Incorporating stakeholder interests: What is the role that material artefacts play in public engagement settings?

INCORPORATING STAKEHOLDER INTERESTS: WHAT IS THE ROLE THAT MATERIAL ARTEFACTS PLAY IN PUBLIC ENGAGEMENT SETTINGS?

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ABSTRACT

Public engagement is becoming increasingly commonplace globally, bringing with it unique sets of rituals and procedures that project managers must follow through. The disparate and divergent nature of stakeholder cohorts makes the management of these processes particularly challenging. Much attention has focussed on how the public can be identified as stakeholders to the project, and how they should be managed within this contested environment. Less attention is paid to the actual procedures that are involved, especially the role and use of material artefacts in public engagement processes. In this paper, we examine the material artefacts used in public engagement settings, in particular, how they are used to cross political knowledge boundaries. We take a socio-technical approach to consider these artefacts as nodes in a wider heterogeneous network. Using data collected through an ethnographic study, we show examples where material artefacts i) represent a form of power that is already in-play; ii) control and direct the flow of discussion; and iii) used to rally or promote points of view. By exploring the role these artefacts play, we seek to uncover and explain the highly politicised and value-laden network in which managers often have to operate.

KEYWORDS

Public engagement, stakeholder management, STS, material artefacts, power play

INTRODUCTION

One of the more contentious issues within project management, which has recently gained attention, concerns the way external stakeholders such as the public, who have no direct financial stake in the project and yet may be adversely impacted by the project's outcomes are managed. In response to public pressure, the practice of public engagement and consultation is becoming prevalent in many parts of the world. This provides an avenue for the public to vocalise their concerns and be involved in decision-making processes that have formerly been regarded as strictly state-related. The premise of public engagement is for the project sponsors to meet with stakeholders of the project in a systematic way to facilitate a two-way dialogue between participants (Rowe & Frewer, 2005). By engaging in these dialogues, project managers are provided opportunities to capture feedback on public projects from the public, which includes potential end users of the projects, and adjust the project to

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address thier concerns. By so doing, public engagement aims to incorporate legitimate decisions into the project that are 'broadly owned' (Legacy, 2012).

Despite its ideological aspirations, the practice of engagement is fraught with difficulties. As the range of stakeholders being considered broadens, so do the range of interests that the project needs to represent. The avenue for public engagement then becomes a contested space where stakeholders vie for their interests to be included (cf. Irwin, Jensen, & Jones, 2013). As such, the question then becomes to what an extent such a process can be effectively managed, and how those involved react to and interact with the many managerial strategies put in place. In this paper we explore the physicality of public engagement processes, taking a socio-technical approach that considers the material artefacts as integral nodal points in a heterogeneous network. We draw on the concept of boundary objects and black boxes, which both has basis in science and technology studies (STS).

We begin with a brief theoretical overview of boundary objects and black boxes, explaining how the development of a design concept can be conceptualised as a network formed as a result of alliances between human and non-human actors. In order to capture these alliances, we utilise a 'naturalistic' (Babbie, 2010) data collection approach based around ethnographic techniques. We focus the study on the formal public engagement events for public engagement of urban development projects in Hong Kong and make use of data collected from an ethnographic study to explore how material artefacts are used in these highly politicised and contested environments. The ethnographic observations showcase how material artefacts have the power to constrain, control, and direct the way stakeholders interact. The aim of the exercise is to explore the formation of stakeholder relationships during public engagement processes, especially considering the dynamic power relationships that are formed and disbanded in the process.

