

TO SUBMIT IS TO RELATE

A study of architectural competitions within networks of
practice

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Table of Contents

Table of Contents	2
Table of Figures.....	6
Abstract	7
Declaration	8
Copyright Statement.....	9
Acknowledgements	10
<i>Chapter 1</i> Competitions in architecture	11
1.1 The practice of architectural competitions	11
1.2 The formal language of competitions.....	18
1.2.1 Design competitions	19
1.2.2 Formal competitions without a design component	21
1.2.3 Frameworks	22
1.2.4 Implicit competitions	22
1.2.5 Categories of competition as an empirical problem	23
1.3 Plan for the argument	24
<i>Chapter 2</i> Architectural competitions and architectural practice	30
2.1 Two approaches in tension	30
2.2 Objects and architectural practice.....	31
2.2.1 Objects and practice as a recent research problem.....	31
2.2.2 Objects and practice through micro-ethnography	33
2.2.3 Objects and practice through ethnography	34
2.2.4 Objects and practice versus the categories of competition	37
2.3 The missing objects of architectural competitions	39
2.3.1 The competition as a site of convergence.....	39
2.3.2 The competition as a matter of language	41
2.3.3 The competition and interior processes	45

2.4 Objects and practices meet strategy and judgment.....	47
<i>Chapter 3</i> Competition, language and practice	50
3.1 Connecting objects and practices with categories and formats.....	50
3.2 Actor-network theory.....	52
3.3 Relationality	55
3.4 Agency.....	58
3.5 Language within practice	61
3.6 Detours and translations.....	65
3.7 Objects, practices and <i>things</i>	67
<i>Chapter 4</i> Journeys through the agency of competitions	70
4.1 Taking ethnographic journeys.....	70
4.2 Speaking and writing	71
4.3 Organising competitions	73
4.4 Teaching competitions.....	74
4.5 Preparing an entry	74
4.6 Exhibiting competitions	75
4.7 The technologies of the competition	76
4.8 Conclusion	76
<i>Chapter 5</i> First journey: narrating competitions	79
5.1 Competitions in the speech of architects	79
5.2 Architects on competition documents	81
5.3 Architects on entering competitions.....	85
5.4 Architects on competitions and time	89
5.5 One competition, different narratives.....	92
5.6 Competitions in the British trade press	94
5.7 Conclusion	97
<i>Chapter 6</i> Second journey: the documents of competition.....	100
6.1 From speech to print.....	100

6.2 The project	101
6.3 Movements through the project	103
6.3.1 Comparison through transformation	103
6.3.2 The competition within the project as a whole	111
6.4 DEPICTIONS OF PROCESS within documents	116
6.4.1 The tenders	116
6.4.2 Outside the tenders	120
6.5 Conclusion	124
<i>Chapter 7 Third journey: students in competition</i>	127
7.1 Adding participants to competitions	127
7.2 Objects and practices within the classroom	129
7.3 Presentations	131
7.4 Competition boards	136
7.5 A competition within the school	143
7.6 Conclusion	149
<i>Chapter 8 Fourth journey: designing for competitions</i>	152
8.1 Observing the practice of preparing an entry	152
8.2 Outside the studio: describing routine	154
8.3 In the studio: responding to surfaces	161
8.3.1 Working alone	162
8.3.2 Working together	166
8.3.3 Meeting	168
8.4 Conclusion	171
<i>Chapter 9 Fifth journey: Exhibiting competitions</i>	175
9.1 A situation specific to competitions	175
9.2 The boards	179
9.3 From boards to exhibition	180
9.4 Conclusion	185

<i>Chapter 10</i> Bringing the journeys together.....	188
10.1 New dimensions of architectural practice	188
10.2 COMPOSITION	189
10.3 BOUNDEDNESS.....	191
10.4 SIMULTANEOUS MOVEMENT	193
10.5 PARALLEL TRANSFORMATION	194
10.6 PHASING: from COMPOSITIONS to BUILDING SCRIPTS.....	195
10.7 COMPARISON	196
10.8 Conclusion: Objectification, detachment, COMPARISON.....	197
<i>Chapter 11</i> When architects submit	200
11.1 First contribution: architects and relationality.....	202
11.2 Second contribution: language and practice.....	205
11.3 Third contribution: methodological journeys	208
11.4 To submit and relate	211
References	213

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Table of Figures

Figure 1 Questions within the 'Invitation to Mini-Competition'	108
Figure 2 One tender's response to Question 7 in the 'Invitation'	109
Figure 3 The 'Evaluation Tool'	110
Figure 4: Compositions of the top three entries in the ArchTriumph 2014 Sky Pavilion competition (none is from 'Atelier Eco')	142
Figure 5: The region of the studio where the PPP team worked	160
Figure 6 A comparison of the compositions of schemes A and B	177
Figure 7 GCSS competition exhibition website.....	178
Figure 8: The exhibition, including several boards, models and the voting station	183
Figure 9 One display in the exhibition included a site model and handouts.....	184

Abstract

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Doctor of Philosophy

To submit is to relate: A study of architectural competitions within networks of practice

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This is a study of architectural competitions as they engage with the design practices of architects within the UK and Europe. Since only one firm or one design emerges at the end, and the project programme exists prior to the submissions, there tends to be a gap between programme and practice, past and future, language and situation. It is the aim of this research to investigate what changes in our understanding of architectural practice when we acknowledge that architects work to linear *programmes* and submit *deliverables* within the set of relations that make up the competition. In conducting this research I address a gap in the social scientific understanding of architectural practice. While ethnographies of architectural studios have described the way design emerges through an interplay of humans and nonhumans, formats or structures like the competition have not yet become analytical categories in the ethnographic literature.

To bridge what seems like a gap between the immaterial world of the competition and the material world of the studio, I draw from actor-network theory to view the competition as a set of relations that include objects and practices. Considering the technology of the competition, I follow five different strands of research. I identify the *matters of concern* that architects talk about when they talk about competitions; examine the documents involved in administering a competition; follow an atelier at an architectural school where students participate regularly in competitions; observe the Office of Metropolitan Architecture prepare a concept design; and visit an exhibition of submissions. Here I describe the ways in which competitions come together within the practice of architects.

This study makes three contributions. First, the study adds to our understanding of architecture as a set of relations, rather than a stable identity. The second contribution has to do with language and practice, demonstrating that 'big' categories like 'building' nevertheless act within collectives of architects, clients, contractors and so on. A final implication is for methods. Since certain categories exist *between* sites, organising the activity of actors in different offices across what might be hundreds of miles, ethnographic fieldwork on architecture can become fragmented and multi-sited. The implications of the architectural competition for an ethnographic understanding of architectural practice, then, are to see more and 'bigger' collectives within the lives of architects.

Declaration

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Chapter 1

Competitions in architecture

1.1 The practice of architectural competitions

This is a study of architectural competitions as they engage with the design practices of architects within the UK and Europe. The world of competitions is filled with formal categories for process, from names of procurement routes to names of documents. But within the determinacy of a competition programme is an indeterminacy of who will be selected and what the selection will be like. For architects who submit to competitions, a regular presence is a list of deadlines and events: when the full brief arrives, when the site visit is or when to submit a design or information about the firm. The competition from the start tends to have a category: a design competition, a public tendering procedure, a Public-Private Partnership. Here is the practice of producing a building described in advance. Yet since only one firm or one design emerges at the end, and the project programme exists prior to the submissions, there tends to be a gap between programme and practice, past and future, language and situation.

