

Savoir-faire/faire savoir : How to engage architecture practice as a research tool ?

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Introduction

When observing contemporary architecture, as practitioner, as teacher and as researcher, it has become difficult to grasp constitutive design rules. Even when some of these can be identified, their reach is often limited. The qualifiers for the word 'architecture' have multiplied over time: minimalist, hygienist, socio-participationist, formalist, high-tech, low-tech, sustainable and eco are some examples. After one century of avant-gardes, architectural practice has been scattered in uncountable styles and streams. This leads to a free market situation in which architects and teachers are confronted with an almost endless catalogue of approaches and styles. In this context, between multiple-choice and pragmatist refusal, arbitrariness and relevance become a central issue.

Research

Today the understanding of design processes is fundamental in the interpretation of architectural designs, since universal rules of composition (harmony) and common ideals (beauty) have failed to support them exhaustively. This paper explores ways of engaging the design expertise of an architect as an immersive research tool allowing to recompose design processes and narratives. The research engages design practice as a tool, and is completed by the verbalization of the results. This engagement of practice in knowledge production is relevant as pedagogical tool for teachers, as methodological tool for researchers and as a source of inspiration for practitioners.

The paper exposes this *modus operandi* through three cases, illustrating different situations :

1. Post-operational design documents at AgwA architects (the author's own practice). The redrawing/recreating of documents in order to explain our projects, even though they may be already built, allows to develop new insights on the design and to enhance communication. These documents allow to discover and explicit "constitutive rules" of the design. This is made possible by imposing an "arrow of intention" in the drawings.

(Fig1.)

2. Re-construction or re-enactment of the design processes of projects realized by other architects. The case develops a partially fictional design process of the Toledo Museum by SANAA architects. This re-enactment makes possible to develop insights on different stages of the design process and on the final design, even though the process does not intend to retrace the original design process. It is the honest engagement of design practice expertise in the observation that produces valuable knowledge.

(Fig. 2)

3. A transversal one-day exercise in the framework of several architecture studios at Uliège. The exercise aims to develop a single fictional design operation on the ongoing design and to

explicit this action verbally. It develops the skills of the students as practitioners (making) and as potential researchers/ critics (saying) in one single movement. From making towards saying, and from saying towards making. The exercise allows to gain new insights on the design in progress and to inform the process, even if the design operation of the exercise disappears when the exercise is over.

(Fig. 3)

Conclusion

This research invites to observe contemporary architecture by (re-)enacting a design process. It aims at finding and explicating decisive principles of a design and/or of a design process. This method can equally be implemented as a tool for architects, teachers, researchers and students, addressing different goals at different levels.

The specificity of this method is the subjectivity of the practitioner's point of view and his aims/interests. It means that the result of the research on one single object can provide a large range of different results. However these results prove to be operational in the production of valuable knowledge and/or operational guidance in a process.

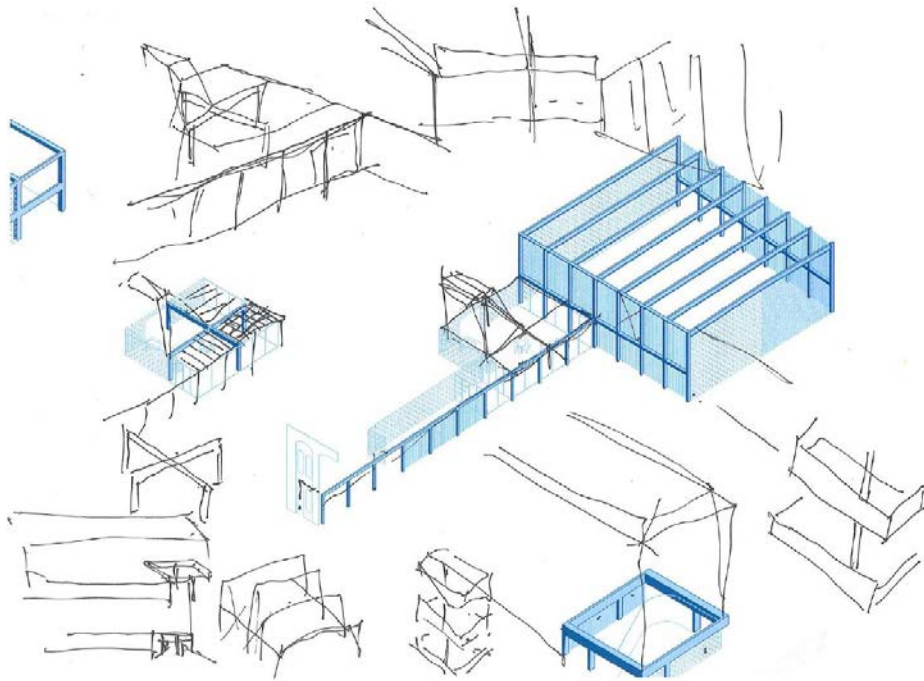


Fig. 1: ECAM, multipurpose infrastructure (sports center, kindergarten, offices, park), redrawing of the structural principle of each intervention in the existing building.

