflect on reflecting together as members of a group?

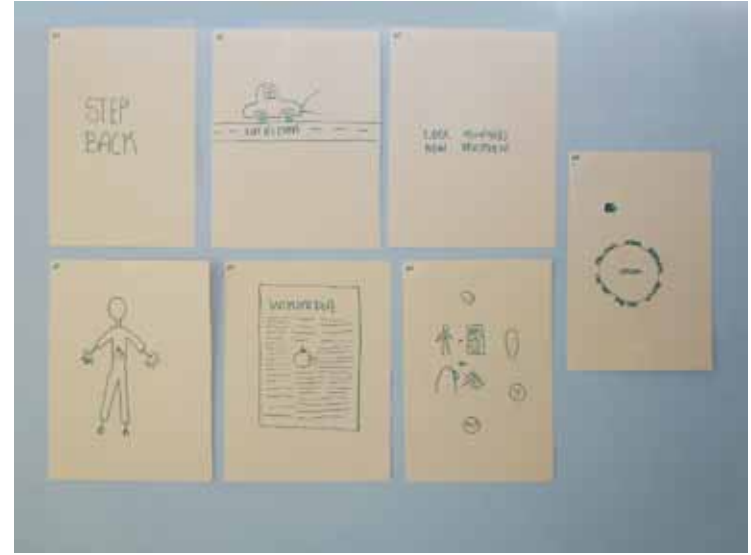
An important aspect of this approach is not to determine a method in advance: as the group discovered what it was interested in and what it was working on, further steps were mapped, but always provisionally, always allowing that a different path would be created as the journey progressed. What is reported here is only a method in retrospect and should not be seen as a recipe to determine behaviour on other occasions.¹

We opened the workshop by explaining that in order to understand the importance of reflecting we had to 'do' it, not merely speak about it. After this introduction, group members introduced their own individual take on the word's meaning. What does 'reflecting' mean to you? Where does reflection emerge in your own work? Different meanings and associations for reflecting emerged allowing us to become aware of other perspectives and develop an openness and familiarity with these new and different associations.

Having established such a common ground through conversations it was time to proceed to 'do' some more reflecting. We distributed stacks of A6 paper in individual colours. The task was to reflect how reflecting appears in or relates to our work and write those terms that we associate with reflecting, on these cards. As we reflect and write, very different terms appear and, written upon cards, the different associations become something tangible.

¹ This is inevitable because the process of reflecting changes understandings and hence perceptions. So each reflective act in some way changes the world in which it exists, for the reflective practitioner. Hence, there is a fundamental connection with subjects such as cybernetics that actively include the observer within the system.

Figures 1, 2, 3: Sets of cards. Cards being placed (Images by Ranulph Glanville)



So what is considered reflecting? In its nominal form, according to the Oxford American Dictionary of 2005, one meaning of reflection is,

serious thought or consideration [...]

Now let us turn this into a question: what is the role of 'serious thought or consideration' in our work and how might it help us? What effect does it have? Why is it important? When and where does it happen?

In the research literature on education 'reflection' has played a prominent role since at least 1910. Pioneering advocates of reflection were educators Maxine Green and John Dewey both active at New York's Columbia University's Teachers College. Dewey's book "How We Think", first published in 1910, influenced Donald Schon from early in his studies, and he wrote his doctoral dissertation about Dewey's theory of enquiry (Lyons, 2010, 14). In 1982 Schon would publish "The Reflective Practitioner" in which reflection would be the central activity of professionals "reflecting in action".

For Maxine Greene, reflective practice was a quality that would extend into a life project (Lyons, 2010) intrinsically linked to consciousness, wakefulness and freedom, and often expressed through artistic practice (Lyon, 2010, viii). For her, it also was the arts that would play a crucial role in reaching such a state of 'wide-awakefulness' leading to reflective encounters that enabled others to see, hear, and feel in unexpected ways. (Greene, p.60)

Her colleague John Dewey considered reflection to be an indispensable way of acquiring knowledge, which he described in his work “How we think”.

Dewey suggested five phases or aspects of reflective thinking:

1. suggestions, in which the mind leaps forward to a possible solution;
2. an intellectualisation of the difficulty or perplexity that has been felt (directly experienced) into a problem to be solved, a question for which the answer must be sought;
3. the use of one suggestion after another as a leading idea, or hypothesis, to initiate and guide observation and other operation in the collection of factual material;
4. the mental elaboration of the idea or supposition as an idea or supposition (reasoning, in the sense in which reasoning is a part, not the whole of inference); and
5. testing the hypothesis by overt or imaginative action (Dewey 1933, p.200).”