I arrived at the competition as a research problem after an academic upbringing in a climate of greater attention to objects and materials. Texts such as Ingold (2000) and Latour (2005a) had helped bring into ubiquity debates from earlier decades about the deterministic qualities of 'meaning', 'form', the 'social', 'big' concepts often taken in the social sciences to stand in for everyday interactions. The upshot from much of this work is that action has to take place along with something, from tools to work surfaces to buildings to landscapes. Processes that appear to be representations shown as images or words within the human mind, 'culture', 'meaning' and so on, sustain themselves alongside constant encounters with objects and surfaces. This kind of analysis extended to architecture, where research drawing since the turn of the millennium from Science and Technology Studies examined within the everyday work of architects interactions with objects that in other research would have seemed too fleeting or mundane to pay attention to (see Houdart, 2008; Houdart and Chihiro, 2009; Loukissas, 2012; Cardoso Llach 2015; Rose et al., 2014; Yaneva, 2005, 2009a, 2009b). With the question of what a building 'is' emerging moment by moment, its ultimate form a succession of partial views rather than an originary idea within the 'mind's eye', a focus on objects and practices brought with it an understanding of architectural time. In the place of a straight line from idea to building

was a continuously emerging environment, where only by intervening within this environment was it even possible to cut off the process of development (see in particular Yaneva, 2005). The timeline of architecture became closer to a meandering stream.

Yet at the same time, paying attention to the architectural press, it was difficult for me to avoid the presence of the linear. One phenomenon where this is especially strong is the architectural competition. In architectural journals, competitions are announced with a clear set of dates: when the submissions are expected, when the shortlisting takes place, when the client declares a winner. Accompanying the promise of a timeline are further stories: the shortlisting has indeed taken place, a winner has indeed been announced. Often there are tussles with the unforeseen. A client might reject all entries on the shortlist and send 'a raft of big name practices going back to the drawing board' (*Architect's Journal*, 27 November 2013), or a client 'rips up [the] shortlist after legal challenge' (*Building Design*, 7 December 2012). These are occasions of controversy and blame. In the running of a competition, to meander is to deviate. A timeline, if impossible in studio ethnography, becomes normative in competitions. And at the same time, even if we do take as straightforward the progression from announcement to bids to shortlisting to selection, in the competition there is necessarily a moment of indeterminacy: the question of who (or what) will win, or even whether a selection will take place at all. Thus as recent STS-inspired scholarship on architecture moves away from timelines, plans and determinism, in the competition these things assert themselves again. With the competition is an opportunity to elaborate on or even challenge the ethnographic literature on architecture.

In conducting this research I address a gap in the social scientific understanding of architectural practice, particularly among recent research within Science and Technology Studies. Over the last two decades, ethnographers have sought to open as a research problem what was once consigned to the category of minutiae: the everyday practices of architects and the objects that accompany them (see Houdart, 2008; Houdart and Chihiro, 2009; Loukissas, 2012; Cardoso Llach 2015; Rose et al., 2014; Yaneva 2005, 2009a, 2009b). Instrumental in this research is the idea, inspired by scholars writing within the tradition of actor-network theory (e.g. Latour, 2005a for an introduction), that seemingly mundane objects become participants within moment-to-moment activity. Here, 'programmes of action' (see Latour, 1999: 176 - 178), macro-level claims such as 'This is a social interaction' or critique such as 'This is actually capitalist ideology' (as in Latour,

2004) cannot determine the way a situation takes place or holds together. Instead, say scholars of ANT, every 'big thing' (as in Jacobs, 2006) has to be sustained through many complex interactions, the course of which these scholars aim to follow by examining specific objects. Thus in architecture, say recent ethnographies, buildings as 'big things' that appear to be reflections of 'context' (see the criticism of Yaneva 2009b: 99 – 107) or taken-for-granted backdrops (as in the critique in Strebel, 2011 of Lees, 2001) can, and should, be described as processes by which human and non-human actors assemble and remain together.

The gap I demonstrate (Chapter 2) is this: While ethnographies of architectural studios have described the way design emerges through an interplay of humans and nonhumans (c.f. Houdart, 2008; Houdart and Chihiro, 2009; Yaneva, 2005, 2009a, 2009b), formats or structures like the competition have not yet become analytical categories within the literature. This is a matter of scope: the ethnographic research looks at situations of bodily activity, the ability of objects and surfaces to organise the work of design. When 'the competition' is not visible in these situations, it does not appear within the research. On the other hand, scholars in management studies have *begun* their research with the figure of the competition (c.f. Kreiner, 2009, 2013; Svensson, 2009; Van Wezemael, 2011). However, so far this research has focused on language, beginning with the 'big thing' of the competition already taken to exist as an object of investigation, its objects and practices stable and recessive. While some competition research draws from ANT (as in Valand 2009), by and large the current scholarship on architectural competitions have not considered their research object as a 'big thing' that is held together through objects and practices. The competition instead becomes a fact of strategy, judgment and deliberation.

If we as investigators of architectural practice in the recent STS tradition are to account for what takes place within the discipline of architecture, it becomes important to address the gap between studies of architectural practice and studies of architectural competitions. For contemporary ethnographic work on architecture has yet to take the *construction industry* as a unit of analysis (Sage, 2013). As developments such as 'Design and Build' procurement in the UK offer an opportunity to re-evaluate received wisdom about the role of architecture and construction (Sage, 2013), it seems clear that any investigation into architectural practice would miss something vital if it were to look the complex objects that move through a particular construction industry. Clearly architects encounter 'big' things like laws and organisations along with 'small', graspable things like models and drawings.

The competition offers one such example of a 'big thing' that architects in the UK and Europe engage with in some way or another in their working lives, even if they simply consider the possibility of entering one before working only on repeat commissions. These two literatures, the STS-inspired ethnographies of architectural practice and the management studies scholarship on competitions, have not yet come together to account for the material world of architectural competitions, where competitions and practice exist together.

It is the aim of this research to investigate what changes in our ability to understand architectural practice through an STS-inspired lens when we acknowledge that architects work to linear *programmes* and submit *deliverables* within specific sets of relationships. With each new competition is a new configuration of *what architects do*, *why they do it* and *whom they do it for*. I ask how design *within a situation of competition* proceeds along the possibilities offered through the *objects* of that situation. At the same time, looking at objects and practices, we can see how the situation of competition *comes together*, not *above* architectural practice but *on the same plane*.

I direct this research toward recent work at a meeting point of anthropology, sociology and human geography the existence of which can be traced in large part to concerns within actor-network theory. In laying out the scope of this study, it is important to clarify that I am interested in bringing out the dynamics of contemporary architectural practice. Ethnographic research on the work of building design has revealed particular dynamics and interactions that until recently tended to escape the notice of social sciences. My aim is to ask how this analysis changes when consider objects of industry-wide practice such as architectural competitions, objects that seem to presuppose certain claims about architecture (e.g. 'architecture is linear'). By adding competitions to the repertoire of STS-inspired analysis, it becomes possible to describe even more dynamics of architectural work, dynamics that may have remained hidden otherwise. As such, this research is less concerned with a deep historical analysis of competitions. Nor is it concerned with a critique of the competition. At the same time, further research could connect this study to history or criticality. The dynamics I describe throughout the empirical analysis might make for historical variables ('How long have competitions been like this?'). These dynamics might also make for the elements of critique. Indeed, criticism of architectural competition has often been steeped in claims about cost and time (see RIBA, 2012), rather than in qualitative claims about technology, movement and relationality. Thus, while

my research continues the focus of architectural ethnographers on describing the present, it seems possible to move from this research into a more historical or critical direction.

To bridge what seems like a gap between the immaterial world of the competition with the material world of the studio, I view the competition as a set of relations where documents and images have as much a role to play as words. The way I approach this argument is with inspiration from actor-network theory (Akrich, 1992; Latour, 1999, 2005a, 2005b, Yaneva, 2009c). As we see in analyses of architecture that draw from ANT, we can describe buildings in terms of the activity of architects, politicians, organisations, drawings and so on (Yaneva, 2012). It is misleading to look *above* the building itself to concepts like nationality, culture, history and so on, as long as these things are left to subsume the particular processes through which a building takes shape (Yaneva, 2012: 9 – 16).

