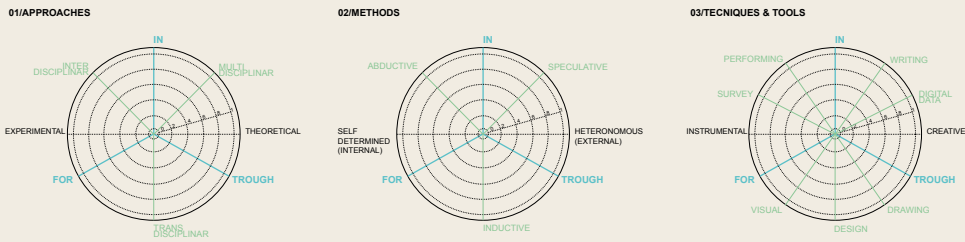


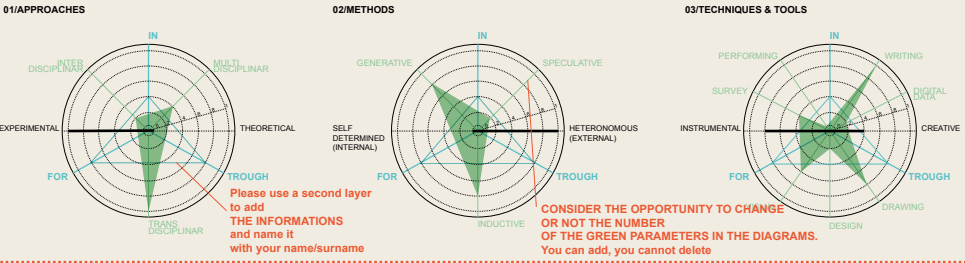
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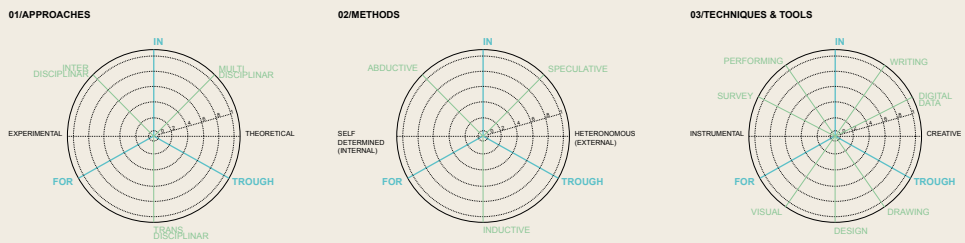
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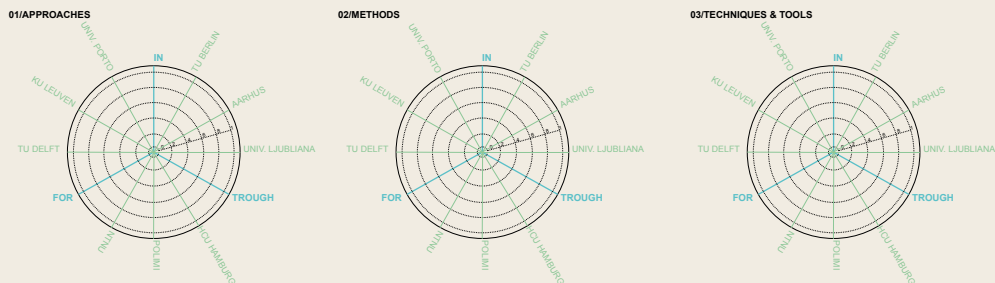
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LEVEL 2 / PHD COMMUNITY POSITION



LEVEL 3/ CONSORTIUM POSITION



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**EVALUATION OF
DESIGN-DRIVEN
RESEARCH**

COLOPHON

CA²RE+ 2 EVALUATION OF DESIGN-DRIVEN RESEARCH

2022
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**An inquiry on Design
Driven Research:
a comparative
approach.**

Giulia Setti
Politecnico di Milano

ABSTRACT

The contribution highlights the various way to conduct research and the different applied methodologies, collected after the Ca2re conference held in Milan, as a testimonial, to analysis in what terms the work addresses the Design Driven Research approach and the topic of the conference (Comparison).

The significant aspects that emerged from the individual panels underlining three main themes: design-driven approaches, research methodologies, representational techniques.

The essay compares different applied research methodologies that could be traced back to two main areas, on the one hand, research that develop a 'learning by doing' approach, on the other works based on critical reflection in relation to design practices. It also addressed the representation techniques shown that describe an autonomous and critical dimension to interpret and produce drawings, images and diagrams that reinforce the quality of the research and the understanding of the topics covered. The lens of comparison has helped, each participant, to better understand each methodology and aspects of the relationship between research and design investigated.

