Summary

NON-STANDARD BUILDING MATERIALS:
The building usage of clay, ash, dung, urine, hair, animal fat and other materials of this type, including their aesthetics, semantics and their role in architecture

VOLUME I. PARTS OF BUILDING

Aim and objectives. Non-standard building materials, such as clay or dung, were popular subjects in the old Polish technical and household literature. They were used for all parts of buildings, from floors to roofs. Their building usage was the subject of experiments and improvements, and polemics, including discussions about various admixtures to clay- or cob-dung-based mortars. Those discussions and building craft clues are analyzed in the paper, with aim to present the past Polish culture of building with clay, dung and admixtures. The analysis can refer to more general topic of technical and cultural evolution of our civilization, supplementing this subject with the specific view on aesthetic changes for the last 200 years. The results can be applicable in the contemporary eco-tech and low-tech architecture.

Structure. The chapters are dedicated to respective parts of building as the objects of non-standard building materials application. The exception are plaster techniques and materials, included into the four consecutive chapters (3 to 6). Furthermore, the author’s intention is to supplement this work with the new successive volumes in the future. These volumes will refer to the issues of building finishes and to the systematics of non-standard (alternative) building materials.

The conclusion is that the Polish technical literature of the last three centuries was abundant in works related to the subject matter and now witnesses about the stunning development of culture of clay and dung usage, as part of Polish national cultural and technological heritage of the past. Nowadays, the whole traditional culture of building with clay, dung and admixtures supplements the present-day knowledge about traditional, „ecological” or „natural” building materials. It can be applied to the contemporary ecoarchitecture industry and science with its related trends such as eco-tech, low-tech, green building, sustainable architecture etc. Thus, the recognition of the old Polish culture of building with clay, dung and other admixtures of that type seems to be the significant contribution into the contemporary theory of sustainable architectural design and practice, including eco-tech and low-tech architecture.

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