MATERIAL ARTEFACTS IN ORGANISATIONAL SETTINGS: BOUNDARY OBJECTS AND BLACK BOXES

The role that material artefacts play in spanning knowledge boundaries is often explored under the remit of the 'boundary object' construct. With its origins in sociology, a 'boundary object' is an object that intersect multiple social worlds, thus allowing agents to create meaning along the margins of their overlapping worlds (Star & Griesemer, 1989). The concept has been used in managerial studies to explain the use of artefacts including engineering drawings, project tools, and timelines to span knowledge boundaries (e.g. Carlile, 2002; Sapsed & Salter, 2004; Yakura, 2002). While we take inspiration from these studies, our focus moves beyond the artefacts as singular objects towards viewing these artefacts as part of a much wider sociotechnical system. To understand our approach it is first necessary to explain how the concept of boundary objects originated from science and technology studies (STS).

Within a STS worldview, the social order can be described as a power network made up of a combination of tangible and intangible elements. The network is held together by the strength of the alliances that makes up this network. These 'alliances' are formed during the process of spanning social worlds. For example, when a design

idea is turned into architectural drawings, which are then eventually transformed into a built form, the process requires spanning multiple social worlds. First there is the world of the design professionals who engage in verbal talk around design ideas. Then, the world of technical drawings which has a different (and much wider) audience. Finally, the world of construction professionals who must interpret the drawings and turn them into reality. The architectural drawings in this scenario may be described as boundary objects, but they are also part of a much wider network that includes architects and construction professionals. This network of human and non-human actors engages in actions that require them to form alliances with each other. In fact, when an intangible element (the design idea) is transformed into more tangible forms (design drawings), they stabilise part of the network by locking in the alliances that were formed as a result of previous discussions. The boundary object in this scenario does more than span knowledge boundaries; they become a reservoir for power by allowing an actor to delegate their power to that material. The 'power' held by tangible elements are evident in our everyday lives. As Latour points out, once a speed bump is installed, the local police officer can turn their attention elsewhere (Latour, 1991).

The way the social order is established is directly relatable to the extent to which material artefacts are utilised. As the network consisting of series of social practices becomes more established, more aspects of the network are transformed from intangible to tangible forms. Examples of these tangible forms include uniforms, medals, names, and signs (Callon & Latour, 1981). When a set of practices is strongly associated with a range of durable materials, they become stabilised within the power network, such that the associations no longer need to be considered. For example, instead of explaining the size and density of a proposed building in relation to each site, urban planners may simply refer to the site's designated plot ratio.

When these associations become taken for granted they, alongside the materials they are associated with, are put into 'black boxes' (Callon, 1986; Callon & Latour, 1981; Latour, 1987). The 'black-boxing' concept may be appropriated to managerial settings, and to some extent, dovetail with some of the characteristics identified by Carlile (2004) as part of his 'integrative framework' for managing knowledge across political boundaries. But rather than focusing on characteristics of the object, a 'black box' is always considered in relation to the rest of the network, as all elements are intricately linked in such a network. The exploration of black boxes places the emphasis on the relationships and alliances within a network, rather than on its disparate components. Going back to its STS roots requires us to acknowledge and explore how the multiple elements of a network, both tangible and intangible, work together; and how they in turn form the power networks that make up the 'social order'.

RESEARCH METHOD

This paper draws from a larger research project that investigates the public engagement phenomenon in Hong Kong. For this research project, qualitative data were collected over 34 months using ethnographic techniques including participatory observations, ethnographic interviewing, and document analysis by the primary author. By immersing into the field, an ethnographic account aims to trace the

symbolic forms, patterns, discourses and practices that give a phenomenon its essence and defining characteristics (Willis & Trondman, 2002). The project used an 'iterative-inductive research approach' (O'Reilly, 2005) which evolved in design throughout the study.