Keywords: Comparison; design methodology; representation techniques

In my first participation in the Ca2re conference in Milan, I was involved as an observer, chair and panelist in various presentation and discussion sessions of the selected doctoral research. On this occasion, the conference was held exclusively remotely due to the pandemic, allowing to experience the possibilities that an event conducted at a distance can offer and some limits related to the lack of interaction between participants, even beyond the official sessions established by the program. In general, the structure and organization of the presentations appear to be very effective both concerning the open and rich discussion generated within each panel or plenary session and concerning the methods of presenting the research works. Each speaker has, in fact, a coherent time available to illustrate his research, to highlight the applied research methodology and to describe in what terms the work addresses the Design Driven Research approach and the topic of the conference (Comparison). The debates developed

within the various panels in which I participated tried to give operative indications to the Ph.D. candidates to continue their research. The focus has been to give an active and lively discussion where the research path and the expected results can become a tool for discussing positions and new perspectives on doing research today.

Starting from the discussions and the notes taken during the different sessions, I would like to summarize some significant aspects that emerged from the individual panels, underlining three main themes: design-driven approaches, research methodologies, representational techniques.

Design-driven approaches

I have participated in four panels in which different research works have been discussed, some of them at the initial phase, others in a more mature stage. Their comparison helped to understand better each methodology and aspects of the relationship between research and design investigated. Some research, those of Luyi Liu (Polimi) and Amath Luca Diatta (Polimi) use a research through design approach, in which the design is a tool to define research questions and to select and interpret references and case studies from the discipline. Researching through design is a possibility, in these cases, to define a cultural position with respect to the topics chosen by the candidates.

A more hybrid approach is described by Janet Hetman's work (CRENAU) who uses different tools, even outside the narrow boundaries of the discipline, such as ethnography, anthropology, and social studies, to underline practices, uses and transformations underway at the Centquatre in Paris and to identify the legacy of adaptive reuse processes in this building. The research developed by Elena Guidetti (FULL, Polito), entitled "The Potential of Form. Assessing the Transformative Potential of Existing Buildings in the Post-functional Era", is a work of great interest and based on the design-driven approach. It studies the potential to transform and to adapt the existing buildings underlining the central relevance of reusing in contemporary design from a sustainability perspective. Elena Guidetti's research show a mature approach that opened an interesting discussion in the panel on some aspects of her work. Underlining the need to better explain the criteria and methods to select the case studies identified to compare the different design operations and approaches to adaptive reuse. Moreover, in the discussion emerged the need to specify some keywords used in the research, such as the concept of 'transformative potential', and to build a hierarchy of criteria through which to analyze and compare the identified case studies.

Research methodologies

The methodologies presented in the panels in which I was involved can be traced back to two main areas, on the one hand, research that develop a 'learning by doing' approach, on the other works based on critical reflection in relation to design practices. During the sessions that I attended at Ca2re, many of the discussions suggested to the Ph.D. candidates to clarify the methodological processes and tools used in the development of individual research. Some comments collected in the various panels suggested to choose and define a specific methodology already in the first steps of the research also in relation to the expected results.

Some works highlight the design driven approach as an operative tool to identify the strategies to transform the existing buildings with a 'learning by doing' methodology, like in Elena Guidetti's work. While the research of Janet Hetman, Luyi Liu and Amath Luca Diatta use an approach based on the critical reflection of theoretical topics, very relevant for the discipline, like the one of publicness, adaptability, or landscape, underground, and from there they develop design practices through the reading of case studies, projects, and places.

Representational techniques

The representation techniques shown are of a high level and describe an autonomous and critical dimension to interpret and produce drawings, images and diagrams that reinforce the quality of the research and the understanding of the topics covered. It seems to me that drawing represents an essential tool in the research of the Ca2re program because it is a form of abstraction of topics, concepts, and issues, theoretical and practical, developed in the individual works. It is a set made by original materials and documents that are interpret strategical aspects of the research (as in the case of Guidetti) or a set of analytical and descriptive drawings (as for Hetman, Liu and Diatta) which describe both the state of art and the transformations that have occurred in the selected case studies. Some drawings and diagrams show a more speculative attitude, focusing on the representation of different aspect of the design process (time, uses, spaces). Moreover, diagrams and graphic elaborations presented also build a possible comparison within the different works, responding, in part, to the conference topic.

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