Scholars working with an eye toward ANT tend to bypass things like essences and forms in discussing the way something has come to be, whether in the case of buildings (as above), aircraft (Law, 2002) or atherosclerosis (Mol, 2002). Architectural competitions lend themselves to this kind of analysis. Competitions are difficult to pin down and easy to explain by turning away from process and toward the essential: sets of categories, names of procedures. Instead of these kinds of claims, I look *inside* competitions (as much as there can *be* an inside to something so amorphous and dispersed) for the ways in which they hold together, persist and transform. We already have some actor-network theoretical studies of competitions (Paisiou, 2011, Valand, 2009, Silberberger et al, 2014), but so far only Valand (2009) and Silberberger et al (2014) look at the circulations of individual documents between places, and so far through a cursory naming of moments *within* particular competitions. There has not been an attempt to account for the material-pragmatic basis for the competition itself. The goal of this study, then, is to widen the scope of research on architectural competitions to include design practice as something that encompasses both humans and non-humans.

Further, since my aim is to take something that often appears as a set of abstract claims about a building project that has not yet taken place, the architectural competition, I follow Schmidt et al. (2012) in addressing common criticisms of an ANT-based approach. For instance, Schmidt et al. note that ANT-based accounts 'have been criticised for their potential as a platform for political resistance and engagement' (76) by implying the existence of 'seemingly totalising actor-networks [...] that seemingly impair rather than improve [actors'] capacities to resist and speak or act differently' (76). In this line of

criticism, actor-network theoretical approaches ignore or even hinder efforts directed toward change. Yet as Schmidt et al. (2012) continue, often the introduction of new actors in empirical descriptions is itself a form of potentiating change, offering up new avenues and objects of action. In any case, by exploring ways in which the apparent abstraction of the competition exists within the everyday practice of architecture, I expose to possible future critique a set of actors that might otherwise seem removed from the realm of ‘small’ interventions in the material world.

In my approach, then, any strategizing, description, representation or deliberation takes place within the same situation as the practice of design. Here the production of a competition entry is less a counterpoint to the project programme, a clash of theory and practice, than something that has to *incorporate* the programme as one object among many. Practice does not oppose the formal definition of the competition but *works with it*. Thus I thus follow competitions as *things* (Latour, 2004, 2005b) that emerge through particular collectives of human *practices* that incorporate nonhuman *objects*.

Considering the technological affordances of the competition, I follow five different detours (Latour 1999: 178 – 180), possibilities for acting with particular objects. I identify the complex, collective *things* that architects talk about when they talk about competitions; examine the documents involved in administering a competition as they mediate relations between contractors, architects, consultants and clients; follow an atelier at an architectural school where students participate regularly in competitions; observe the Office of Metropolitan Architecture prepare a concept design; and visit an exhibition of submissions for one design competition. Here I describe the ways in which competitions come together within the practice of architects. To do this, I group the objects and practices that assemble around the competition as *elements* and *arrangements*, which I denote with SMALL CAPITALS so the reader can trace them through the text. Each strand of the research reveals a different but overlapping set of elements and arrangements. Together, the elements and arrangements that we find within the different strands *add up* to a view of the way competitions engage with architectural practice.

The competition *submission* plays a crucial role, holding together a number of other relations that allow architects, clients, contractors, consultants, funding bodies and others to act on one another over a distance. First, submissions, like competitions themselves, are divisible into BOUNDED elements, which take the form of regular presences within the work of architects: perhaps a kind of document or drawing, a category for a building, or a

trajectory of a firm. Second, competition submissions are COMPOSED. Their elements are complete and BOUNDED while the COMPOSITION is nevertheless a product in itself, an object of work. Thirdly, architects work on submissions as COMMUNICATIVE ELEMENTS, rather than as *buildings*: it is in presentations to and deliberations of a jury that they become BUILDING SCRIPTS. Fourth, submissions include DEPICTIONS OF process, evoking an operation that has not yet taken place. Fifth, elements move together to the office of the client: in this SIMULTANEOUS MOVEMENT, a submission leaves one set of relations and enters another. Sixth, competition entries sustain a series of PARALLEL TRANSFORMATIONS, taking separate but similar trajectories alongside one another. Throughout all of these arrangements, what is key is that submissions *objectify* both a design team and a building and *detach* from the world of the submitter. The submission allows architects to enter a network of project participants acting from separate offices, relating to one another through meetings, email and formal documents.

This study makes three contributions to the STS-inspired literature on architectural practice. First, the study adds to our understanding of architecture as a set of relations, rather than a stable identity. Architects do not merely *design buildings* but produce objects that act in particular ways within the specificity of a project. The ‘deliverables’ that architects produce respond to the actors that make up the world of the architects for a particular project: contractors, a multi-firm project team, a client no architect will meet until selection, a developer leading a consortium for a Public-Private Partnership, whatever the situation might entail. Thus a competition entry acts within a specific pattern of architectural process: the project programme. This is possibility of telling a story where Architects A through G submit entries at date D, end up on a short-list at date E and present to a client at date F.

The second contribution has to do with language and practice. Recent ethnographic studies of architecture show how one category that seems essential or stable, *the building*, turns out to be multiple, having a different sort of reality in different sorts of situation. At the same time, this study of competition demonstrates that ‘big’ categories like ‘procurement route’ nevertheless act within collectives of architects, clients, contractors and so on. The language we find among architects and clients comes to *matter* because it organises architectural work in different ways. Thus it becomes important to attend to individual documents, interviews with management and conversations among practitioners.

A final implication is for methods. Since certain categories exist *between* sites, organising the activity of actors in different offices across what might be hundreds of miles, ethnographic fieldwork on architecture can become fragmented and multi-sited. The implications of the architectural competition for an ethnographic understanding of architectural practice, then, are to see more and 'bigger' collectives within the lives of architects. I suggest that it is possible to apply a similar multi-stranded study to other 'big things' within a specific construction industry (not least the notion of a 'construction industry'), such as the RIBA Plan of Work, the notion of 'Soft Landings' in handing over construction projects and specific procurement routes such as the Private Finance Initiative, which have complex stories of their own to tell. Each contribution has a separate role. The first contribution is empirical, directed to the way STS-inspired research on architectural practice understands what it is to do architecture. The second is theoretical, engaging with an apparent ontological difference between language and practice in ethnographic studies of architecture. The third is methodological, with the implication that ethnographers of architecture can begin research with a fraught 'thing' as well as a specific architectural practice.

1.2 The formal language of competitions

This study looks at competitions in Europe with a focus on the UK. The regional focus is possible because of the legal situation in which European competitions take place, but also because competitions in this setting tend to be described through similar sets of terms. Competitions exist through architectural practice (the concern of the study), but they also exist through a particular *vocabulary*. To understand the practice of participating in competitions, it is helpful to understand the terms through which architects, journalists, clients and so on speak and write about them.

Architectural competitions are puzzling for practice in part because so much official discourse exists about competitions in the abstract that it can be difficult to tease out the specific activities through which architects participate in them. To introduce the question of competitions and everyday practice, then, I begin with a brief review of the formal language of architectural competition in the European context, emphasising the UK. After bringing out sources of tension within the language itself, I lay out a map for the rest of my argument.

The language of competitions has a lot in common with the language of *procurement*. Fundamental within the categories that circulate in the British construction industry is the *procurement route*. The professional body of architects in the UK, the Royal Institute of British Architects, publishes a book called *Which Contract?* (Clamp et al, 2012) that serves as a guide to construction management in the UK. The book defines the procurement route this way: ‘The term “procurement method” is used to describe the often complex network of relationships which are formed between clients, consultants and construction companies, to enable a building project to be realised’ (Clamp et al, 2012:15). The infinitive ‘to enable’ here is telling: this is an ideal process, something that can be spoken or written about even before it has taken place. A category for a procurement route (or method) spells out a pattern of activity: who sends what to whom and when, who is responsible for what, how payment is to be dealt with. What is important for our purposes is that every procurement route has to specify some kind of selection process. In the discourse of procurement are several types of competition, each belonging to different sorts of procurement methods. What I describe in this section are ideal processes. Only over the course of this study will I move toward a description of *what happens* during a competition in terms of practice, as a pattern of participation in a world of objects.