In the following section, we first present an overview for how public engagement is conducted in Hong Kong, before presenting three observations that explores how participants express their values through interacting with material artefacts that are embedded into the public engagement event format. These observations are drawn from numerous events and display the characteristics of a 'multi-sited' ethnographic approach. A multi-sited approach treats the objects of study as emergent and argues that actions taken by individuals may be assembled into a structural network of relations deemed pertinent to the type of scenes witnessed, rather than by the specificity of the issues discussed (Marcus, 1998). These observations are presented as 'thick descriptions' (Geertz, 1973) to communicate the cultural nuances of the actors engaged in the events. Ethnography rests on the "peculiar practice of representing the social reality of others through the analysis of one's own experience in the world of these others" (Maanen, 1988, p. xiii); it is a personal and reflexive exercise that nonetheless forms the base for wider comparison across settings. The experience, and specifically the researcher's experience, is central to ethnographic studies, both empirically and theoretically. To stay true to this ethnographic tradition, the personal voice of the primary author is used liberally in the ethnographic accounts that follow.

PUBLIC ENGAGEMENT IN HONG KONG

The type of engagement that we are about to describe can be classified as 'non-statutory' public engagement, as it is not legislatively enforced. However, although there is no formal written consensus for how public engagement should be conducted in Hong Kong, reviewing public engagement processes for the past 8-10 years shows that the protocol for public engagement is set to 2 or 3 general stages. The premise is to present a draft design plan to the public and seek the public's input before progressing to the final stage of design. A 2-stage public engagement strategy would begin engaging with the public at a more refined stage of design, whereas a 3-stage strategy would begin engaging at a more preliminary stage of design. In other words, a 2-stage strategy begins the public engagement at a similar stage to Stage 2 of a 3-stage strategy. The formal events of each stage involve face-to-face interaction with a public audience, usually in a town hall meeting style session. At the end of each stage, a consultation report is generated by the project owner, which is published online. The project team will aim to incorporate the feedback collected into their final design, which is then developed into their formal application to the Town Planning Board for funding and approval.

Typically, each stage of the public engagement process lasts for two to three months and is interspersed with a period of one year or more for analysis of comments received and preparation of an updated plan. Each stage usually consists of a combination of several types of activities: a "roving exhibition" where the plans are put on display; a series of gatherings in a more intimate setting to garner views from the community (such as focus groups or community workshops); and a large-scale

public forum. The public forum takes the form of an 'open mic' session which begins with each participant being given feedback forms to fill in. Completed feedback forms are entered into a ballot box and drawn out at random, and those that are selected are given a chance to voice their comments. An expert panel consisting of academics and professionals, who have an understanding of the project, are on hand to respond to the public's comments or answer their questions, if they are of a technical nature. The workshops and forums are usually held in a civic building, such as a lecture theatre, school hall, or community hall, which the organiser deems to be 'neutral' in the sense that it is not affiliated with any particular interest group.

OBJECTS FROM PUBLIC ENGAGEMENT EVENTS

THE BALLOT SYSTEM

The physical box from which ballots are drawn epitomises the ballot system, and the ballot box often becomes the focus of attention during an event. This leads to a wider acknowledgement of the ancillary artefacts surrounding the procedure for conducting the ballot, such as the feedback forms and the registration procedure. It has already been established that the rules for drawing ballots are often contested. In some instances, the anger and frustration held towards the voting system may be directed to other objects within close proximity to it:

> Discussion became heated as the event progressed. Speakers voiced their concern that the completed development will not match the images shown in the video, and that the numbers published in the socio-economic study were incorrect. When discussion about these technical details could not be progressed, hostility began to be directed towards the format of the forum, the mental capacity of the event host, and the legitimacy of the ballot. When a few speakers representing the same interest group were picked in a row, a couple of men from local villages shouted that the ballot was unfair because the box was somehow rigged, even though it was clear plastic and completely transparent. [Public forum, Sept 2013]

