Refurbishment and sustainability: raising up in relation to dry technologies.
Reading and taxonomies
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The graduation thesis centres around the raise up intervention as refurbishment in relation to dry technology and it develops as attempt formulation of guide lines through reading and analysis of projects.
The relevance of refurbishment, as dynamic and logical management of built-up, and the great attention to environmental and energetic points of view, they motivate the choice of this subject; besides, necessity to compare with complex building property accents the importance of provide the designer with tools, as guide lines, able to turn the planning and technologies choices and to organize the hard relationship between these choices and the morphologic conversion.
The graduation thesis is organized in two parts: a theoretical first part that introduces the second part in which the guide lines are developed.
The first chapter centres around guide lines as methodological instrument and it analyses the new Italian political writings; the second chapter concerns the theme of refurbishment and the raising up intervention, start from sustainable development to pass to protection of land as resource; in the end, the third chapter concentrates on dry technologies and analyses potentiality and criticality.
The second part of the graduation thesis develops the guide lines that are divided in three levels of deepening: the first level of lecture of projects; the intermediate level centres around the typology of connection between new and pre-existence; and the third level of analysis of some projects with more details.
The first level includes 28 reading files, each for project, where the selected projects have been built in Europe in the last ten years. The file is divided in four columns (fig. 1): the first around the pre-existence, the second about the project of raising up, the last two columns about technology system of the new volume; in the file, the project are read with reading criteria thought the use of symbols. This first level provides the designer a catalogue of projects to take an initial idea for the project.
The intermediate level centres around the typology of connection between the two systems. Beginning from the reading files, it determines five typologies of connection that are analyzed thought different question, such as external perception, management of rainwater and radiation (fig. 2). The aim is to allow the designer to think about the connection and the possible solutions in relationship to the analyzed questions.
The third level is formed of 8 analysis files, reported to some projects of the reading files, inside which the technological connection is studied. The files is divided in four columns (fig. 3): the first about the dry structure, the second analyzes the relationship between technology and form, and the last two columns report some sketches with technological section. This third levels shows to designer as the connection between two structural systems can become a characterizing element for all the building and it allows to analyze some technological solutions.

Finally, in the end of thesis, methodology is compared with the examples of guide lines of the first chapter, with the aim of read the critical questions that come out in development of this tool. In parallel with these criticality, the guide lines have potentiality, that are the principal aim of this methodological tool, that it doesn’t consist to say to designer “what he must do”, but in to allow to reflect on “how to do”, thinking about different questions and motivating so the choices of project.

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