1.2.1 Design competitions

Clients might procure a building through a *traditional* procurement route. *Which Contract* defines the traditional route as one where ‘the client accepts that consultants are appointed for design, cost control, and contract administration, and that the contractor is responsible for carrying out the Works [i.e. construction, renovation and so on]’ (Clamp et al, 2012: 33). There is a separation between the work of the architects and the work of the contractors. The architects produce a set of drawings for the client and the client supplies the drawings to the contractor. In UK architecture, the traditional route is ubiquitous. According to a 2012 RIBA members’ online survey (cited in Sinclair, 2013), 86% of firms ‘frequently use’ the traditional procurement route. This is more than double the percentage that participates in the next two most common.

The traditional procurement route lends itself to a *design competition*. This is what the popular UK trade journals *Building Design* and *The Architects’ Journal* and blogs like ‘Bustler’ and ‘Death by Architecture’ tend to report on when they report on competitions. The design competition is, in fact, what I had in mind when I began my research, and for

good reason: sociologists focusing on discourse and architecture take the design competition as central to the public face of architects (see Jones, 2009: 33 – 37; Larson, 1994). The central move of a design competition is this: a client issues a standard specification for a building (e.g. a design brief), receives submissions from a number of entrants and selects a design proposal (for a building, a masterplan...). Within a brief will be design requirements, but also a programme of dates, a deadline for submissions. What firms submit is usually a set of large-format boards (A1, A0...). Typically a panel of jurors will select an entry. In many cases this is done in two stages. An initial round is culled from dozens or even hundreds into a shortlist (often between two and six submissions). The client will send another brief to the architects, and the architects produce a second design submission, developed in more detail than the first. After another meeting, the jury choose a winner. The winner usually develops the design until it is ready for a planning application.

The quantity of entries depends on whether the design competition is *open* or *invited*. In the *invited* competition, a client will contact a number of firms, perhaps five or six, and ask them to participate. In a sense, the project begins with a shortlist. The major difference between this and the open competition, where any firm can submit, is not only how many firms submit but also whom the client is aware of. In the open competition, the client only knows about the existence of firms that have registered, and registration often takes place in the form of a submitted entry. And since in many competitions, submitting teams are anonymous in the first stage, the only contact they make with clients at the beginning is the entry itself. Thus while invited competitions often involve an act of invitation (e.g. a telephone conversation), in open design competitions, invitations are *broadcast*. The client will announce that they are looking for submissions. Often this takes the form of a notice on a website. The RIBA run their own design competitions as private consultants for clients, and a 'competitions' section of their website will list the announcements. Another large UK competitions consultancy, Malcolm Reading, do this as well. Trade journals will then announce new competitions on their websites or in print. Other online platforms (like the two I mention above) will compile notices from various sources.

But before architects prepare a design submission, they must often fill in a Pre-Qualification Questionnaire (PQQ). The *Building Ladders of Opportunity* report (RIBA 2012) defines the PQQ as 'preliminary pre tendering information [...] prior to a tendering stage submission (39)'. This will be a series of questions about the operation of a firm:

how much money it makes, what sorts of projects it has worked on, who will be on the project team, the size of the firm's professional indemnity insurance policy and so on. Clients tend to judge PQQs on a pass/fail basis: it is often only after the firm passes that they receive a design brief. European law requires all construction projects that exceed a certain value threshold be open to a competitive tendering process. That is, any firm in Europe has to be eligible to participate, and opportunities to enter are advertised in the Official Journal of the European Union. In response, the role of the PQQ has changed: 'As EU procedures have become embedded in the commissioning process PQQs have become increasingly complicated, and are now used to pre-select rather than to merely exclude the unqualified or financially questionable' (Strong, 2013:140). For architects participating in design competitions, then, the work they do involves a number of submissions, not all of which contain a 'design'.

1.2.2 Formal competitions without a design component

Competitions are often between *consortia* of architects and contractors, where it is the contractor that is responsible for the tender. In these cases, architects participate in a formal competition procedure without being, so to speak, the authors of the submission. Here the contractor *employs* the architect. Thus the architect is involved in the competition even though it is not a competition among architectural firms.

For firms of a certain size, being in a consortium is a common experience. A 2012 RIBA members' survey referred to in Sinclair (2013), for example, found that 40% of members took part in one form of procurement involving client-architect teams, 'Design and Build'. Here a contractor takes responsibility for producing all of the design information as well as delivering the works. When contractors bid for 'Design and Build' projects, it is often the case that they will respond to an 'Invitation to Tender' (ITT) document, answering questions about their operation and approach. Like the PQQ, this does not include a design component. Nevertheless, the contractor might have to represent their architect-partner within the ITT, justifying their selection. Here the architects become involved in a competitive procurement process, but are only indirectly involved in the competition itself. But acting as a consultant for the contractor does not make architects immune to the competition. Architect-partners who lose a bid for a 'Design and Build' project lose the chance to produce a design, to get further work with the client.

1.2.3 Frameworks

Another type of competition takes place through a *framework*. A framework is in one sense a list (or collection) of firms. There might be a framework for contractors who work on low-value projects in one region of England, for example, or a framework for architects working in London. A framework lasts for a pre-determined period, perhaps around three years. Frameworks are typically tools for procuring public projects. To get on to a framework, a firm participates in a competition that follows European regulations. Once on the list, a firm participates in a series of *mini-competitions* for any project a client tenders through the framework. The client contacts the manager of the framework and disseminates a preliminary briefing document: an 'Invitation to Express Interest'. This is effectively a short version of a PQQ. Some firms respond to this with an 'Expression of Interest'. For 'Design and Build' projects this is usually a smaller number than for design competitions, about two or three, and the client follows up with an 'Invitation to Mini-Competition', which asks for even more information. Frameworks are a popular form of procurement. The 2012 RIBA members' survey (RIBA, 2012) found that in 2011, while firms in the UK submitted 847 bids to design contests, they submitted 1,613 bids to mini-competitions. While design competitions may attract headlines in the press, firms are more likely to participate in mini-competitions through a framework.

1.2.4 Implicit competitions

It might be that a selection process has no formal category, no announcement in a newspaper and no one defining it as a competition and thus as a set of dates and submissions. A survey of British architects that the firm Colander Associates (Colander, 2014) carried out for the RIBA found that over half of the firms who participated in the survey employed fewer than five architects. Only five per cent employed more than 50. For these firms, much of the work is for homeowners, rather than the large public clients who abide by EU competition rules or large private clients who hold international design competitions. Thus in another report on the same RIBA members' survey (RIBA, n.d.), for small firms, a little over forty per cent of the work came from domestic clients. Given that the survey categorises clients as 'domestic', 'private' and 'public' (there is also a category for 'other' clients), the domestic clients made up a plurality of client types. And in a 2012 members' survey, the RIBA (RIBA, 2012) found that nine per cent of practices with one staff member submitted bids to competitions posted in the Official Journal of the European Union. For firms of three to five employees, the number rises to 44%, and rises again to

66% for firms with between six and ten staff. Taking these survey results together, it is clear that much of the work among architects in the UK is of a kind that often does not involve a formal procurement procedure. Instead, there might be any combination of interviews, presentations, office visits and so on.

1.2.5 Categories of competition as an empirical problem

From this very brief overview of different kinds of procurement methods and types of competitions that often go with them, one aspect of architecture becomes clear: designers often find themselves working within formally defined procedures. That is, the work of architecture is not always one of *designing buildings*, but of acting out a particular role at a particular time. In these cases, what it is that the architects are doing fits into a broader story. For an open, international design competition, a firm submits a 'concept'. The concept is distinct from the 'design development' or 'technical design' that the client requests only after a jury has selected a shortlist for the second stage. We might ask, then, how this process of making architecture explicit interacts with the fine grain of architectural practice.

