Developing the building object: The role of cascades of visual representations
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Extended Abstract
Submitted to the International Workshop on “Giving visual and material forms to ideas, identity and imagination: Architecture, urbanism and sustainable construction”
WU Vienna, Austria, 12-13 May 2014

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Our work contributes to an emerging stream of research, which has begun to examine the organizational significance of giving visual and material form to ideas (e.g., Leonardi, Nardi, & Kallinikos, 2012; Nicolini, Mengis, & Swan, 2011). This research adopts a “practice approach”, by which visual and material objects are appreciated as parts of the everyday practices and routines of organizational actors (Meyer, Höllerer, Jancsary, & van Leeuwen, 2013). The practice-based lens is being applied also to the exploration of the built environment, with attention focused on the practices by which the building project is transformed into physical reality (Nicolini, 2007; Tryggestad, Georg, & Hernes, 2010). A focus on the everyday practices of architecture and design, in turn, brings into view the visual and material objects – such as hand-drawings, physical mock-ups, and digital models – that are mobilized in realizing design intentions (Ewenstein & Whyte, 2007b). In line with a practice-based view, such artefacts are viewed not as mere carriers of information, but rather as “active forces in the work of construction”, in that “they make specific things happen” (Nicolini, 2007, p. 577). The workshop paper develops our contribution, which consists of uncovering the practices by which visual and material objects are mobilised to gather consensus around a not-yet-existing object (i.e., the building). This aim is achieved through the analysis of ethnographic data from an architectural practice based in London, Edward Cullinan Architects, collected in both 2003 and 2012.

The theoretical background is offered by studies on design and organization, which shed light on the multiple roles that visual objects play in the formation and the subsequent articulation of design intentions. By acting as “artefacts of knowing” (Ewenstein & Whyte, 2007b), sketches, drawings and models do not merely represent the building object, but rather contribute to bring the building project into existence. The engagement with the visual material enables architects and designers to project the future state of the building (Tryggestad et al., 2010), by developing aesthetic knowledge based on sensorial experience (Ewenstein & Whyte, 2007a). At the same time, visual objects draw diverse constituents into conversation (Henderson, 1999), therefore maintaining interaction around the building project, and providing the ground for mediating among conflicting logics (e.g., aesthetic and functional logics; Groleau, Demers, Lalancette, & Barros, 2012; Tryggestad & Georg, 2011). To mention an example, Luck (2010) showed how interaction around a set of drawings maintain mutual orientation and awareness, therefore enabling diverse actors – architects and a group of users – to develop a shared understanding of the building design.

In addition to fulfilling the epistemic needs of the design process, visual objects are instrumental to secure commitment around a course of action, by virtue of their unique capability to persuade, convince, and enthuse. As suggested by Latour (1986) in his treatise on visualization and cognition, images are important to organizing insofar as they help in convincing others to take up a statement,
accept it as a matter of fact and pass it along. In this respect, visual objects can be usefully conceived of as ‘affiliative objects’ (Suchman, 2005), since they trigger relational dynamics of affiliation and dis-affiliation while circulating across organizational sites. As a result, an object-centred sociality (Knorr Cetina, 1997) develops through a series of intensified relations of affiliation (disaffiliation) among persons with aligned (opposing) orientations towards the object. For example, Henderson (1995) illustrated how a drawing-prototype pair went through a “political carrier”, by travelling throughout a production department in the role of a “recruiting sergeant”.

The process of mobilization can be achieved through a single representation, and more commonly through a cascade (Latour, 1986) or a directional chain (Goodwin, 2000) of visual representations, that converge to create a new type of vision. A cascade of visual objects, in fact, constructs an ‘objectified reality’, therefore contributing to muster allies around a course of action, while at the same time making more arduous for dissenters to move objections (Latour, 1986). A focus on cascades of visual objects points as well to a multiplicity of associated practices, such as for example moves of freezing (or unfreezing) the visual material to stabilize (or challenge) meaning (Whyte, Ewenstein, Hales, & Tidd, 2007), or shifting scales up and down to approach the building object in a series of trials and errors explorations (Yaneva, 2005). Such practices set the directionality and the tempo of the cascade, while also ensuring that visual representations are assembled in way of suggesting ‘optical consistency’ – i.e., a regular trajectory through space and time (Latour, 1986).

In this paper, we take a closer look at the process of mobilization, by exploring the visual practices by which a cascade of visual representations is enacted in order to gather consensus around a specific course of action. To this end, we use ethnographic data from the Herbarium and Library Extension project at the Royal Botanic Garden at Kew Gardens, Surrey, awarded to Edward Cullinan Architects (Figure 1). In particular, we present two vignettes taken from design meetings where architects, clients and consultants negotiate diverse access options to the future Herbarium. In the first vignette, we shed light on the relations of affiliation triggered by visual objects, and illustrate how diverse actors load such objects with their own intentions, while also projecting the expectations of their audiences (e.g., planning officers). In the second vignette, we show how visual objects are arranged into a directional chain, and are subsequently embedded into a stage report with a vision of winning the consensus of target audiences. The data suggest that decisions about what to bring to the foreground, and what to leave on the background, are central to mobilizing actors and entail dynamics of participation within the community of practice.

In both the vignettes, a variety of visual objects – such as the master plan, aerial photographs of the site, and engineering drawings of access options – are rearranged, annotated and commented, while being discussed in design meetings. While delving into assemblages of images, texts and notations, we address a number of questions arising from our readings of the literature on visual objects and practices: How is mobilization achieved in architectural and design practice through a cascade of visual objects? How do assemblages of visual objects trigger reactions of affiliation, by virtue of their materiality – i.e., their appearance, built-in affordances, and embedding? How is optical consistency achieved at the interfaces between different modes of visualization (e.g., digital and non-digital)? To address these questions, we analyze empirical data through the lens of practice theory (Nicolini, 2012), while also integrating insights from the literature on sociomateriality (Leonardi et al., 2012).

A few studies have already recognized the multiplicity of the visual objects involved in architectural and design practice (Whyte & Lobo, 2010), and have brought attention to the visual practices that emerge at the intersection of multiple media used for project delivery (Harty & Whyte, 2010). However, the current literature has paid less attention to the chaining of visual objects, in terms of the directionality arising at the interfaces between visual objects, and of the associations that unfold as such objects encounter the building constituencies. The primary contribution of this article consists of shedding light on the materiality, as well as the sociality of the cascades of visual objects used in architectural and design practice. Whereas studies in the sociology of science suggest that mobilization is achieved through a chain of ever simplified representations that reduce the complexity of empirical phenomena (Latour, 1986; Star, 1983), our data suggest that mobilizing actors in a building project requires to simultaneously maintain multiple levels of visual detail to enable actors zooming
in and out of the future building. As several representations are used synoptically, the building is projected as a unitary object, while also being reflected through a multiplicity of visions that are activated at different points in time, to satisfy the information requirements of diverse actors. By focusing on dynamics of mobilization, we contribute to further characterize the agency of visual objects, and show how they participate in the politics of the building project. In this way, we offer a complementary perspective with respect to the current literature on objects (see Nicolini, Mengis, & Swan, 2011), where visual representations are often portrayed as “carriers of knowledge”.

**Keywords:** Visual objects and practices, mobilization, cascades, practice theory, sociomateriality

![Figure 1. The Library at the Royal Botanic Garden at Kew Gardens, Surrey (UK)](image)

**References**


