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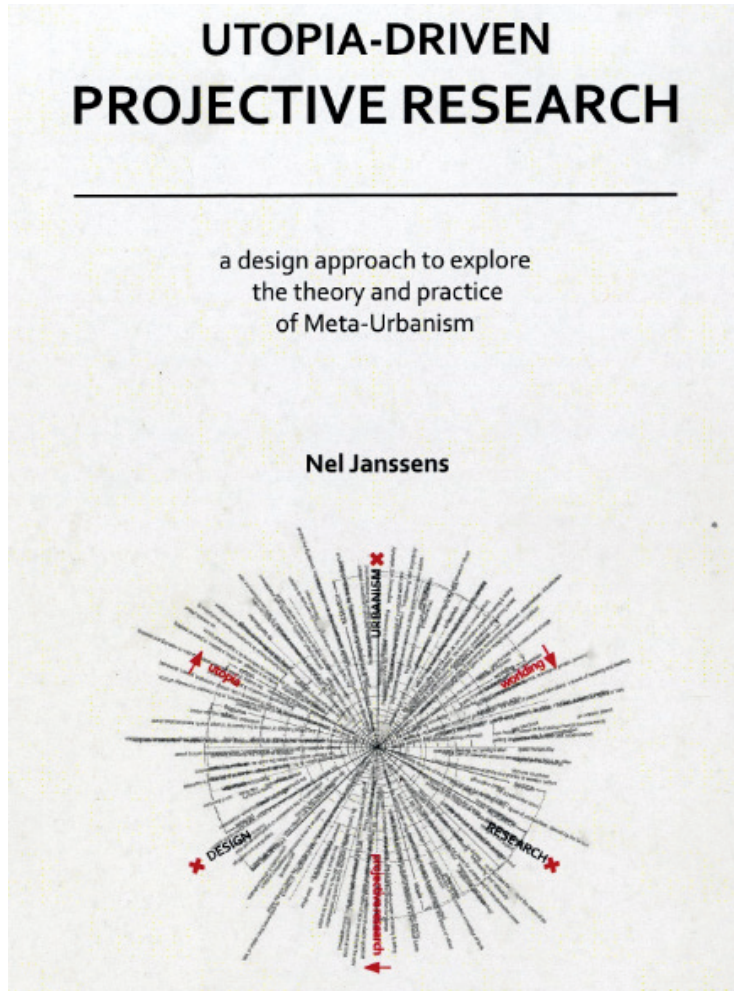
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Fig.1: Cover of doctoral thesis of Nel Janssens

Research as a driving force for change: on triadic practice in architecture

THE FIRST DOCTORAL ALUMNI AT SINT-LUCAS ANNO 2012

Our engagement in research education at Sint-Lucas School of Architecture began in 2006, and, to be honest, our first encounter with the research culture at the school was not an entirely easy one (see Dunin-Woyseth and Nilsson 2006). Since then, we have had the opportunity to follow the emergence of a very interesting environment and culture of research (Dunin-Woyseth and Nilsson 2011), which, crucially, also includes teaching and professional practice. Julia Williams Robinson has written that architecture is "an emerging discipline that involves professional practice, research, and teaching." She continues, "The character and effects of its products—disciplinary knowledge, the forms of disciplinary practices, architectural artifacts—are the responsibility of those within the field. Academics, researchers, and professional practitioners are thus jointly responsible to society and each other" (Robinson 2001, 62). While closely following the emergence of such a scholarly culture, we have also observed how these different practices have become integrated into each other, to become one and the same. Emerging ever more quickly and deeply, this culture has begun to make its mark at Sint-Lucas.