Dewey did not consider these functions or phases to follow one another in a set order, rather they only outlined the indispensable traits of reflective thinking. They could also appear nested within each other, forming a recursive system of enquiry.

Once the participants had noted their associations on their cards, these were stacked and placed, one-by-one, on the table. This was a collaborative process and each member of the group explained why a term or concept was important to them, and where it should be located in relation to other association cards. We discussed and reflected. We became aware of the different associations, dimensions and connotations that ‘reflecting’ had for other members of the group and gained a wider understanding. By comparing own, necessarily confined and mono-dimensional ideas to those of other individuals new associations emerged and individual conceptual frames opened up.

Slowly the cards were formed into clusters as they were placed—one after another—in each others’ neighbourhoods. Which terms belonged together? What if a term could be located in more than one cluster? In this phase the confined individual associations loosened up as individual concepts become part of something larger: clusters of related concepts. This became a process of negotiation and thinking aloud. How could associations relate? Why did they relate? Did we understand the same when we use what appears to be the same word? Some terms were more clear than others, while ‘orphaned’ cards lie on their own forming a ‘miscellaneous’ cluster later.

From the individual reflective effort of developing concrete terms, the second phase was about collaboration. Here, members became deeply immersed together in the process of ‘sharing knowledge, reflections, ideas and opinions in multi-directional communication’ as, for instance, described in Callaos’ text on conversational conferences (Callaos, 2009). This process of sharing also led to an extension and refining of each individual’s understandings.

Following figures 4, 5, 6: forming and naming clusters (Images by Ranulph Glanville)





Once all cards had been placed on the table and the results discussed we moved on to another phase: What connected the terms in those clusters? What do the concepts have in common? The group was invited to invent overarching terms or labels for each cluster. Another stage of reflective group creativity emerged, nurturing and being nurtured by the individuals in the group in positive loops (Callaos, 2009). Members explored similarities between their own concepts and those of others. In the first exercise mutual agreement had been reached by placing terms together and forming clusters of perceived relatedness. Now the task was to invent or infer connecting concepts that would apply to all terms within a cluster, becoming the shared concepts of a collaborative experience of reflection in action (Schon). When someone reflected in action, he became a researcher in the context of practice (Schon, 68). It is this critical reflection that shifts the process so it becomes a deep learning experience (what Schon calls: becoming research).

By now, all group members had a deeper understanding of what reflection meant for them, and also what it meant for others. Individually they had investigated their own associations with the activity and then shared it with the other members of the group. Finally, emerging from this process, they had negotiated shared concepts they could all agree upon. What does this say about the state of mind of collaborating group members?

Dewey identified four 'attitudes' which were necessary to cultivate for successful reflective enquiry: "*Open-mindedness*, defined as freedom from prejudice and [other

factors] that close the mind and make it unwilling to consider new problems and entertain new ideas. It includes an active, emphatic desire to listen to more sides than one; to give heed to facts; to give full attention to alternative possibilities. *Whole-heartedness* - defined as when someone takes up a project with a whole heart, and individual interest; and *Responsibility* - defined as considering consequences of what one has learned. The final attitude being *directedness* - faith in human action and the belief that something is worth doing. For Dewey (so Lyons) these were the means to acquire a reflective attitude of mind and constitute the methods of engaging in enquiry. (Lyons, 2010, 47)

The next step of our workshop on reflection moved beyond the merely reflective and collaborative, to physical experience. Now the task was to arrange the individual cards within a grid: not a flat grid placed upon a wall, but a spatial 'cube' or mesh, which we could enter and walk inside: a three-dimensional concept structure. Here, reflection, planning and skill were required to decide how to undertake this task. The members of the group chose a section of the large space where strings could be attached to the ceiling. We chose materials from a box of string, scissors, tape and adhesive tape and such-like. Together, members of the group roughly planned the required actions and, using a ladder, quickly started to tie string to hooks and pipes on the ceiling, creating a tense rectangular grid of string. From the connecting nodes of this grid strings were stretched to the floor, where they were fastened with adhesive tape, and stretched up

Following figures 7, 8, 9 (Images by Ranulph Glanville)





again to another point on the ceiling, creating a spatial mesh with three Cartesian coordinates along the “x, y, and z” axes. Participants placed cards within this spatial mesh and then marked out paths by tying coloured strings between the cards that were “theirs”, shaped by the zig-zag lines of string that stretched from the ceiling to the floor and up again.

