Remarks on Transdisciplinarity as Basis for Conducting Research by Design Teamwork in Real World Context through Two Case Studies of Algorithm Aided Lighting Design

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The definition of Research by Design (RD) as a research methodology is not yet well established. RD takes its position not only as a research method next to the 'traditional' sciences but also in relation to the creative design practice, where transdisciplinarity is in essential role. Rather than defining architecture being transdisciplinary in itself, we see beneficial to conduct research together with various disciplines concerning the complexity of the life-world. Also in this interdisciplinary research group we are willing to hold on the designerly way of knowledge production. Of our practical experience working in an interdisciplinary research group shared values, research project management together with participation with evaluative aims were the most challenging aspects. At its best, attempt for genuine transdisciplinarity was beneficial and rewarding, though sometimes challenging. We would like to target the discussion how we architects, as researchers identify in an interdisciplinary research group conducting transdisciplinary research.

Keywords: Research by Design methodologies, Transdisciplinary research, Interdisciplinary research group, Real world context, Virtual and physical environment

INTRODUCTION
As transdisciplinarity from the viewpoint of a research group is not adequately discussed, further discussion of Research by Design (RD) as a research methodology is needed. Importantly, the discussion on RD methodology should be extended beyond the level of graduate student projects and doctoral studies (e.g.Dunin-Woyseth 2005; Verbeke 2013) to truly accommodate all phases of academic research. A broadly diversified and widely accepted definition of RD as EAAE Charter [1], however, exists for administrative purposes to foster research in the field of ar-
chitecture. In the more accurate definitions, RD is positioned not only as a research method next to Mode 1 form knowledge production referring to ‘traditional’ sciences, but also in relation to creative design practice and research, positioning itself to Mode 2 (Gibbons et al. 1994). Definition of RD which emphasizes insider perspectives, a generative approach and furthermore, operates through rich and multiple layers in real life contexts (e.g., Dunin-Wojseyth 2004, Sevaldson 2010). This specification includes transdisciplinarity, context, mode of applied research, and multiple actors. RD forms a good frame to reflect on the research processes of two of our case studies, Urban Echoes, which was situated in a park context (Figure 1) and SparkSpace, which took place in a retail context (Figure 2).

The aim of this paper is to reflect on the definition of Research by Design (RD) in the context of interdisciplinary research group (Figure 3) aiming to conduct transdisciplinary research. Interdisciplinary knowledge is clearly located within scholarly environments, however, transdisciplinary knowledge production entails a fusion of academic and non-academic knowledge. First, we regard the notion of transdisciplinarity more closely, since it compiles quite many aspects emphasized in the definition of RD (e.g., Dunin-Wojseyth 2004, Sevaldson 2010). We will start with introducing our research group briefly, but discuss the roles and modes of cooperation along this paper more thoroughly.

In general, our research group was much bigger than the researchers hired by the project, its composition was complex and roles of the actors were manifold. The composition of the research group was not static; rather, the assemblage was altered depending on the case study, on the phase and on the need for specific expertise. The main research institutions involved were the Oulu School of Architecture, University of Oulu (OSA) in both projects, namely Urban Echoes (UE) and SparkSpace (SpS) and VTT Technical Research Centre of Finland (VTT) in SpS. And in UE we co-operated also in many ways with the Faculty of Information Technology and Electrical Engineering, University of Oulu (ITEE). The core researchers in both case studies were architect and lighting designer Henrika Pihlajaniemi, with research interest towards design and experience of adaptive lighting, and architect and digital designer Toni Österlund also in the end of his doctoral studies. In Urban Echoes Pihlajaniemi was researcher hired (part time) by research project AUL, co-operating with SpS, where she was also a business partner through her architect’s office M3 Architects and in a teacher’s role supervising Piia Markkanen’s diploma thesis dealing with adaptive retail lighting. Österlund was full-time hired by AUL and co-operating with SpS. The common nominator between Österlund and Pihlajaniemi was the development process of a tool prototype for designing and simulating adaptive urban lighting (VirtuAUL) that was also customized to be used in SpS demo. Architect Anna Luusua worked part-time in multidisciplinary UbiMetrics research project lead by ITEE (prof. Timo Ojala) in co-operation with other disciplines, architecture being one of them. In the end of the evaluation phase of both demos she was hired for both projects. Luusua was actively co-operating with cultural anthropologists and computer scientists, since she was working with them in the same space called Urban Life Lab. In addition of working with diploma thesis in SpS project Piia Markkanen, now also an architect, doctoral student of architecture, was hired to join the designing phase of the Spark Space demo. In addition of these core members of the research team there are many master’s students both from OSA and ITEE, together with other stakeholders such as companies, customers and citizens that have been attended with one way or another to these two pilots.