There is a juxtaposition between the lofty idealism associated with public engagement and the mundane realism of a ballot box. The attention that is paid to the box, its physical dimensions, its literal transparent nature, and the way the hosts ceremoniously draw ballots from it, are significant to the successful running of an event. Similarly, clear signage to mark the amount of time a speaker has remaining to speak, plays more than a pragmatic role in event planning. The interface between the participant and the event is regulated by the ballot system, and the ballot system is in turn regulated by the action of drawing ballots from a box. The ballot box holds the pragmatic and literal function for transferring knowledge, and yet its role as a boundary object was challenged by the participants present. The ballot system is a mutually agreed set of rules to ensure the procedure is conducted fairly. But it also acts as the means of controlling the order and direction of traffic through relegating potential speakers to a randomised time slot. To the disinterested observer, an attack on the validity of a transparent ballot box would seem to bypass rational argument. Yet, it still points to the acceptance of a power structure that encompasses a ballot

system. None of the participants at any of the events observed based their argument on whether there should be a ballot system: that is already taken for granted; it has been 'black-boxed'.

THE MICROPHONE SYSTEM

If the public forum is promoted as a way to 'give voice' to the public, then the microphone is the physical manifestation of this 'voice'. It is through the use of microphone equipment whereby the common 3-minute time limit for speakers may be enforced. Being in control of the microphone equipment also means that the organisers have the discretion of allowing an audience member to finish speaking if they exceed the time limit, or not. Consider the following public forum, attended by around 200 participants. The participants who attended this event were very distinctively split into two demographics: young to middle aged expat residents who spoke little to no Cantonese, and elderly local residents who spoke little to no English:

> The event organisers provided real-time translation of the proceedings through interpretative headsets for those who did not speak Cantonese. Additionally, after each of the expats made their speech, the event host gave a brief overview of their main points for the benefit of the members of the audience who do not understand English. This procedure soon became contentious when a young Cantonese-looking man wearing a white polo shirt interrupted the host to say that he was mistranslating the last speaker's comment, and that the host missed out the point about "the hospital" (putting in an alternative route through the hospital complex). The host responded by saying that their main point is not to translate word-for-word, and that the event was being recorded by technicians who understand English and all comments will go into the official records. The young man requested, and was given, a microphone; and he used it to make his case. He knows it's not his turn, he said, but he feels that his group is being misrepresented. As he spoke, his speech became increasingly emotional and irate, until several members of the audience, myself included, felt obliged to correct him: "No, he did talk about the hospital", I muttered in Cantonese (other discordant voices emanating from the audience at large were also making the same point), "but he called it by the hospital's name, 'Tung Wah'". After a while (2 minutes, maybe?), his microphone was switched off; and without an amplified voice, he had no choice but to sit down, looking disgruntled. [Public forum, April 2015]

Just as the ballot box is key for the enactment of a ballot system, the microphone is essential for directing voices and allowing speakers to be heard one at a time. The fact that this particular event involved translating between two languages added another obstacle to the task of 'giving voice' to participants. It also demonstrates the difficulties participants face in representing their interests across this language barrier. In this scene, the young man's quest to represent his group was hindered by the lack of control he had over the language it was conveyed in. The young man sought to speak out of turn and attempted to take over the role of the event host to translate between languages. However, he failed to align his own interest with those of other

participants, as the other participants did not accept his Cantonese translations. When the microphone was switched off, it bluntly terminated the young man's ability to voice his interests and participate in the value co-creation process. It is such a blunt act, in fact, that it is usually not employed unless a participant resolutely refuses to yield the floor. Before the extreme act of shutting off the microphone, speakers are usually given fair warning by the event host politely informing them their time is up. After such a disruption, a host will also often remind participants that they may submit any further comments they have as a written submission. The constant reference to a written account seems appropriate, since after all, the public engagement report produced at the end of each stage is the sole reference point summarising the proceedings for future readers.