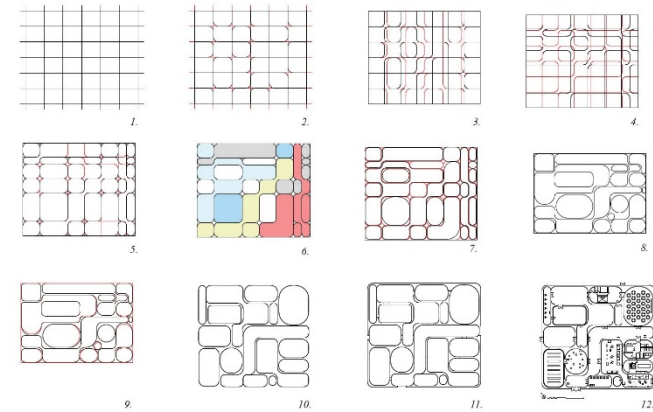


Fig. 2: SANAA, Toledo Museum, extrapolation and intrapolation of the design process, based on 4 schemes published by the architects.

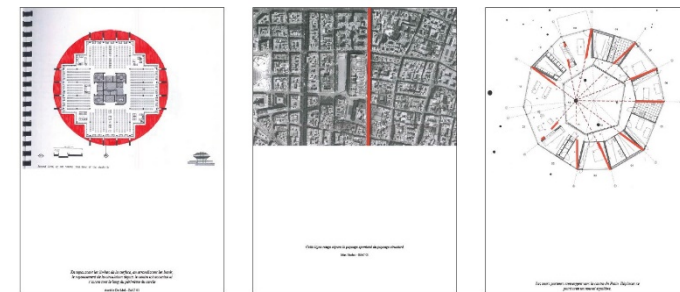


Fig. 2: ENTRE, exercise, Uliège, students works

References

- ALBERTI L.B., *L'art d'édifier*, Sources du savoir Seuil, 2004
 EI CROQUIS 121/122, Kazuyo Sejima & Ryue Nishizawa, Spain, 2005
 EL CROQUIS 139, SANAA, Kazuyo Sejima & Ryue Nishizawa, Spain, 2007
 HUET B., *Sur un état de la théorie de l'architecture du XX^{ème} siècle*, Quintette, 2003
 FALLON H., "Metarbitrariness", PHD, RMIT, Melbourne, 2013
 FALLON H., VANDENBULCKE B., *AgwA architecture office : Study cases on structure and architecture*, Structures and architecture : Concepts, Applications and Challenges, 2013 Taylor & Francis Group, London, p. 621, 2013
 LUCAN J., *Composition, non-composition architecture et théories, XIX^{ème} et XX^{ème}*, Presses polytechniques et universitaires romandes, Lausanne, 2010
 LUCAN J., *On en veut à la composition*, Matières n°5, Suisse, p40-49, 2002
 SEJIMA K.+ NISHIZAWA R. / SANAA, *Works 1995-2003*, Shinichi Masuishi, 2003
 VANDENBULCKE B., *abstraction, concrétion, lecture et production du projet d'architecture par immersion*, PhD, UCL, 2015

Keywords

architectural research by design, practice of architecture, design tools, design practice, design processes

Biography

Benoît Vandenbulcke is a civil engineer architect. Between 2001 and 2007, he realized several private and public buildings for different architecture offices in Belgium and Austria. In 2007, he founded AgwA architects in Brussels, working primarily on public projects. AgwA was recently invited to the competition for the new « centre Pompidou » in Brussels.

He was teaching and researching at the UCL (faculty of architecture LOCI) in Belgium where he presented his PhD in 2015, entitled "Abstraction, concrétion, lecture et production du projet d'architecture par immersion". He is now assistant professor at Uliège where he leads studios and initiates research in the field of research by design.