**TRANSDISCIPLINARITY AS A NORMAL BUSINESS AS USUAL IN RESEARCH BY DESIGN**

Transdisciplinary knowledge production was introduced in the epistemologically critical framework of "The New Production of Knowledge" (Gibbons et al. 1994). It has been adopted as the basis of the Research by Design approach, particularly by Halina Dunin-Wojseyth (2004) and her colleagues (e.g. Nils-
Urban Echoes Demo
The first pilot reflected in this paper is Urban Echoes (UE) demo carried out in the Academy of Finland funded research project Adaptive Urban Lighting. Algorithm aided lighting design (AUL) (2011-2013) led by Dr. Aulikki Hernejoa. Urban Echoes was a temporary park lighting installation in the city centre exploring adaptive and communicative lighting. The demo studied different scenarios of adaptive lighting from the perspective of a park visitor’s experience. The scenarios were designed using a graphical design tool developed within our research project, called VirtuAUL. The design process of demo scenarios acted as a method for developing the tool’s functionalities. The objective of the UE demo was also to develop and test a communicative lighting system. The installation visualized urban information such as current city events and their activity level in the form of colourful lighting, and with mobile devices people could make inquiries about them. The UE mobile service was accessible from the park through scanning QR codes. (Pihlajaniemi et al 2014b.)

SparkSpace Demo
The second research setting reflected in this paper is a pilot from a TEKES funded research project SparkSpace. Adaptive lighting control with multi-channel ambient sensing, together with VTT, Oulu School of Architecture share was led by Dr. Aulikki Hernejoa. The pilot was located in retail context and constructed in a department store to a section in ladies’ clothes department. In the pilot, lighting was controlled in an implicit way according to the tracked movements of users within or near the pilot area, following three lighting modes in dynamic and complex patterns design using the VirtuAUL. The demo was evaluated using a probe-inspired method, which revealed a large spectrum of different aspects of users’ experiences. (Pihlajaniemi et al 2014a.)

son 2007, Verbeke 2013, Sevaldson 2010). Through this publication (Gibbons et al. 1994) the transdisciplinary approach became widely spread in relation to the description of two parallel and competitive Modes 1 & 2 forms of knowledge production. Mode 1 refers to traditional scientific knowledge, such as Natural Sciences belonging to exact sciences, generated within a disciplinary, primary cognitive context. In-
stead Mode 2 form of knowledge is fairly opposite to Mode 1 being holistic of its nature:

"The Mode 2 is carried out in a context of application and defined by its: transdisciplinarity; heterogeneity; organisational hierarchy and transience; social accountability and reflexivity; it includes a wider, more temporary and heterogeneous set of practitioners, collaborating on problem defined in a specific and localised context." (Gibbons et al. 1994, 3.)

However, the relationship between these two types of knowledge production has not been considered fundamentally contradictory. Mode 1 forms do not have to be abandoned, but complemented by a new Mode 2 form of knowledge production that focuses on combining different types of knowledge (Nowotny et al. 2006 (2001), Nicolescu 2002, 45; Doucet & Janssens 2011).

Before entering into further discussion on transdisciplinarity in the context of architecture, we should reflect on transdisciplinary in general. The definition of transdisciplinarity varies depending on the features being emphasized by refining, broadening or changing the focus of the original definition by Erich Jantsch (1972). His formulation of transdisciplinarity envisioned a systems theory approach for the purpose oriented integration of knowledge to grasp the complexity of problems in the life-world.

The widely cited Julia Thompson Klein et al. (2001) define transdisciplinarity in general by comparing transdisciplinarity to a form of learning and problem-solving process involving cooperation among different parts of society and academia in order to meet the complex challenges of society. Klein et al. (2001) stress that this process is practice-oriented in its nature, and is not confined to a close circle of scientific experts, professional journals or academic departments where knowledge is produced: "Through mutual learning, the knowledge of all participants is enhanced, including local knowledge, scientific knowledge and the knowledge of concerned industries, business, and non-governmental organisations." (Klein et al. 2001.) It is noteworthy that Klein et al. (2001) do not discuss only about the society at large, but also specifically mention NGO's, industries and business as sites of knowledge. Also their way of highlighting the "mutual learning" aspect is interesting considering the architect’s professional role as the head designer in a design project directing the whole project where the priority is not in the learning process.

