



**International Council
for Research and Innovation
in Building and Construction**



March 2016

Architectural Management Architectural Research Roadmap Working Commission W096

Working Commission W096 invites you to join its Architectural Research Roadmap Workshop on May 31, 2016.

Purpose of the workshop

The purpose of the Architectural Roadmap workshop is to map an agenda for Architectural Research which will be developed, and to establish a network of international researchers to, amongst others:

- provide partners for research funding bids
- explore practice-based research

The workshop is part of the [CIB WBC 2016](#), which will take place from May 30 till June 3, 2016 in Tampere, Finland.



Issues to be addressed

During the workshop issues such as Organisations, Procurement, Processes and Tools will be addressed.

The above mentioned issues will be discussed within the context of Architecture Practises and Education.

A clarification on the issues can be found attached.

How to contribute

In case you would like to contribute, you can contact the coordinators of W096:



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Issues to be addressed Architectural Research Roadmap

● Organisations

- Investigate different styles of organisation, including:
 - ◇ separate disciplines and multi-disciplinary practices
 - ◇ integration or separation of different professionals
 - ◇ composition of organisations
 - ◇ debates regarding the amalgamation of the design and construction phases within one organisation or whether distinction between the phases offers more professional integrity
 - ◇ the effect of different types of organisation on quality of products
 - ◇ the correlation between organisational types and award-winning designs

Role of vision statements

Award Winning Practices	Vision Statement
A	Designing buildings is a way of thinking; a way of life. The creation of form and space that is memorable and inspirational
B	We design bold , contemporary, imaginative buildings that are fit for purpose, accessible and loved by the people who use them
C	An inspirational , practical and resilient public architecture
D	We believe in: using our brains, in listening, in research , in collaboration, in innovation
E	We simply love design...and we love to share our enthusiasm by creating great working relationships and buildings of excellence and enduring quality
F	We listen, challenge and innovate in our quest for excellence

Knowledge Transfer Partnership KTP007705

● Procurement

- ◇ new procurement systems – criticism for lack of architectural design quality
- ◇ rationalising procurement systems
- ◇ selecting appropriate procurement systems for particular types of projects

● Processes

Architectural design process – different types of design, e.g.:

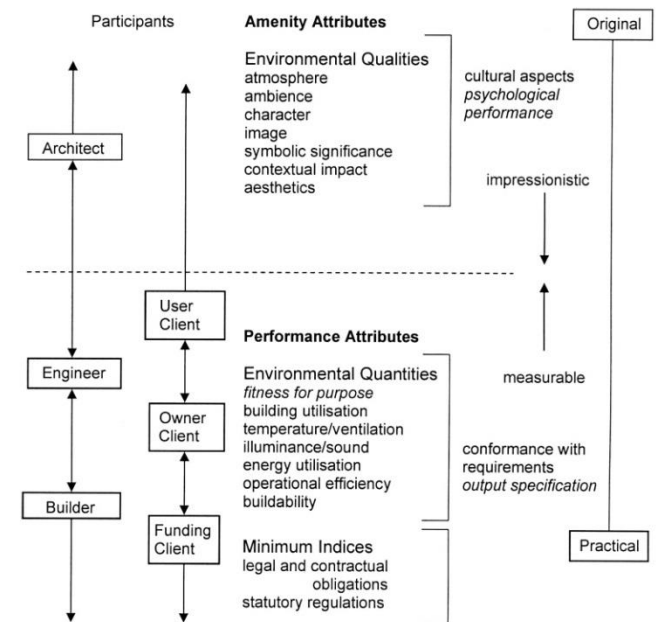
Engineering Design	Architectural Design
Prescriptive	Descriptive
Rational	Intuitive
Linear	Cyclic
Algorithmic	Heuristic
Theoretical	Empirical
Problem focused	Solution focussed
Analytical	Holistic

Integrated design and development solutions, performance specifications, office and project management strategies etc. are good for saving time and money, and help performance attainment; but it is amenity that is at the apex of the architectural design quality hierarchy. Research is needed as to how to maintain performance attainment while also achieving amenity objectives.

Processes also involve

- ◇ feedback and post occupancy evaluation
- ◇ interpretations of Sustainability and Sustainable Development
- ◇ energy efficiency, carbon footprints etc. (e.g. CIOB Carbon Action 2050)

Architectural design quality hierarchy (intrinsic and extrinsic values)



● Tools

- ◇ The advantages of Virtual Reality and BIM for design integration, clash detection etc., but concerns about the casual adoption of component libraries; and the danger of unqualified and poorly qualified staff using them.
- ◇ Appraisal of existing design quality tools

Issues to be addressed Architectural Research Roadmap

Composite digital and hand-produced drawings



City models



Architectural design quality evaluation tools – criteria

Ref	Statement	Output Specification Requirements (checklist)	Y	Criteria for Quality Assessment
SECTION 5: Communal Spaces				
5.01	Arrangement Communal spaces are rationally and logically arranged within the building and minimise unnecessary long journeys for the users (Housing Corporation 2007) (CABE 2009) (HCA 2009)	Public amenities accessed from the main entrance Alternatively, may be accessed directly from outside with an internal door through to the main entrance area, if the layout and security arrangements permit	Y	<ol style="list-style-type: none"> 1. Grouping as overall strategy (Alexander 1977) 2. Travel distances from the furthest apartment (Littlefield 2008) 3. Access to external spaces whilst maintaining security (Newman 1973)
5.02	Communal Subspaces Internal communal subspaces are rationally and logically arranged (Hanson 2001) (CABE 2005, 2008) (CSIP 2008)	Appropriate number of DDA compliant toilets provided within 40m of communal spaces and close to main entrance. Baby changing facilities also provided (A minimum of 2 WC's and an assisted bathroom need to be located within communal facilities (12 – 15m ²))	Y	<ol style="list-style-type: none"> 1. Sufficient number and size of communal spaces (Alexander 1977) (Hertzberger 1998) 2. Subspaces are logically arranged (Alexander 1977) 3. Subspaces sufficiently adaptable to change of use and user capacity 4. Sufficient and appropriately located storage
5.03	Composition composed to promote excitement, delight and comfort (CIC 2003) (Housing LIN 2008) (CABE 2009)	Communal living areas shall be sensitively designed to create inviting environments and shall incorporate focal points	Y	<ol style="list-style-type: none"> 1. Different volumes are offered to create spatial variety (Brown 2001) 2. Maximise views and natural light (Pollock et al 2007) 3. Encourage local community integration and use by family and friends

Knowledge Transfer Partnership KTP006998

Context

• Practice

- Analysis of different status in architectural practice, such as the privileged and the professional
- starchitects and communities
 - global and local influences



• Education

Architecture and the built environment and greater association with Schools of Architecture

Pedagogy

- the nature of architectural education
- studio culture
- the concept of the project