At the same time, designing in competition is clearly something more than a formal set of procedures. Architects do not just produce competition entries or submit drawings to consortium partners, they do so while dozens of other architects or other consortium partners are doing the same thing. If architecture in competition exists as *potential* architecture (Chupin et al, 2004), then we see different kinds of potential in different kinds of competition: when contractors vie to show a client that their architect-partner is the most capable; when a team of architects vie to prove that they are big and relevant enough for a project as they respond to a PQQ; and when architects submit a concept, a cost-plan, a technical design and so on, all so one firm can win the appointment while the others do not. Architectural competitions raise questions for architectural practice, then, in so far as they combine explicit, deterministic statements of procedure with an indeterministic choice of a winner. We could call this a conceptual tension at the core of the architectural competition. On one hand, there are *competitions*, formal events, with explicit arrangements of deadlines, meetings, presentations, submissions, site visits and so on. These are the competitions that slot into the set of categories that make up the language of procurement. But there is also *competition*, a process of struggle, rivalry, a way of doing that presupposes that to act is to act against. By looking at architectural

competitions in terms of the practice of doing architecture, it should be possible to shed more light on this tension.

1.3 Plan for the argument

This thesis looks at the way competitions enter the working lives of architects. The aim is to go beyond the formal language of construction procurement, keeping in mind that it still exists and makes a difference in the world of architecture. I look at competitions as *things* (Latour, 2004, 2005b) that emerge through practices and objects. I ask how practices of architectural design accommodate the architectural competition as a *thing*, and, at the same time, how the architectural competition incorporates architectural practice. In short, my question is this: How do architectural practice and architectural competitions come together within design? The result will be a theory that elaborates the ways in which the movements of architectural practice and the movements of the competition produce specific sorts of trajectories among drawings, documents, models, clients, buildings—the actors that make up the worlds of architects.

I start with a review of the literature on architectural practice and the architectural competition (Chapter 2). Recent ethnographic work with architects (e.g. Houdart, 2008; Yaneva 2009a, 2009b) has suggested that building design takes place through a number of pragmatic processes that give reality to a building as architects produce drawings, hold meetings and so on. What is important is that these processes take place in terms of the specific environment of the studio. Architects attend to the objects in their environment as much as they manipulate them. But at the same time, we do not see in these studies the formal procedures of competition. And in studies that *do* look at competition, taking it as an analytic category, we see another set of processes entirely (c.f. Chupin, 2011; Kreiner, 2010, Volker, 2012). Competition comes out of the literature as more a matter of speech, writing and printed images than of reception and attentiveness to objects. What competition has to do with the more materially rooted process of architectural work has yet to be seen.

To make sense of the connection between the determinate categories of the procurement discourse and the indeterminate practices of design, I turn to a body of scholarship that has emerged through similar lines of questioning: actor-network theory. While the literatures from management studies and studio ethnography seem to exist apart, we can look to other disciplines for a theorisation of practice and competition. Here I look at

Callon's (1998) analysis of competition as a matter of practice, of relations between humans and non-humans (Chapter 3). The analysis, a broad version of which has support from more recent ethnographic research (e.g. Colloredo-Mansfeld, 2002; Gowlland, 2009; Zaloom, 2004), comes to the conclusion that competition is *relational*. Competition exists only in so far as objects and practices act on one another in a particular way, through constituents that are not necessarily 'competitive' in themselves. And here we can hone the research question into one that supports empirical research: a question of the practices through which the architectural competition *emerges*. Meanwhile, I lay out a role for language within this study, a set of terms that will help us place the categories of procurement on the same plane as architectural practice and architectural competitions (Chapter 3). Drawing again from actor-network theory, I take speech and writing as the results of actions in the world. That is, this study does not examine language for 'hidden assumptions' but for instances in which something has been *inscribed* or *described*. That is, language can indicate *what it is* that architects have interacted with and how that interaction has taken place. Further, language can circulate between sites, not *above* the world but in and across it.

With a conceptual toolkit in hand, I discuss the methods I use for investigating practice within architectural competitions (Chapter 4). The ephemeral, multi-sited, confidential and complex qualities of competitions make them difficult objects for a long-term ethnography. As a result I adopt a set of methods that are ethnographically inspired but fragmented in themselves, adding up to a story about competitions and architectural practice. Thus rather than define my 'field' as a jury session (Svensson, 2009; Volker, 2012), client office (Silberberger, 2011), architectural firm (Kreiner, 2013) or set of images (Schmiedeknecht, 2007, 2013), I frame this research broadly: around the junction between architectural practice and architectural competition in the various ways it unfolds. Each fragment is organised around contacts I made in the course of my fieldwork. As I was based in the north of England, it became feasible to focus my research on the UK. But since architecture in the UK has a blurred edge with architecture in the continent (e.g. UK competitions abide by EU procurement regulations, European architects enter UK competitions, some competitions are international and so on), some of the research addresses a non-British context as well. With different contacts came different, often unexpected directions for observing aspects of architectural practice. These include interviews with architects around the UK; a review of UK trade journals; the analysis of a set of documents related to one competition; visits to a unit at an architectural school that

focuses on competitions; and a four-day period of observation at the Office of Metropolitan Architecture (OMA) in Rotterdam. I also visited an exhibition of competition entries. What brings all of these fragments together is the architectural competition itself, emerging from technologies that in turn allow for different paths of travel, different ethnographic journeys.

Opportunities came with their own sites, surfaces, objects and affordances, requiring different kinds of research engagements. This branching quality of the research is one reason I have described this study as a set of 'journeys': journeys can move in one direction and break off into side-paths. Another implication of the notion of the 'journey' is that some can be longer than others, taken at different speeds and with different kinds of distance. There were different kinds of duration and intensity.

To express these qualities of branching and duration within the text, I have assigned each of the empirically-focused chapters (Chapters 5 through 9) to a different journey. Thus I carried out interviews (Chapter 5) between May 2013 and September 2014, and reconstructed a recent, completed competition through a period of document analysis (Chapter 6). I accompanied architectural students weekly for a term (Chapter 7). One journey was brief and intense: spending part of a week with OMA (Chapter 8). I made close observations with a field notebook, describing every moment-to-moment practice I could in my time at the office.

Each of the first four journeys can be described as starting from the main body of my empirical research. I began each without knowing where it would lead. Thus in the journey to the OMA office, even though the team I followed were working on a design competition, the competition as a competition tended to become present in the form of a brief, with most discussion taking place around what the building itself would be like (see Chapter 8). Thus while I position this journey on an equal plane with the first three, the conclusions take the form of a comparison, the result of an unexpected difference from the earlier journeys. In contrast with Journey One through Journey Four, the fifth journey is a moment of convergence, where I bring the other four journeys together in order to reflect on the specificity of architectural competitions for architectural practice through a case of an event that owes its COMPOSITION uniquely to the technology of competition: the exhibition of entries. Journey Five, then, feeds off Journey One through Journey Four as a segue into a more general discussion of architectural competitions as they relate to architectural practice (see Chapter 10).

To describe the competition as a *thing* in the sense of Latour (2004, 2005b; see Chapter 3), I propose a number of *elements* (object-practice configurations) and *arrangements* (further configurations of elements). As we go through the different strands of research, we can *add these elements and arrangements together* and put together a view of the objects and practices that assemble around the competition.

In the five chapters that follow I focus on the ethnographic journeys themselves. Four of these are set in the UK and one is set on the continent. I begin the chapters on the UK with a discussion of the way British architects talk about the world of competitions available to them (Chapter 5). Here we find architects talking about competitions in terms of GENERIC CATEGORIES and BIOGRAPHICAL MOMENTS, placed in COMPOSITIONS of BOUNDED elements that can act as features of multiple competitions. Architects talk about documents they encounter regularly as requirements: PQQs, briefs and submission boards. As *things* (Latour, 2004, 2005b; see Chapter 3) that are COMPOSED of objects, competitions lend themselves to analysis, and architects analyse them in terms of the directions of their firms. From architects' narratives, competitions emerge as COMPOSED, regular and thus predictable: each new competition will feature some combination of PQQs, briefs and so on, each of which can be talked about as *separate from* the competition itself. The regularity and partability of competitions is not only a feature of my conversations with architects, but also something that characterises coverage of competitions in the British architectural press. That is, the contingency of the competition, its dependence on a particular configuration of objects, is not lost among British architects. As *things*, competitions exist in part through this kind of language, through a COMPOSITION of matters of concern (as in Latour 2004, see Chapter 3).

