Thinking + talking adaptability: diagrams for time and change in the built environment

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The integration of time forces the recognition of architecture’s symbiotic relationship with context. Context is more than the physical environment; it includes the surrounding factors that impinge on the design and use of our built environment—shifting influence, role and scale throughout time.

PERSPECTIVES
TIME, COMPONENTRY, SPACE

CONTEXT
TIME

PROCESS
SOURCE TIME

BLACKBOX
SOURCE, STAKEHOLDERS

FRAMECYCLE
SOURCE, SPACE, COMP any, TIME

LAYERS
COMPONENT, STAKEHOLDERS, TIME

BALANCE APPROACH
SOURCE, PROJECTS

VIRTUOUS CYCLE
STAKEHOLDERS, PROJECTS

ENERGY
TIME, MARKET COST

PERMUTATIONS
TIME, SPACE, BRIEFING

LEASE LENGTHS
TIME, BENEFITS

LAYER COST
TIME, BENEFITS, USAGE

DECISION MAKING
STAKEHOLDERS, INSURANCE

DISCOUNTING
STAKEHOLDERS, ECONOMICS, COST, SPACE

UNCERTAINTY
TIME, INSURANCE

CRITICAL DECISIONS
TIME, ECONOMICS, DECISION

TOOLKIT MENU

The AF toolkit offers a menu of devices for thinking about, designing for and assessing adaptability (color coding). The diagrammatic menu provides a concise overview and illustrates the interrelated set of core concepts (color bars).

INTERGRATING CONTEXT
The integration of time forces the recognition of architecture’s symbiotic relationship with context. Context is more than the physical characteristics of the building site, taking into account a range of physical and social factors that shape on the design and use of our built environment—shifting influence, role and scale throughout time.

Thermodynamic Evaluation

ADAPTABLE LINKS

The table links distinct types of change, building elements and stakeholder roles as a platform for interrogating the why, how and who of adaptability.
ADAPTABILITY SOURCES

The sources play-out at different points in the design process (clockwise). The simple idealized illustration suggests the sequential condition between the seven sources in time.

Design Process

BLACKBOX OF ADAPTABILITY

Adaptability is typically defined by a limited number of physical characteristics (the system), whilst many other variables are left "outside". The "black box" of adaptability will be different for everyone—thus, the growing shade of gradation suggest a variety of possible "boxes" (moving from the more conventional in the center to the lesser associated elements on the periphery).

FRAGMENTATION

The fragmented and disaggregated nature of stakeholder involvement over the course of a buildings life is frequently at the root of issues that hinder adaptability. A partial product (the usually long-term inputs) between conception (design for) design (capacity) and implementation of change (adaptation).
Levels of Investment

A developer/owner’s projected length of involvement is often the basis over which they are willing to plan/invest for future change. How much they invest up front (initial decision point (2)) and for operational maintenance (CDP (2)) will help determine the point in time and their actions for when the building is no longer suited for their needs (CDP (3)).

Future Discounting

Different ownership models will affect a developer’s willingness to pay (WTP) for certain features relative to their timescale horizons. The probability of certain types of changes grows with increasing risks and willingness to pay for solutions to mitigate against downstream costs.

Project Pull

Architectural design can be seen to be ‘pulled’ by factors which either sit inside the practice, inside the specifics of the project, or external to both (exogenous factors). The diagram provides a theoretical space for a dialogue around understanding the social context in which design takes place, dimensioning the complexity of the forces at play.