In turn, Gibbons et al. (1994) emphasise four features in transdisciplinarity where the processual nature of the approach is distinctive: First, it is an evolving but distinct framework of problem solving generated and sustained in the context of application. By this they emphasize that knowledge is not first produced and then applied, but it is a simultaneous and continuous process. Second, according to Gibbons (1994) concerning empirical and theoretical aspects, transdisciplinary knowledge develops its own distinct theoretical structures, research methods and modes of practice, though they may not be located on the prevailing disciplinary map, but they may be generated by the context. Third, instead of keeping the knowledge in academic circles as in Mode 1, the results are communicated to the participants, especially the original practitioners who have participated and the knowledge is accessible for them also afterwards. Gibbons et al. (1994) is the same way against holding on only the academic publishing tradition as Klein et al. (2001); instead, the “diffusion” of knowledge should occur among participants. And fourth, Gibbons et al. (1994) emphasize the dynamic nature of transdisciplinarity; it is problem solving capability on the move.

The Handbook of Transdisciplinarity Hirsch Hardoun et al. (2008) give compiled general definition of transdisciplinarity, in which they have been reflecting among others the definitions of Gibbons et al. (1994) and Klein et al. (2001), but also bring forward the experience gained from the practical projects carried out in the "life-world". The definition of transdisciplinarity by Hirsch Hardoun et al. (2008) as follows: *Transdisciplinary research is research that includes cooperation within the scientific community and a debate between research and the society at*
large. Transdisciplinary research therefore transgresses boundaries between scientific disciplines and between science and other societal fields and includes deliberation about facts, practices and values (Hirsch Hardoun et al. 2008, 435). Despite differences of emphasis, Hirsch Hardoun et al. (2008, 437-439) summarises in their book *Handbook of Transdisciplinarity* four core concerns which appear in all definitions of transdisciplinarity or related terms: First, the *focus on life-world problems*; second, the *transcending and integrating of disciplinary paradigms*; third, *participatory research*; and fourth, the *search for unity of knowledge beyond disciplines*.

In order to reflect on transdisciplinarity in architecture, we have to first take a stand or at least discuss architecture as a *discipline*. Isabelle Doucet and Nel Janssens (eds.) (2011) *Transdisciplinary knowledge production in architecture and urbanism: towards hybrid modes of inquiry* point out in a recapitulating manner that architecture has a twofold role as a discipline and a profession. Architecture's complex arrangement with the world, acting as it does in both roles, requires us to deal with a broad range of disciplinary and practical forms of knowledge. (Doucet & Janssens 2011, 2). Architecture has been called as "weak" discipline because it integrates and yet depends upon many areas of knowledge (Troiani et al. 2013). Jane Rendell (2004, 144) also holds that architecture encompasses several disciplines, but she has also emphasised architectural design as a particular type of practice-led research; a disciplinary specific that cannot be found in other types of practice or design (Rendell 2004, 144), or in Nigel Cross' terms "designerly ways of knowing" (Cross 2001). Alain Findeli (1999, 3) discusses designerly ways of knowing, which he calls research *through* design. Overall, concerning the production of design knowledge, Doucet & Janssens (2011,3) propose that all these three approaches (Rendell 2004, 144; Cross 2001; Findeli 1999, 3) should be considered under the term Research by Design, even though they do not make explicit use of the term .