In 2012, seven teachers at the school of architecture were awarded the degree of Philosophiae Doctor (PhD). They are: Laurens Luyten, Nel Janssens, Arnaud Hendrickx, Thierry Lagrange, Jo Van Den Berghe, Harold Fallon, and Hilde Bouchez (Luyten 2012; Janssens 2012; Hendrickx 2012; Lagrange 2012; Van Den Berghe 2012; Fallon 2012; Bouchez 2012). Although they graduated from three different academic institutions—KU Leuven in Belgium, RMIT in Australia, and Chalmers University of Technology in Sweden—we witnessed their doctoral paths from the very beginning, having met with them during lectures, seminars, and mentoring sessions while we served as guest professors at the school. Over the years, we learned about their motives to launch doctoral studies, formulate research subjects, and choose appropriate methods. When they graduated, we asked five of the seven (those we had most contact with during their doctoral trajectory) for reflections on their triadic practice—being professionals, teachers, and researchers—a practice formed out of their doctoral studies. Four of them responded in writing, and one of them, Arnaud Hendrickx, met us for a conversation at the school in February 2013. The text below is a report of this bilateral exchange with the five doctoral alumni. They have all permitted us to share their reflections with others, for which we thank them.

We have concluded that with these five alumni, the teaching situation at the school has changed; indeed, several of their colleagues will be joining them soon, thereby increasing the number of doctoral alumni. We dare assume that their
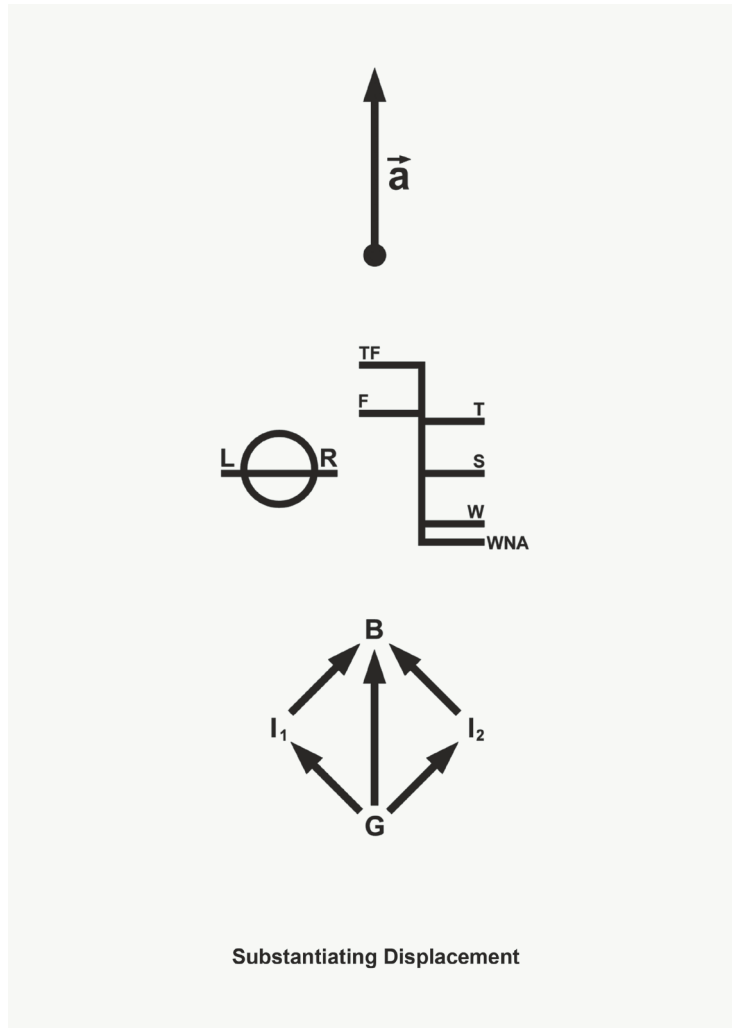
Substantiating Displacement

Fig.2: Cover of doctoral thesis of Arnaud Hendrickx

competence in triadic roles will promote new, adaptable, conscious, and creative architectural practice.

The aim of this article is to illuminate the premises for the research studies undertaken, the resulting doctoral studies, and the contribution that this research can give to teaching a new generation of architecture students at the school. Further on, the article's intention is to present a case of how research in architecture can be a driver of change towards a new architectural practice.