Here we experienced reflection, skill and negotiation in action. Beside reflective thinking and understanding the reflections of others, the making of one’s narrative also became a learning experience: as cards are located among other cards (in neighbourhoods individually conceived by each participant), becoming aware of these neighbourhoods and connections resulted in a further personal learning experience. A personal narrative on the reflective process (which may include other participant’s terms (cards) with shared ownership) allows other perspectives to be learned, accepted and internalised. Reflection became an individual, extended, but also shared experience.

These ways of dealing with the new and uncertain connect to Donald Schon’s enquiry into how professionals think in action. Schon regarded academia’s view of knowledge as limited since it did not capture “practical competence and professional artistry”. He was interested in what architects, psychotherapists, engineers, planners or managers were actually doing in their practice. His assumption was that they knew more than they could say. While universities were committed by a *particular epistemology* to a view of knowledge that ‘fostered selective inattention’ (Schon, 1983, vii)—his concern was to understand how professionals learned through and knew in their practice.

Schon believed this kind of (professional) knowing occurred especially in situations of uncertainty, instability, uniqueness and value conflict. Analytic techniques could only reach so far. Problems were interconnected and environments turbulent and active, and therefore synthetic skills were necessary to design a desirable future, and ways of bringing it about. Schon writes: “If it is true that professional practice has at least as much to do with finding the problem as with solving the problem found, it is also true that problem setting is a recognized professional activity.” (Schon, 18) Professionals not only reflect on past actions in order to prepare for the future, but also reflected in action. Reflection in action was central to the art in which practitioners coped with troublesome “divergent” situations of practice, and constructed a new way of setting the problem by imposing a “frame-experiment” upon the situation. (Schon, 62, 63)

For the group attending the workshop this required reflection in action and framing the problem. They were immersed in the shared activity of building the structure made of string that in all its ad-hoc construction required both constant reflection in action and verification that the construction was progressing in the desired direction. Once the structure had been created, the cards were fastened to the strings with clothes pegs, keeping to the order of ‘good neighbourhood’. Here team members experienced their own concept-cards surrounded by those of others.

The final task had each member reflect on the different stages of their own reflective process by selecting the particular cards and thus creating a narrative of the individual

stages of their own experience of reflecting. They examined the cards, took notes, and by stretching an individual coloured string from chosen card to chosen card they connected concepts relevant to their own reflective experience. During this process very individual 'trails' of coloured string emerged within the mesh, demonstrating how individual the representation of the reflective process can be. This part of the reflective process consisted of theorising and analysing, and concluded with short presentations of individual tours through the reflective process.

In the workshop we did not teach 'reflection'—instead we reflected, we did reflecting. One could say we reflected on reflection in the process and experiencing the different stages. When we create or solve a problem we reflect many times without necessarily being conscious of that process, and we always reflect, recursively, in the light of earlier reflections (this is the link to cybernetic understandings and descriptions of our places, acting in the world). The workshop created a deep experience of both conscious and unconscious reflection, of reflective reflection, of reflection in action. Becoming conscious of this is an important experience for creative practitioners involved in problem solving as they become fully aware of the obvious and not so obvious phases of their creative process. It is this awareness or consciousness of the reflective process that allows for more critical processes to emerge, to grow and integrate these into own future practice.

Michael Hohl and Ranulph Glanville

References

- Callaos, Nagib (2009), Integrating the conversational format into conventional conferences, draft essay, available at <http://www.asc-cybernetics.org/2010/wp-content/uploads/2010/07/Integrating-the-conversational-format-.pdf> accessed 11.20.2011
- Dewey, John (1986), Volume 8 1933, *The Later Works, 1925-1953*, Southern Illinois University
- Fook, J. and Gardner, F. (2007), *Practising critical reflection: a resource handbook*. Maidenhead: Open University Press.
- Greene, Maxine (1995), *Releasing the Imagination: Essay; on Education, the Arts, and Social Change* San Francisco: Jossey-Bass Publishers.
- Lyons, Nona (2010), *Handbook of Reflection and Reflective Enquiry: Mapping a Way of Knowing for Professional Reflective Enquiry*, Springer New York, Dordrecht, Heidelberg, London.
- Schon, Donald A. (1983), *The Reflective Practitioner How Professionals Think in Action*, Basic Books.