It is easy to agree with the aforementioned writers that interdisciplinary knowledge is located in scholarly environments, and also that transdisciplinary knowledge production entails a fusion of academic and non-academic knowledge. However, Doucet & Janssens (2011, 4) also conclude that transdisciplinarity in architecture is the fusion of theory and practice, discipline and profession, and this we find rather surprising. When discussing about the obviousness with which hybrid modes of enquiry are part of the knowledge landscape, which is easy to agree with, Doucet & Janssens (2011, 4) state that *because (architectural, urban) design engages, both as a discipline and as a profession, with broader societal concerns (e.g. situated knowledge, participatory design, everyday practices) [...].* Rather than disagreeing with the intended content we are concerned how easily these "societal concerns", such as situated knowledge, participatory design, and everyday practices are considered as natural contents of architecture, either as a discipline or profession. This suggests that architects would have self-evident understanding of "life-world problems", or "the society at large" (e.g. Hirsh Hardon et al. 2008), or that they would have existing procedures or effective practices to study broadly the "context of application" of Mode 2 knowledge production (Gibbons et al. 1994), or indeed to handle the "mutual learning" process unaided. Unquestionably, we see the very valuable attempt to legitimize the "designerly ways of knowing" in architectural research, and we are also eager to implement it in our research projects. Nevertheless, at the same time our research group is concerned about losing the true potential for interaction with the society at large if RD is reduced to be considered automatically transdisciplinary. For example we argue that the various "users" of the end-product are relatively unknown for architects, urban designers and planners; this long-held understanding has been strengthened through co-operation with cultural anthropologists. Though these professions design for people, the genuine participatory procedures are still fairly new in these fields, and often treated as a formal obligatory necessity as in urban design and planning.
(Räihä, 2009; Mansikka, 2011) or they exist only as tacit knowledge in architectural design, since participatory procedures are not required at all in the area of building design.

It is important to remark that in the publication Transdisciplinary Knowledge Production in Architecture and Urbanism (Doucet & Janssens 2011) most of the work refers to doctoral level studies and dissertations. This is actually the case also in other publications or articles concerning research in architecture, and the RD approach in particular, which often include graduate student projects as examples (e.g. Dunin-Woyseth 2004, Verbeke 2013). Of course we acknowledge the great value of having RD studies in schools’ curricula and having great impact also to studies conducted in the post-doctoral phase. Hence, it is clear that when the context of discussion from graduate and doctoral studies are transferred to research projects, new aspects will obviously occur. Since we wish to discuss RD also in the context of transdisciplinary research group conducting research projects together we will next reflect on the work we conducted in two of our demos, namely Urban Echoes and SparkSpace.

CHALLENGES OF TRANSDISCIPLINARY RESEARCH PROCESSES IN PRACTICE IN THE LIGHT OF TWO CASE STUDIES

The six stumbling blocks in transdisciplinary research practice pointed out by Hirsh Hardon et al. (2008) forms a good frame to discuss about the challenges we have faced in practice working as a research group: Participation and mutual learning, Integration and collaboration, Values and uncertainties, Management and leadership, Education and career building, and Evaluation and quality control.

We identify two profound challenges in working within an interdisciplinary research group with a transdisciplinary approach: First, shared values or rather, the genuine attempt to share them. The crucial differences in the ontological and epistemic foundations of the participating disciplines may cause a wide-ranging ripple effect to the whole research project. The question of shared values is also present when looking at the discipline of architecture as transdisciplinary of its nature. When following the former described division by Doucet & Janssens (2011, 4) the two-fold nature of architecture as a discipline, referring to the theoretical contents with interdisciplinary features, and as a profession, referring to practical contents. The second major challenge is the skill of managing a transdisciplinary research project. Transdisciplinary research projects exist usually for only a limited time and they do not follow any single administrative division.

In addition, we will reflect on the experiential and emic (Luusua et al 2015) evaluative research that was an intended part of our RD approach, and the participatory processes which this subsequently introduced into the research project. Of course we recognize also all the other stumbling blocks pointed out by Hirsh Hardon et al. (2008), but with these three: shared values and research project management together with participation with evaluative aims have been most challenging.

About research project management and leadership

The project management by Hirsch Hardoun et al. (2008) is logical for a successful transdisciplinary research project where various disciplines are involved. However, the strategy is fairly rigid for research projects in which the RD approach with its generative and heuristic means of working is applied. It is noteworthy that research projects usually last from two to four years. Rather than using project management contents and structuring, which was suggested by Hirsch Hardoun et al. (2008), we perceive a research project managing of temporary organizations more suitable, consisting of the four main features: time, task, team and transition (Ernø-Kjølhede 2000; Lundin et al. 1994). The idea of considering the implementation of the research project to be an expectations-action-learning loop, a cyclical design process could be repeated at least twice (Packendorff 1995). In our case, we accomplished this with UE as the first
and SpS as the second iteration. Erik Ernø-Kjølhede (2000) argues that project management tools are often misleading since they are used as a blueprint for a research project rather than as flexible tools. The proposal of Hirsch Hardoun et al. (2008) structure the process into different parts in containing phases of disciplinary contents side by side with intense collaboration. Again, theoretically it is easy to agree with Hirsch Hardoun et al. (2008) about the proposed way of project management, especially when pre-structuring the working periods. However, in cases where a real life demo through applying the RD approach is implemented, long-term planning is challenging. For example, negotiations about the place or site or other arrangements for the demos are often complex and therefore time-consuming, but finally the suitable opportunity may occur suddenly, as with the SpS demo. These kinds of situations have force majeure like nature, where the time table, assemblage and operation diagram is customized by the needs of the real life demo which is tailored for a specific place or site. The seamless, inventive and solution-oriented co-operation of the entire transdisciplinary research group is fundamental for a successful implementation.