The COMPOSITIONALITY of the competition owes itself at least in part to the *documents* that circulate between clients, architects and consultants. If documents play a role in the way competitions emerge from the practices of those who participate in them (administering, entering...), then an analysis of the documents that make up a competition can illuminate the processes that hold a competition together. Documents become ways for project participants to act within a given set of relations. By looking at the visual affordances of the documents within a project, we can identify the ways these relations unfold. Thus I look at one particular selection process, a mini-competition within a framework for a school in the north of England (Chapter 6). In some ways, the movement of information from document to document resembles one process described in research on markets

and competition that is inspired by actor-network theory (c.f. Callon and Muniesa, 2005). This progression fits within an overall pattern in which competition organisers wait for and compile information. At the same time, individual elements can be taken as DEPICTIONS OF PROCESS, demonstrating to the selection team that a contractor will be able to complete a project with the architect-partner on time. Competitions are COMPOSED of documents, but the expressiveness of each element within the COMPOSITION matters as well. The processes of movement and expression then become an extension of a broader pattern in which team members submit documents to one another, discuss the documents at meetings and prepare composite submissions for approval and permission. Through this submission of documents, this constant reference to a project programme, we see the possibility of describing a competition as a *thing* that exists in and between offices, in briefs as well as presentations, vacant buildings, email correspondence and so on.

With so many standard documents populating the world of competitions, it becomes possible to ask how architects come to *anticipate* the particular qualities of a competition, to respond to briefs, prepare submission boards and so on. I approach this question from a study of one unit at an architectural school (Chapter 7), where master's students are encouraged to work on competitions. Here students begin to enter the same sorts of relations that bring competitions together with design practice among architects in the UK. The group discuss techniques for producing *competition boards*, which require attention to the COMPOSITION of *images* as well as the *expressiveness* of the images themselves. Some of the research focuses on students working on a competition that was organised within the school itself. The students produced submission boards for a jury who held their deliberations, as they do in other competitions, away from the entrants. The competition comes together here through practices of working apart from jurors and preparing documents with BOUNDED VISUAL ELEMENTS, as well as through practices of presentation that exist in architecture more broadly.

My opportunity to observe architects working on a competition project came in the form of a short trip to the OMA office in Rotterdam (Chapter 8). In interviews over the year before the visit, architects at OMA are able to talk about procedures for entering competitions on the basis of linear shifts between *segments* (or phases) of time. Yet during the period I observed, shifts in the work tend to respond to shifts in the (multiple) reality of the building itself. Where time *does* seem segmented is when the architect leading the team calls a meeting to evaluate the state of the work. The upshot is that the competition *itself* does

not motivate the pragmatic relations between architects and artefacts. That is, a formal competition does not pose an *alternative* form of architectural practice, but *adds to it* the need to segment time. A competition emerges from a separate practice of *doing competitions* that divides architectural work into the production of concepts and the production of a submission.

The final empirical chapter looks at one situation that arises from the unique possibilities of the design competition: an exhibition of competition entries (Chapter 9). This chapter is based on a visit to an exhibition of entries for one competition, a design competition for a social science building at the London School of Economics. Here I describe the ways in which the presentation practices of the architects and the objects that enter the exhibition proceed from the relations through which the competition itself emerges.

With a body of observations in place, I pull together the conclusions from the empirical chapters into a more synthetic theory of architectural practice in competition (Chapter 10). It becomes clear from the study of the masters unit (Chapter 7) and the project documents (Chapter 6) as well as what architects say about competitions in interviews (Chapter 5) that competitions operate through a predictable set of mobile VISUAL ELEMENTS. At the same time, these chapters suggest, *within* a given document that competing teams prepare, individual elements become DEPICTIONS OF PROCESS, demonstrating to the client how *potential* (Chupin et al 2004) architecture will take place. Thus during work on competitions, there is a point in which teams *select* images from the dozens or hundreds available, combine them with text and place them into COMPOSITIONS. The elements and arrangements I find in competitions add up to the *objectification* and *detachment* of competition submissions. Clients and competitors work in separation from one another, a separation that allows architectural products to undergo a series of PARALLEL TRANSFORMATIONS until they have become commensurable at the office of the client.

Chapter 2

Architectural competitions and architectural practice

2.1 Two approaches in tension

In the Introduction (Chapter 1), I raise two empirical problems with architectural competitions. First, competitions make it clear that architects are not just designing *buildings* (where architectural objects *add reality* to the building) but producing objects that have been called instances of *potential* architecture (Chupin et al, 2004). Second, the language of competitions describes architectural processes in advance, before any actual architects, clients or buildings have filled in the roles defined for them. Thus competitions pose the problem of *designing for selection*. It is not just a matter of fulfilling a specification, but of doing it in some way within a situation in which the design may not have anything to do with an actual, yet-to-be-constructed building. Both of these issues refer to the moment-to-moment experiences of being an architect.

Thus to make the first steps toward answering the question of how architectural competitions engage with architectural practice, I turn to two recent bodies of literature. One comes from ethnographic and microethnographic studies and looks at interactions between architects and the objects within their studios (Houdart and Chihiro, 2009; Yaneva, 2005, 2009a, 2009b). The other is from management studies and examines practices that take place throughout the competition process (Van Wezemaal et al, 2011a; Kreiner, 2009; Chupin, 2011). While both literatures are in some way about architectural practice and both come from observations at one office or another, the way to blend the two sets of research interests and empirical findings is not self evident. Studio observations find engagements with objects but not the presence of architectural competitions. And the management research, though it includes observation and begins with the category of the competition, is interested in language, strategy and judgment rather than in practices and objects.

I begin this review of the literature by looking at recent ethnographies and micro-ethnographies among architectural firms, extrapolating a view of architectural *practice*. I then turn to the management research on architectural competitions. In each literature we see scant if any attention to the intersection of architectural practice (as an interaction with objects and surfaces) and the format of the architectural competition, even while each literature treats one side of the divide in detail. Thus we are left with an apparent gap

between managing competitions and *doing* competitions, language and practice. This is an opportunity for research into the way relations between practices and objects allow competitions to emerge as *things*, a category I derive from the work of Latour (2004, 2005b; see Chapter 3). Here I add to our understanding of practice and architectural competitions by naming particular *processes* through which practices and competition come together (Chapters 5 – 9).

2.2 Objects and architectural practice

2.2.1 Objects and practice as a recent research problem

Ethnographic research over the last fifteen years has followed professional architects in their studios (see Houdart, 2008; Houdart and Chihiro, 2009; Yaneva, 2005, 2009a, 2009b). So far these studies have focused on transformations in the objects that architects produce, along with the capacities of those objects to organise these transformations. Out of this research comes the prominence of the studio as an environment. Architecture here is a process that is rooted in situation. While this theorisation gives us a vocabulary for the moment-to-moment fabric of life in the studio, there has been little if any discussion of the architectural competition, whether as something that can be taken to exist *beyond* the studio (as it is in the language of procurement; see Chapter 1) or that architects interact with *inside* the studio.

The focus of the literature on architects in their studios has been on processes of cognition, a cognition that has much to do with the surfaces at play. With parallels in Hutchins' work on distributed cognition (Hutchins, 1995), we see in the studio how designerly cognition becomes a process of working through states of the world, a set of interventions on the objects at arm's reach. The difference between cognition that is distributed and cognition that is purely internal is clear in one forerunner of much of the contemporary ethnographic studies. Schön (1995 [1983]) looks at knowledge as a process of response to the world. He characterises architectural practice as *reflection-in-action*, and brings out this concept in an extended vignette. Here an architectural instructor critiques a student's work. The instructor sets tracing paper over top of a student's earlier drawing. The two talk as the instructor makes sketches. Each sketch is a small experiment that responds to a previous sketch. The work of design proceeds on the basis of these sketches, rather than a plan of action set out at the start. Architectural work unfolds here as a development of situation, where humans respond to objects and objects

respond to humans, the overall pattern of responses following its own earlier states. Reflection is *in action*: the question 'What do I do next?' becomes a reaction to the contents of the tracing paper, rather than to the private contemplation of the instructor.

