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**The rise of dominant criteria in sustainable architectural design  
institutional work forms as indicators of institutionalization**

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## **The rise of dominant criteria in sustainable architectural design institutional work forms as indicators for institutionalization**

### **Abstract**

Recent research in sustainable architectural design has led to articulations of a rise in criteria enveloped in issues of carbon and low energy as dominant indicators of sustainability. What has been overlooked is a sense of how this thinking evolved over time and what actions led to certain criteria becoming dominant. This paper addresses this gap with a particular emphasis on institutional analysis as it considers the forms of institutional work that create, maintain and/or disrupt institutions underpinning criteria used by diverse actors to evaluate sustainable architectural design. Evaluation criteria used to define and promote sustainable design by the professional association and policy makers in the UK are examined over time. The research suggests that new forms of institutional work act as facilitators for a wider process of institutionalization. It shows the importance of considering new ways to theorize issues of sustainable design as new meanings are negotiated in these complex institutionalized settings.

Keywords: evaluation criteria, institutional work, institutionalization, sustainable architectural design

### **INTRODUCTION**

A review of literature related to issues of sustainable architectural design suggests that indicators for sustainability in architectural designs are dominated by carbon reduction measures and efficiency performance criteria (Cole 2004; Farmer and Guy 2002; Guy and Moore 2004). Guy and Moore (2004) trace the development of this dominant approach to the Bruntland definition of sustainability (Development 1987) as being of a global scale and informed by physical terms such as ozone layer depletion and greenhouse gas emissions. They argue that this and subsequent definitions in world conferences in Rio in 1992 (United 1992) and Kyoto in 1997 (United 1997) have provided the criteria for evaluating sustainable architecture as one focused on “resource efficiency” and “low energy” (Edwards and Hyett 2001). The majority of this academic literature has focused on evaluation criteria employed by planning and regulatory agencies and specifically criteria used in environmental impact assessment models. This body of research has not considered how this criteria evolved over time in these and other institutionalized settings such as those used by professional associations and policy makers which can have a powerful influence on the institutional structure of a field (Greenwood et al. 2002).

This paper considers how changes in criteria used by the professional architectural association and policy makers in the UK are shaped by forms of institutional work enabling the wider institutionalization of sustainable architecture. It examines how dominant approaches evolve bringing about connections between the diverse sets of participants. Institutional theory provides an approach to understanding how consensus is built around new meanings and how concepts and practices on issues of sustainability are developed and diffused (Jennings and Zandbergen 1995). Institutional theory is concerned with the processes by which items become institutionalized and the role of institutions in society (Scott 2001). Because it focuses on the processes by which these items become embedded in institutions or accepted practice, institutional theory is useful for describing how organization activities may, over time, come to contribute to sustainability (Jennings and Zandbergen 1995).

The paper argues that by employing institutional theory as a framework of analysis a better understanding can be provided of how these forms of institutional work are situated within an institutionalization process and how dominant criteria emerge, diffuse and become embedded in practices and policy. What criteria are used to evaluate, define and promote sustainable design in these settings and what forms of institutional work enable dominant criteria to emerge and evolve over time? These questions are addressed through a historical study (1990-2010) using archival research methods (Ventresca and Mohr 2002) examining how dominant approaches evolve bringing about connections between the diverse sets of participants associated with the professional association RIBA and policy makers in the UK. Understanding how a dominant criterion emerges is important as it can have a wider impact on the development of an industry's institutionalized structures by showing how new roles emerge and in some cases how new art forms take shape (Wijnberg and Gemser 2000).