As an alternative for using overly rigid ways used project management tools Ernø-Kjølhede (2000) reminds us of the importance of constant communication. He also prioritizes the importance of team-building, but above all he emphasizes the importance of designing the project in such a way that it is in fact capable of managing itself. The reason for coming to this conclusion is somewhat surprising due to the knowledge imbalance i.e. parts of the project are known to all participants but all details of the project are known to no one single person. Unfortunately, we did not find Ernø-Kjølhede's (2000) thoughts until the UE and SpS projects had ended. Rather, we proceeded intuitively during the projects using the project management and problem solving skills of practicing architects. The lighting designer Henrika Pihlajaniemi and digital designer Toni Österlund, both architects, had the leading role in the self-managing process. They had the skills, knowledge and vision concerning the outcome of the demo. If there was a thing they did not know how to do, they either decided to learn it or persuaded others, researchers (e.g. cultural anthropologists) or other stakeholders (e.g. companies) to co-operate with them, with all the problem solving capacity of practicing architects. More generally, as such working in an interdisciplinary research project is a skill of its own that has to be learned, usually in practice. But it is even more challenging when a real life demo is involved.

About participation and mutual learning process
The participation processes of the UE and SpS demos the approach was only partially transdisciplinary, since neither of the demos were started, in absence of preconceived ideas or predetermined goals, from tabula rasa. In the beginning, the emphasis was on the generative and technical aspects. However, we wanted to consider the viewpoints of various user groups. In the UE demo, we first drafted user profiles and wrote scenarios in various anticipated users' first-person perspective in order to empathize with the various citizens using the park, and to imagine their everyday life situations. In the SpS demo, the scenarios were written from the perspective of different users of retail environments; clients, employees, technical staff members and designers. Those of these narrative scenarios that were developed into visual ones were then further scrutinized. Even though our scenarios could not replace the perceptions and expectations of real-life users of the retail environment, the scenarios from different users' perspectives supported the knowledge we had gained from prior literature reviews about experience of light in urban and retail environments. However, our approach follows the idea of transdisciplinarity in RD, through the emphasized "context of application". Bringing the cultural anthropologist into the Urban Echoes project already in the starting phase would have made the transdisciplinarity of
the project more apparent and thorough. However, their disciplinary expertise was used later in participation process with the park visitors during walking interviews. The participatory method could be developed further by arranging co-design workshops with participants, architects and cultural anthropologists and through analyzing these events we would have achieved grounds to continue to discussions of formulating the shared questions.

Participation in the UE project, then, took place within of the evaluation phase, which was designed partly interlocking with the design of the demo. For example, the design process of the lighting scenarios, which were used in walking interviews, was acting as development context of the VirtuAUL design tool functionalities (Pihlajaniemi, Österlund & Herneja 2014). Different team members had partly different research interests concerning the interviews and walking in-situ interviews that were carried out at this phase. The architect who served as the responsible person for the design of the evaluation did not really consider her study as only an evaluation that served a larger project; it was a study of a real-life phenomenon in its own right, with separate research questions and separate knowledge interests. Indeed, all those involved brought their own research interests into the project, and while this took some navigating and negotiating, it was a study for the subsequent participation process, which was designed in a truly transdisciplinary manner, including two groups of citizen participants. Over the course of the UE participation process, on-the-go learning was abundant. Thus it became obvious that it would be beneficial to design subsequent participatory evaluation studies and demos simultaneously, so that data collection and future participants' anticipated needs would be taken into account in the design of the demo. Thus, the architect-evaluator continued working with the team in a more lengthy collaboration in the SpS demo. Consequently, the participatory evaluation of the demo was designed at the outset, in collaboration with the demo’s designers and various stakeholders.

