

# REACTIVE DESIGN METHODS

ON PHYSICAL EFFECTS IN CONTEMPORARY  
ARCHITECTURE

Doctoral Dissertation

Author: GERGŐ BURIÁN

Tutor: TAMÁS NAGY †, DLA, universal teacher

Consultant: GERGELY PAULINYI, DLA

Budapest, 2021.



MOHOLY-NAGY MŰVÉSZETI EGYETEM  
DOCTORAL DLA EDUCATION  
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# THESES

## THESIS 1.:

The feedback on physical effects, i.e., external environmental impacts and / or internal needs can be considered as reactive design methods in contemporary architectural design.

## THESIS 2.:

During the use of reactive architectural methods, a kind of series of rational and justified decisions can be seen, which spreads around gradually in the contemporary architectural design period and becomes a design tool more and more often.

## THESIS 3.:

The reactive buildings, - and so the appearances of the reactions - can be divided into 3 groups, 3 dimensions. The first dimension, when the reaction happens in the design process, creating a static building; the second, when certain elements of the building pre-programmed react with movement; and the third, when the reaction is automatic. If multiple reactions occur simultaneously at a high level, a building with full synergy can be created.

## THESIS 4.:

As a consequence of reactive design methods and architecture, new forms of building, building elements and building structures are created, which is one of the defining phenomena of contemporary architecture.



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