## **CONCEPTUAL BACKGROUND**

Institutional theorists have primarily focused on the ways organizational procedures and practices become infused with value and meaning i.e. institutionalized (Selznick 1966 [1949]) and the impact of legitimation processes regardless of an organization's efficiency demands (Meyer and Rowan 1977). Institutional theory has initially been concerned with how institutions impact on actions in establishing stability, inducing taken-for-grantedness and embedding social behaviours (Scott 2001). Institutional work developed as a stream of literature focusing on the actions necessary to impact on institutions in either facilitating institutional change and/or providing institutional

continuity (Lawrence and Suddaby 2006). Actions are viewed as “situated and intelligent” and are pursued by a diverse range of actors engaged in creation, maintenance and/or disruption work. Lawrence, Suddaby and Leca (2009) build upon the wider research on institutional change and suggest “institutional work” is able to better define the actions of a variety of actors and that the initial view of heroics by the few and powerful was no longer a relevant one. They argue that earlier calls by DiMaggio (1988a) criticising institutional theory for having an over socialized view of agency could be addressed through studies of institutional work.

This paper is engaged in this stream of research by considering new forms of institutional work and their placement within a wider institutionalization process. These key constructs of “institutionalization” have not been sufficiently specified in much of contemporary organization theory (Hoffman and Ventresca 2002). This research seeks to explore forms of institutional work that create, maintain and/or disrupt institutions (Lawrence et al. 2009) within on-going processes of institutionalization. It argues that by employing institutional theory as a framework of analysis a better understanding can be provided of how these forms of institutional work are situated within an institutionalization process and how dominant criterions emerge, diffuse and become embedded in practice.

## **RESEARCH METHODOLOGY**

The first phase of the research will employ a historical study using archival research methods (Ventresca and Mohr 2002). Archival research is characterised by formal methods that treat archives as data to be collected, analysed and measured directly. Several recent empirical studies utilise this method: Lounsbury, Ventresca and Hirsch (2003) content-analysed issues of the main trade journal (Waste) between 1970-1995 in order to track the growth or decline in the popularity of recycling as well as shifts in prominence in the resource field frame. This provided historical evidence of the evolution of recycling practices and their eventual transformation. The mid 1990’s have been identified in the literature review as a defining period for the development of concepts relating to evaluation criteria used to define sustainable architectural design. Applying content analysis of text and graphic material in the period (1990- 2010) would be drawn from two sources of data:

- 1) Published studies, reviews and critique of awarded buildings
- 2) Policy documents.

## **Published studies, reviews and critique of awarded buildings**

Content analysis uses a set of procedures to make valid inferences from text or other meaningful matter to the context of their use (Weber R 1990). Qualitative content analysis involves close reading of a relatively small amount of textual matter and interpretation of texts into narratives (Neuendorf 2002). The first source of data would be building studies and reviews published in key professional journals such as the *Architects' Journal*, *Architectural Review* and *Building Design*. The studies would be selected by searching for buildings awarded by the RIBA and promoted by CABI as beacons of sustainable design in the period 1990-2010. Publications offer coverage for a specialized audience, providing information through the "frames of reference of the focal industry's readership" (Hoffman 1999 :356). They provide a medium for discourse, space for showcasing latest approaches and precedents (Jones et al. 2011). It is supported by secondary historical data such as editorial commentaries on specific building studies, industry press and other promotional materials.

## **Policy documents**

Having identified factors that contribute to changes in evaluation criteria and the emergence of a dominant criterion in the first source of data, the second part of phase 1 will track changes in evaluation criteria used in policy documents in the same time frame. Content analysis of text material of key policy documents, regulatory reports and codes over the same time period will track changes in evaluation criteria, expected deliverables and assessment methods identifying forms of institutional work. It is supported by direct observation in key conferences which showcase the latest policy and planning decisions to achieving sustainable design. The benefits of using two distinct sources of data to build the analysis provides added credibility (Jick 1979).

## **CONCLUSION**

In answering the questions it is expected that this research would contribute to theory by advancing knowledge on "institutional work" as well as provide insight into problems of sustainable architectural design. There would also be implications for practitioners working in the domain of construction and design as new meanings, policy and understandings of how sustainability is evaluated are better understood and conceptualized. Tentative findings suggest that endorsement as a form of institutional work may play a stronger role than initially thought. This suggests that further explorations on issues of legitimacy, entrepreneurship and power may give greater insight into the mechanisms of endorsement enabling the wider expansion of dominant criteria.

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