FROM DYADIC TO TRIADIC ARCHITECTURAL PRACTICE

PRACTICING AND TEACHING ARCHITECTURE

Architectural education has a long tradition of close exchange between teaching and professional practice. At most schools of architecture around the world, professional practitioners form an important part of the staff or are regularly involved in teaching. This is definitely a characteristic of the tradition at Sint-Lucas, where architectural practice is at the center of all efforts to develop research training and approaches.

Laurens Luyten recalls that before he engaged in research, he had always sought more general topics that would give meaning to both his broad engineering and educational practices. In this period before his doctoral studies, he pursued a kind of action research within both his practices, that of engineering and of education. He regarded this mode of working beneficial for both practices.

Nel Janssens worked as an architectural planner before engaging in her doctoral studies. Part of a renowned architectural office—that, for many years, was involved in conceptual urban practices and was known mostly for artistic urban studies through design—she later engaged in more traditional planning tasks. Nevertheless, she has been known mostly for pursuing urban studies through practice. These experiences from practice formed an important background for her teaching, and subsequently became material for research.

Arnaud Hendrickx practiced architecture, but because the bureaucratic regulations of the building industry tend to delay the progress from architectural ideas to built architecture, he wished to experience more direct results in his creative practice. Thus, he sought more immediate results in cooperation with artists. This new cross-field practice influenced his teaching and vice versa, and at some point, he wanted to reflect on the hybrid artist-architect practice and on his own practice-teaching work.

Thierry Lagrange, before engaging in research, shared an interest in both architecture and photography. This combination of different artistic practices and media was central for his teaching and work with students.
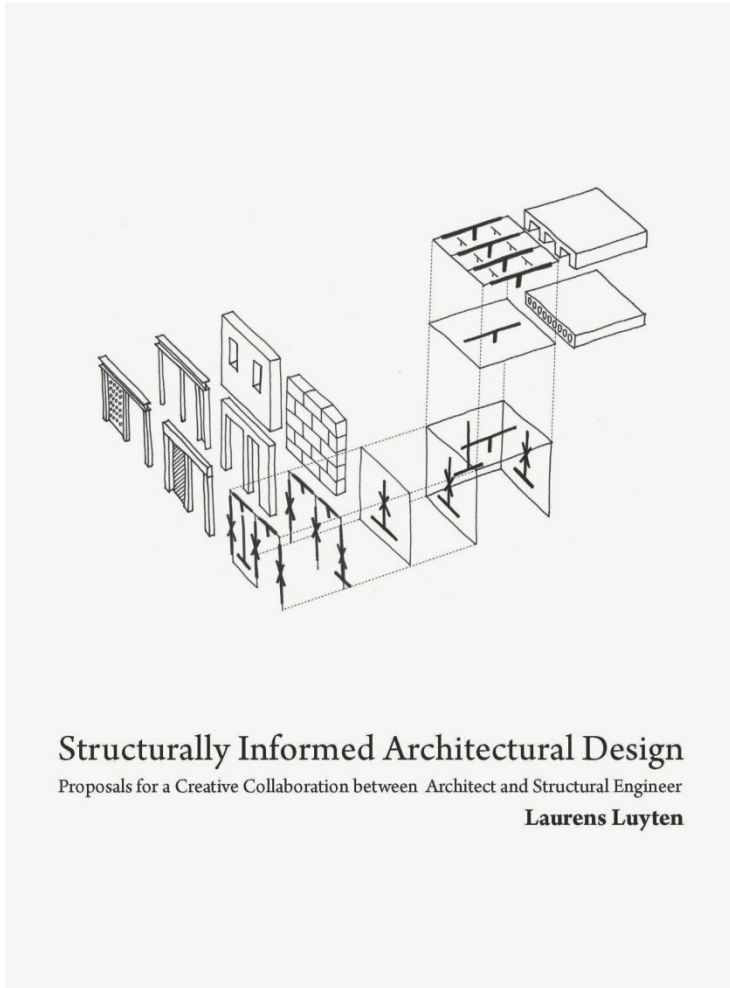
Fig.3: Cover of doctoral thesis of Laurens Luyten

Jo Van Den Berghe found the basis for his dual practice, as an architect and teacher of architecture, in emphasizing the poetics of architectural conception and creation. He worked to make his students more aware of the strengths that poetics gives architecture.