**About genuine attempt for shared values**

As differing and as conflicting the values of participating researchers and stakeholders often are, Hirsch Hardoun et al. (2008) underscore the most decisive a kind of self-defined transdisciplinary problem definition. Ontological and epistemic foundations of the participating disciplines are strongly value-loaded. When Hirsh Hardoun et al. (2008) discusses about aiming for a set of shared values, he stresses the importance of building a mutual learning attitude by creating broad ownership of the problems and by building value-consciousness through reflexive processes among researchers. In the process of genuinely attempting to find shared values, we borrow Ernø-Kjølhede's (2000) idea of research project management: "parts of the project are known to all participants but all details of the project are known to no one single person" and apply it to the field specific differences in ontological and epistemic foundations, since these questions may be too big issues for one research project to gain mutual understanding. We have noticed that researchers or stakeholders who understand each other to even some extent, or share even the slightest common interest should stretch the limits with working closely together in the same sub-groups of a research project. Usually some of the members of sub groups intuitively assume a bridging role, and mingle between the groups building coherence to the group as a whole. For example, in our project, architect Anna Luusua was the bridging person between cultural anthropologists and computer scientists. In addition, architect and lighting designer Henrika Pihlajaniemi was the bridging person between architects and the researchers of digital design, information and lighting technology. Step by step, they learned a little bit from each other each time through discussions. In the process for finding shared values, the "hands-on" co-operation in designing and realizing of both the pilots, had an essential role. A collective, practical problem-solving process helped us in creating shared values and concepts for creating new knowledge.

Even if the two ways of knowledge production
Mode 1 and Mode 2 are not considered fundamentally contradictory as discussed earlier (Nicolescu, 2002, 45; Doucet & Janssens 2011), not all the barriers have been knocked down. However, digital design is an area of research in architecture of its own, but together with other more qualitative research interests in architecture or broader, in co-operation with other disciplines than architecture, enables great grounds for combining qualitative and quantitative contents. The mathematical tools of digital design belong to exact sciences, but harnessed to the use of designers and architects it offers the means for producing experiential qualities. We definitely agree that there is no reason for confrontations of Mode 1 and Mode 2 production of knowledge, but on the other hand there is no shortcuts from mathematics to experiential qualities either. Our solution was working within an interdisciplinary group where in addition of tight co-operation, also space for disciplinary like expertise was given. For example reflecting Toni Österlund, who was concentrating on developing the graphical design tool VirtuAUL for the design, control and real-world implementation of adaptive lighting, through the four criteria of transdisciplinary research (Hirsch Hardoun et al. 2008, 29). Österlund’s focus was in the life-world practical problems even working with digital design tool mostly in virtual surroundings. He was actively co-operating with the lighting designer Pihlajaniemi who set the functional and qualitative aims from the viewpoint of lighting design. We could consider that together with Pihlajaniemi, Österlund was transcending and integrating disciplinary paradigm. And further, Pihlajaniemi and Österlund together did in all times search for unity of knowledge, though sometimes through long discussions, beyond at least research interests if not "disciplines" of digital and lighting design.

**DISCUSSION**

Transdisciplinarity appears as a certain kind of an attitude towards conducting research rather than a uniform definition, and interpretations and emphasises seem to differ by the context of discourse. Along the discussion of transdisciplinarity through Research by Design appear somewhat introverted and self-powered, seemingly turning its back to the other disciplines and society in large, since theory and practice, (inter)discipline and profession are already present in architecture. In the other hand such a core-strengthening attitude of defining transdisciplinarity within the sphere of architecture is clarifying the two-fold, if not the many-fold nature of architecture. However, when capitulating to conversation with researchers of other disciplines than architecture aiming for co-operation beyond multidisciplinarity we need to re-adjust architecture in relation to transdisciplinarity. We are willing to hold on the *designerly way of knowledge production* in Research by Design, but we do not want to retain everything within architecture, since we see the genuine transdisciplinary approach of its best beneficial and rewarding, though sometimes also challenging, even disruptive. Therefor we would like to target the discussion to how we architects, as *designerly knowledge producers*, as researcher identify ourselves, as members of a research group consisting of researchers from various disciplines and sharing the common attempting to study the complexity of the life-world. - In the beginning of the learning process of writing this article we were hesitating whether we are transdisciplinary research group or not? Or wondering how to position ourselves as a research group in relation to transdisciplinarity? Towards the end, when gaining a little more understanding of the essential features of transdisciplinarity, the importance of genuine intention of aiming for transdisciplinarity turned out to be the most crucial one.

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