The difference between reflection *in action* and a process of purely internal reasoning becomes even clearer when we consider approaches to social science research among architects prior to the recent focus on objects and materials (see Blau, 1987; Cuff, 1992). Blau (1987), for example, studies architectural firms, rather than processes of design, and looks at 'structures of risk that accompany opposing conditions of various sorts' (3). 'Conditions' are not particular objects and materials within the studio, but qualities like the size and organisation of a firm. In place of cognitive-pragmatic processes are *values*: the *voice* of an architect within a firm, *design creativity* and so on. We could imagine these values at work no matter what sort of technology a group of architects has assembled around. While Blau is interested in what it is to be an architect *within* a firm, Cuff (1992) focuses on the movements of architects *between* firms: what it is to have an architectural career. Again, the study describes processes that can take place in any situation of objects and materials: defending the value of architecture against engineering and construction (31); picking through a tangle of concerns while meeting with clients (57); and the fact that architects must arbitrarily finish a particular phase of work lest a flow of new information keep the design process going infinitely (91). Here we see the architect as a category of actor whose possibilities for acting tend in certain directions by virtue of the fact that the actor is an architect. This sociological approach has to a limited extent influenced research on competition. Scholars like Jones (2011) and Larson (1994) take competitions as *discursive* phenomena that have the same importance for architects regardless of the material environment in which architects work. Thus for these earlier, sociological studies, the ways in which architects work within the uniqueness of a *specific* situation of models, drawings, books and so on is outside the scope of the analysis.

The crucial transformation we see in the recent research on architectural practice, then, is a move away from *architects* and toward *design*. The likes of Cuff (1992) and Blau (1987) come from a research tradition that investigates what it is to be an architect as a role within society. In the early 2000s, the focus shifted to how architects *produce buildings*. Thus when Yaneva (2009c) talks about practice, it is a way of framing our relationships to objects. Deciding between taking the stairs and taking the lift is not a choice 'between mobility and immobility activity and laziness, exercised control and self-control; rather, I

will be led to share agency with them in a different way' (274). This 'different way' is a result of various processes, summarised from two decades of social scientific interest in distributions of agency (see Yaneva 2009c for a review of the literature): patterns of use embedded in the object (*scripts*); actions we perceive as *possible* in a given situation (*affordances*); changes in our paths of action (*mediators*) and shifts of intentionality from human to non-human (*delegates*). What this is to say is that objects participate in human agency through a variety of roles. Given this active quality of objects, between one situation and another are fundamentally different ways of acting and perceiving. If research about *architects* asks how professionals navigate through the dilemmas of their careers, research about *design* asks what the course of that navigation looks like, its interaction with the world. Architectural practice as social scientists understand it drifts further from the abstract categories we see in the discourse of procurement (Chapter 1).

2.2.2 Objects and practice through micro-ethnography

Since Schön, research into architectural practice has adopted roughly two sorts of approach. While each has a different theoretical concern, both bring out aspects of architectural practice as an engagement with objects. One approach is micro-ethnographic and uses video to analyse the practice as gesture, attention and language (see Luck 2012; Murphy 2004). What the researchers look for within their footage are acts of *communication*. Here is what Suchman and Trigg (1993) in another context (also with video) call a 'collaborative craftwork of hands, eyes, and signs' (173), where the surfaces of the workplace take a central position.

First, architects respond to the curves of their drawings as patterns of movement shared among gestures and lines. Architecture emerges from this literature as a kind of improvised choreography where buildings and sites are understood through the work of making traces and re-enacting them later. A surface here might be imaginary. Streeck (2009: 128 - 129), for example, analyses a vignette in which an architect describes a terraced hillside, *building gestures* on top of one another. In another video study (Ivarsson, 2010), two architectural students sit at a computer screen and talk about where to place a section plane within a 3D model. Moving the plane becomes a way of soliciting 'yes' and 'no' responses from the colleague. What the tracing of gesture across a surface does is bring others in, allowing them to understand another set of traces, the design.

By reenacting traces in gesture, architects come to a common understanding with the individuals they work with. Thus in one video study at a convention of architectural students (Murphy et al, 2012), the examiners that deliver 'crits' of student work direct the awareness of the students toward the prior work of renowned masters, making comparisons. They do so through gesture, shaping and moving their hands to follow the traces of otherwise absent buildings. This is another video segment, where three architects go over a plan diagram for a laboratory (Murphy, 2004). In moving their hands, the architects retrace their understanding of the operation of a loading bay. What is crucial here is that the architects are discussing the experience of the building by future inhabitants (Murphy, 2011). Producing believable narratives about the future, in this case, is a matter of responding to the traces of a plan diagram through the traces of gesture, traces that in turn reenact the architects' prior movements in the world: looking over fences, ringing doorbells and navigating streets. Further, gesture within architecture is not only a way of coming to agreement, but of coordinating disagreement, as Luck (2012) says of a meeting between an architect and the soon-to-be residents of a housing development. Again, this is a possibility that emerges from the availability of traces on a surface. In all of these studies, architectural design emerges as a process of improvising in response to an immediate environment, following traces that have been made previously in other media: gestures following lines, lines following landscapes, conversations following gestures.

2.2.3 Objects and practice through ethnography

Beyond the micro-ethnographic work there has been a wave of more conventional ethnography that examines the practices of architects in their studios. While researchers using video have captured the paths of movement that run through specific interactions between architects, ethnography among architects describes a broader range of situations (see Houdart, 2008; Houdart and Chihiro, 2009; Yaneva 2009a, 2009b, 2005,).

Ethnography among architects is a relatively new undertaking. While Cuff (1992) spent years moving in and out of various firms and speaking with architects as an architectural instructor, the practice of spending upwards of six months with a single firm began with the likes of Albena Yaneva and Sophie Houdart at the turn of the 21st century (see Latour and Yaneva 2008 and Yaneva 2009b for a statement of purpose). What this work reveals is the extent of the material ecosystems in which architects design, as well as the variety of semiotic processes that take place in the world of architects.

Of the ethnographic studies with architects during the last decade, each presents a new but related theory of what architectural practice is, what makes up its world. Central here is the environment of the studio. It is among the surfaces of the studio that objects serve as a representation of the outside world, where what populate the tables and walls of the studio engage the architects in a play of spontaneity. In her observations among a team of architects at OMA, Yaneva (2009a) shows how within the studio, objects come to 'speak' for a team of architects, and colleagues enter a set of relations in which that speech is meaningful. The 'speech' of objects takes place in a set of relations: architects 'listen' to objects as they design, but in order for an object to 'say' anything, there has to be some intervention: assembling an archive, preparing a model, making a map and so on. And as Yaneva (2009b) shows in a book about the more general work at OMA, the architects' relations with objects take place in the open. Objects and relations are available for colleagues and consultants to enter, durable enough to gather other elements. Tables within the studio hold together a project as a collection of models, even when the models present opposing possibilities. Models from one project suggest possibilities for another, and what seems like a haphazard placement around a studio allows new relations to spring by surprise into existence. As architects make many small experiments within a studio (as in Schön, 1995[1983]), the studio as an environment emerges anew, 'speaking' differently and offering further surprises.