Extending the dyadic profile while training towards PhD

A third aspect compliments the dual practice of teaching and professional application: that of research, which the doctoral studies extended for the five alumni.

Laurens, in his research training, found new tools to pursue his long-standing interests. After developing research methods adequate to his doctoral project, he concentrated on research, leaving professional practice for later. Laurens argued for this strong research focus not only because he had limited time, but he also concluded that further pursuit of a traditional engineering practice would not have been insightful for him (he was involved in over 300 projects during the 18 years of his career and could be regarded as a well-experienced practitioner). More, because he felt that the strict rules of building codes laid serious responsibilities on his shoulders and did not leave much space for his own creativity, he found that research gave him the space to use his imagination for original ideas.

Nel also left her architectural urban planning practice when she began her doctoral studies. Like Laurens, she found the time restrictions of her doctoral grant rather limiting, and the particular processes within her field of expertise—namely urbanism—made it difficult to integrate professional work. Nevertheless, she engaged in a new kind of practice during her doctoral studies, a design practice closely related to her research subject. Nel found this kind of practice rewarding as well as supportive to her research. The design projects she collaborated on and co-authored have had an explorative character, unlike a traditional practice that requires navigating between clients and an office. While useful for research, such design practice is short-lived and disappears with the fulfillment of the research project, though it usually continues to provide new insights. Nel believes that it is difficult to reconcile the two modes of work: that of an engaged design practitioner and that of a researcher, as the former is characterized by collective endeavors, while the latter is largely a solitary labor.

As a teacher, Nel asked her students at master level to review their bodies of work and distil recurrent themes and design approaches they had used, both individually and collectively. "This often revealed a design interest (and design 'identity') they were unaware of," she said. "Once formulated, they could start looking at the themes as possible research topics and use this perspective to start their graduate projects."

Arnaud had also grown tired of all the regulations, schedules, and restrictions of professional practice and wanted to reflect more. He decided to try to develop an architectural practice within academia, and, during his doctoral period, devoted just over one third of his work to teaching and to the organization of this role. More than half of his time he put into research. Arnaud said that this way of working led to the consolidation of a teaching structure and of themes. Research provided him not only a reinvigorated perspective on the different topics in his teaching but also new methods that he tested and used in workshops with students.

Thierry said, "Practice, research, and teaching came together during my PhD work. The development of the Matrix Method, an essential aspect of the PhD, led to several connections between the three principal activities. In a first stage of the research trajectory, I developed a situation wherein I looked back to my activities as an architect and a photographer. This led to a first way of using the matrix as a tool to generate creativity and reflection and to an artistic output. … Second, I used teaching constellations … to investigate the use of the matrix. The result is a fine-tuned method which is now an interesting tool for myself and for other colleagues in our discipline and beyond."

Jo emphasized that his triadic roles—as a practicing architect, teacher of architecture, and architectural researcher—worked synergistically through the entire period of his doctoral studies. He looks at these roles as "permeable", not parallel. His doctoral research, he said, "has been driven by practice, which has been a series of 'interrogations of my practice'. I have closely observed my practice. And I have observed me observing my practice, trying to break through my habitual ways of seeing. My practice has offered what any research needs: a subject. Or should I call it an object? I have intensely looked at this: my critical practice in the context of practical practices. My design practice has been the indispensable set of data that had to be processed". His teaching during this time as a doctoral student was primarily a test area—a laboratory, he said, "in which my intermediary research results, found through the thorough investigation of *one* critical practice in the context of critical practices, then could be further tested through *several* parallel critical practices (my number of students), by which I could further refine and calibrate my research process so as to do better".

Post-doctoral practices
The five doctoral alumni have returned to their roles as academic teachers and university staff.