THE TECHNICAL DOCUMENTS

Scientific texts may be viewed as not only a production of scientific knowledge, but also as a means to an end for the scientist to establish their worldviews and persuade others. Similarly, the technical documents that are disseminated at public engagement events take on multiple roles. They represent the technical world as constructed by the project team, and they help to transfer knowledge about the project to a wider audience. Once within the public domain, participants use them in different capacities to advance an argument about the project. Different meanings are assigned to the objects by agents who participate in a public engagement event setting. Hence, when these documents are challenged, it is the meaning participants have assigned to the documents that becomes the point of contestation. Consider the following observation from a community workshop:

> The design schemes were presented as standard zoning plans, accompanied by architectural site cross sections and some artists' renditions. During the group presentation at the end of the workshop, one group's representative voiced his dissatisfaction with the material provided, and said defiantly to the event organisers that: "we cannot understand the blobs and the squiggles of this so-called zoning plan; it doesn't show the height or the real impact, so why don't you come back with a 3D perspective and then we can have an honest discussion!" [Community workshop, June 2013]

This comment exposes the difficulties of communicating across knowledge boundaries. The speaker rejects the validity of a zoning plan and instead proposes the use of 3D perspective drawings; the point of contestation is the physical representation of a series of technical details that include building height, density, and visual impact. These types of information may be represented in a factually correct manner in either form, although it is arguably easier to understand as a 3D perspective drawing. A comparable but conflicting set of interpretations to technical drawings were experienced by the research subjects in Woodcock *et al.*'s (2012) study. The study gauged the reaction by local residents to different types of architectural representations and found that buildings represented as solid blocks with little architectural details were likely to have its height and bulk misinterpreted by laypersons. The same information presented as architectural 3D rendering was easier for laypersons to understand, yet the local residents were likely to conclude that they

were being misled by developers; that the built reality would not reflect the version shown to them in the focus group; and that the drawings were used to seduce and manipulate them into agreeing to a scheme they may later regret.

The results of Woodcock et. al's study seems to contradict the scene observed at this event, but what it really reveals is the difficulties of boundary objects to cross political boundaries (cf. Carlile, 2002, 2004). This view acknowledges that transfer of knowledge in situations where interests are misaligned needs to also take into consideration the political consequence that may arise as a result of the knowledge transfer. By acknowledging the role of vested interests embedded in the production of technical documents, this view also helps to make sense of why some modes of representation may be accepted and others rejected. When a piece of technical knowledge is presented as a 'proposed design drawing', its meaning may still be open to co-production through negotiations and contestations with participants who engage with the material. But once the piece of technical knowledge is accepted as a product, as in the case of a published report or statistic, its role within a power network shifts into a more stabilised state. Like the ballot system or the microphone system, it may then be used by agents participating in a power network as a way of delegating their power to more durable materials.

DISCUSSION AND CONCLUDING REMARKS

The observations presented in this paper demonstrate examples where material artefacts are used in different ways by various stakeholder who attend public engagement events. Since the aim of public engagement events is to capture the feedback from the public, they are exemplified by the attendance of large cohort of stakeholders, who break from their usual living routine to come together to discuss a particular project, within a specific and well-defined timeframe. They come and go throughout the engagement process and an attendee who may be present at one event may decide not to attend the next. Because of the disparate nature of the attendees, the format of the event plays a significant role in providing the event with a sense of cohesion and authority.

The event has been imbued with cultural expectations and normative moral values, which influenced the way attendees can interact with each other. As the observations demonstrate, the material artefacts play an active role in the management framework of these proceedings. Although intended as mere 'tools' to facilitate the proceedings, they in fact contribute to control or restrict what attendees can do. They do so by directing the flow of communication between participants, by controlling the level of discourse that can take place, and by containing the knowledge that can be transferred from one party to another. It is more than likely that material artefacts have a similar effect on other organisational settings. But because public engagement events are often contentious and acrimonious, the way these artefacts have become 'power' in a reified form becomes more readily observable. One of the advantages of introducing an STS framework to examine stakeholder relationship is in its focus on the process rather than the outcome of stakeholder relationships, thus providing insights into the evolving and emergent nature of stakeholder relationships (e.g. Missonier & Loufrani-Fedida, 2014). By critically evaluating the material artefacts as part of a

socio-technical network, this study hopes to broaden the utility of an STS approach to study power relations in different organisational settings.

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