Laurens's practice has changed emphasis compared with the two previous periods in his career. Now, he focuses on his educational practice, which consists

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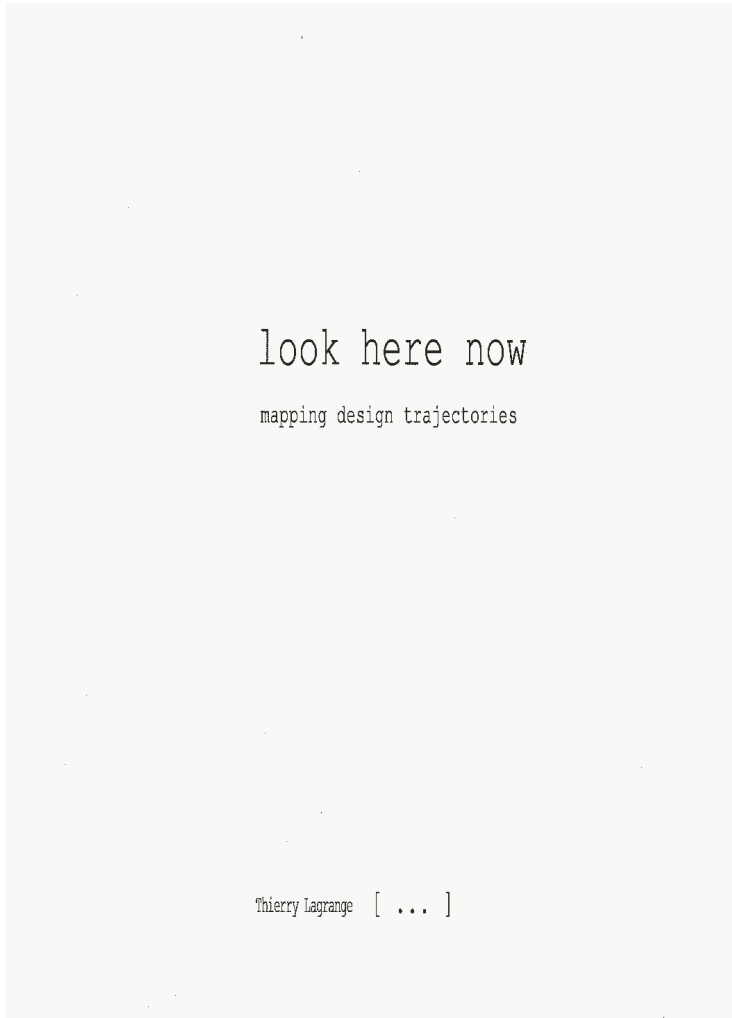The Overarching Essay

Theatre of Operations, or:

Construction Site as Architectural Design

Jo Van Den Berghe architect
Doctor of Philosophy
2012   RMIT University, Melbourne, Australia

Fig.4: Cover of doctoral thesis of Johan Van Den Berghe

of two parts: teaching theory and also structural consultancy in a design studio. He advises architects-to-be, as he similarly advised colleagues in his previous professional practice. He said, "Knowledge developed in these design studios— this knowledge is based on a designerly approach of a structural understanding— is used in teaching theory. Of course, structural theory in itself is the basis used to develop this designerly approach, in order to support design collaboration between architect and engineer."

Nel's post-doctoral work, in its initial phase, is mostly oriented towards advanced research and is based on interdisciplinary studies where architecture meets philosophy and other academic disciplines. At these intersections, the premises for new professional roles in architecture are more clearly emerging. Additionally, her teaching practice has been extended into research education, and now she teaches and supervises doctoral students working in an international context.

Thierry, in his doctoral work, developed a fine-tuned method that is now an interesting tool for his work as an architect-photographer and scholar that can be used for people in other creative fields. He said, "The story does not end with the PhD. The research has an impact on my teaching, practice, and research in a series of new research, artistic, and business projects".

Arnaud has found a new level of complexity in his interactions with students than he saw before his research. Many students ask questions that he is now able to answer in various ways: through discussion, theoretical argumentation, design examples, and exploratory design. He believes that his doctoral studies strengthened his professional and scholarly self-confidence, and he is therefore able to support the development of such a confidence among his students, now more sincerely and convincingly than before.

Jo, in his postdoctoral period, has found that teaching is a most appropriate channel through which he can disseminate his research. Further, he said, "Coming from my critical practice in the context of critical practices, my research sprawls out—call it a cluster bomb—so as to 'contaminate' the practices of my students and hence their future critical architectural practices. It is my strong belief that, by doing so, I contribute to improvement of the discipline of architecture."

FROM DYADIC TO TRIADIC IDENTITY

In their pre-doctoral practice, consisting of both professional architectural work and of teaching architecture, the five prospective PhD architects reached a similar kind of reflection on the prospect of their further development as practitioners and teachers, each discovering the desire for a deeper exploration of their respective

look here now

mapping design trajectories

Thierry Lagrange   [...]

Fig.5: Cover of doctoral thesis of Thierry Lagrange

interests. For one of the five, traditional practice seemed to have exhausted its potential to inspire new creative revelation and, therefore, improved teaching ability. For another, explorative design delivered conclusions that invited additional theoretical discussion. More, the combination of architecture and photography as one practice offered new and surprising creative and analytical opportunities but lacked tools for promoting them within architecture and other fields of practice. Yet another of the five was satisfied with his "hybrid practice" in cooperation with other creative fields but lacked a language to articulate his positive experiences as a base for better, more self-aware teaching. Even employing poetics as the basis for architectural discussion, by another PhD candidate, did not suffice to provide a satisfying practice and rewarding teaching experience.

For these five PhD students, doctoral studies offered new opportunities for the personal and professional development that each had hoped for. One of them found research to be a new and encouraging arena for his interests in studying in-depth engineering and its reciprocal relationship to architecture as well as his interest in exploring new notions in the design studio. Another of the students approached various knowledge landscapes that offered a new and broader understanding of the tasks that demand extended skills and knowledge from prospective architects. Explorations of and reflections on an architectural–photographic practice, for yet another of the five, provided the framework for developing a new "tool" for creative and analytical approaches that can be applied in these two fields and beyond. For another of the doctoral students, collaborating with creative practitioners from kindred fields of arts produced thought-provoking outcomes, prompting further creative endeavors; more, research extended his ability to develop and use adequate language for more expressive architectural and design teaching. Yet another of the five deepened his conviction not only of the importance of poetics as the basis of architecture, but also the conviction that future architectural practitioners need to develop critical practices.

As previously mentioned, we met all five of the doctoral alumni of the Sint-Lucas School of Architecture before they launched careers as architectural researchers and we followed their paths to PhD. We are impressed with how their interests, derived from dyadic practice, formed the basis of their doctoral endeavors, and we appreciate their search for new ways to handle research material while developing appropriate methods in their studies. We watched their profiles extend from a dyadic, professional–teaching practice into a triadic one—professional, teaching, and research—and that these various roles have worked reciprocally in different ways for each of them. Notably, we have observed that all of the doctoral students are interested in continuing to teach, though in a new way. This new teaching style promotes innovative approaches, greater intellectual curiosity, and better

communication, resulting in a stronger intellectual self-confidence, the ability to go beyond the field of architecture as a generic way of perceiving and thinking, and a more holistic perception of poetics in architecture and critical architectural practice.

Research as a third pursuit, complementing the professional and teaching components, has in all cases changed the alumni's identity of practice, and each has stated that it is no longer possible to return to a traditional practice. All five mentioned how their more traditional practices have transformed into critical, transdisciplinary practices, "spatial artistic practices," etc. Common traits from the experiences of all five are that research has contributed to more cogent teaching, stronger self-confidence, broader repertoire of methods, and experimental educational situations—like laboratories where themes are explored and where research spreads and influences the future practice of architecture.

Definitely, we agree with the theoreticians of architectural pedagogy that architectural studies are deeply influential for the formation of future practice in the field (Salama and Wilkinson 2007, 3, 43). Therefore, we hope that with having these first doctoral alumni and their successors as teachers, Sint-Lucas will promote a new architectural practice, one that is more responsive to its time and is an active agent of change in contemporary society and culture.

Halina Dunin-Woyseth and Fredrik Nilsson

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