What is more, different sorts of models have different affordances for the relations they can hold together. As 3D visualisation specialists respond to the commercial developers, architects and project managers at work on the masterplan, their relationships unfold through transformations of the visualisations themselves (Rose et al, 2014). By adding layers of information to a 3D model, practitioners at ARUP can enrol further participants into a project (Harvey, 2009). At the same time, the advent of digital simulation techniques has brought about new roles and distributions of work among architects and engineers (Loukissas, 2012). A small foam model can be held in the hand and inspected with a scope, but only by one architect at a time (Yaneva, 2005). Larger, mixed-media models contain more detailed elements, but it is more difficult to change the fundamentals of their form. Thus large and small models are not successors of one another in some lineage from idea to reality, but sit beside one another on the same table, acting in turn. And at Edward Cullinan Architects, Whyte et al (2007) find that the same sketch or hard-line drawing can become *fluid*, a surface for notes, or *frozen*, 'a dominant view of the object represented across the various audiences that behold the image' (23), changing the

relations it can organise. The ability for an object to 'speak', the negotiations among actors in whose actions an object is meaningful: each transforms along with the other. Thus in one study (Schmidt et al 2012) of the negotiations that take place in the design of a housing development, an unexpected event leads a particular document to lose its ability to present an accurate picture from a projection screen. What this suggests is that the process of gathering elements, eliciting possibilities and acting in response, is an unordered process, jumping from concern to concern. Architecture is never finished, only interrupted and reorganised. Discoveries continue even in renovation (Yaneva, 2008). Work within previously concealed areas of a building bring about new relationships among participants in a project.

The different ways that objects can transform also lend a distributed quality to architectural work, such that it becomes impossible to attribute a building's design in its entirety to the mind of a lone genius. Houdart and Chihiro (2009) make this argument from an ethnography at the offices of Kengo Kuma Associates. Of the processes of assembling mixed-media models, working in 2D and 3D CAD, meeting with clients and so on, each has its own material affordances, its own possibilities for developing knowledge and making changes. What is noteworthy in this book is how removed some situations appear from others: one architect assembling a model atop a plan diagram; a meeting to work out the joints of a cladding system; a field trip to a glassblowing studio. It is not just models or tables that seem to present and hold together incommensurable elements, but complex situations of practice. At the same time, what Yaneva (2009a) calls 'interpretation' and Houdart and Chihiro (2009) call 'valuable mouth-pieces' allow seemingly irreconcilable worlds to come together. As Houdart (2008) demonstrates, for example, the believability of a 3D render to a client (as judged by a senior architect) is not the extent to which it is an accurate representation of a building outside the render, but comes from the possibilities inherent in the practice of interaction with 3D modelling software, adding and adjusting textures, cutting and pasting images of trees and people into the scene. That is, 3D modelling becomes one more practice with its own constraints and challenges, something more than a mechanical process of making drawings more 'real'. The result is that the question of *what is happening* in a situation of design has much to do with the drawings, furnishings, documents and so on within a given site.

The ethnographic literature on architects and their studios has some resonance among human geographic work from the same period of time. Here is an interest in architecture

as a process in which the actors beside architects play a role. Some geographers use the term ‘building event’ to describe architecture as a collective process held together through ‘diverse fields of relations’ (Jacobs, 2006: 11) that demands a host of research methods (Jacobs et al 2012) and brings in a range of participants, human and non-human (Jacobs and Merriman 2011). Squatters intervene within the interiors of their buildings in response to both explicit claims about ‘art’ and the ‘social’ as well as daily negotiations that arise in the course of living in common (Vasudevan, 2011). Concierges making their rounds in a housing block learn to anticipate and identify forms of ‘disorder’ (Strebel, 2011). The memories and past experiences of a building’s visitors, not just the architecture of the building, inform the ways that visitors feel about or within a building (Rose et al, 2010). Practices of inhabiting a building lend themselves to narratives beside the involvement of the architects in the discourse of the broadcast media (Lees, 2001), and residents and tourists may have different relations to the claims of the architect (Kraftl, 2010). Buildings emerge not only from design and construction but through a process of repair that grapples with the staggered, overlapping, complex, often *latent* materialities of rust, birds, lichen and shifting supply networks (Edensor, 2011). Another version is more literal: designers become more peripheral as they subcontract to developers and contractors (Sage 2013). The architect becomes part of a set of relations that nevertheless organise around *architecture*. Again, the architect is not so much an *author* of a building as a skilled participant in a complex network of practices.

2.2.4 Objects and practice versus the categories of competition

If recent ethnographic and microethnographic research represents a break from previous social scientific excursions into architecture, it is through the formulation of the architect as a practitioner who exists *along with* objects and surfaces. That is, in terms of methodology, the organising point is an interest in *designing*, rather than *designers*, offering up a conception of architectural practice. Here is a theory of what architects do, what a building is, and how design takes place. In the descriptions of the ethnographic literature, what architects do is *learn from* and *respond to* objects; a building is a *multiple* entity born of countless partial, incommensurable representations within the studio; and design takes place as the accumulation of these partial representations as new questions are asked and new discoveries are made.

But going back to the discussion of competitions within the discourse of procurement (Chapter 1), we see a description of architectural practice that appears to exist in tension

with the description we get from the ethnographic literature. What architects do, we might say, is *act in accordance with the procurement method*. They produce certain things at certain times. They respond not to materials but to fellow members of the 'complex network of relationships' (Clamp et al 2012: 33). Architects prepare submissions for competitions, go to interviews, make presentations, hold meetings and so on. The rules of a competition spell these things out regardless of the particular offices, studios and building sites the architects will move through.

And just as the sites of design go unspecified in the statement of a procurement method, so do sites of construction. If within architectural practice a building is a multiple entity that emerges from an accumulation of materials and the ways that actors respond to them, in the definition of a procurement route, a building seems to recede, even to disappear. It seems possible to talk about open design competitions, OJEU tenders, 'Design and Build' consortia and so on regardless of the product that emerges.

Finally, the temporal movement of design within architectural practice is linear in one sense and nonlinear in another. Architects move from a 'small' scale to a 'large' scale and back, and all sorts of detail can be mobilised at any point in the project. That is, there is no straightforward progression from beginning to end. At the same time, within the project nothing is lost. If design moves through accumulation, the number of objects produced later in the project is always greater than the number produced at an earlier moment. Speaking only of the *things* that emerge from design, this is a linear increase in quantity. But to imagine the competition format within a procurement route is to imagine a different kind of temporality. To talk about a two-stage open design competition is to invoke beginnings and ends. At the beginning, hundreds of teams submit a concept, in the middle, a shortlist of six submits another concept, and in the end one wins the appointment.

What this is to say is that the definition of a procurement route implies an architecture of a fundamentally different sort than the one we see within the ethnographic literature: a succession rather than an accumulation, processes that exist prior to any activity instead of unfolding along with the twisting trajectory of work within a studio. Here the practice in the margins of the succession is obscured. The definition of the procurement route begins *outside* of practice, naming the events, deadlines or benchmarks that participants *get to* but not the cognitive or bodily means of *getting there*. For clues as to why this is, we might look to one body of research that begins with the category of the architectural competition:

research from management studies (Chupin, 2011; Cucuzzella and Chupin, 2013; Silberberger, 2011; Svensson, 2009; Van Wezemael et al 2011a).

2.3 The missing objects of architectural competitions

2.3.1 The competition as a site of convergence

To get a sense of the particular challenges of studying architectural competitions as they engage with architectural practice, we might begin with a literature that has grown around the competition as an organising concept. Over the past ten years or so, management scholars have pooled their interests in the competition, resulting in a number of conferences and special issues in publications related to both organisation studies and geography (see Chupin, 2011; Cucuzzella and Chupin, 2013; Silberberger, 2011; Svensson, 2009; Van Wezemael et al 2011a). It is interesting, then, that the most likely starting point for analysing the relationship between architectural competitions and architectural practice tends to leave out the transformations in objects through which architectural practice takes place. Instead, the focus tends to be on language, strategy and judgment. But what is also interesting is that this focus has grown along with an emphasis on the *multisitedness* of competition. Judgment in this case becomes a phenomenon of distance. If materiality is suppressed within the competitions literature, then, it may not only be because the interests of the researchers point elsewhere but, perhaps, because the ‘field’ itself encourages a language-based approach.

If there is one feature of the architectural competition that can set it apart from other concerns within architecture, suggest the studies from the management scholarship, it is the competition’s *multisitedness*. What the competition does is bring together processes that would otherwise have little to do with one another. Van Wezemael (2011) observes as much in his introduction to a special journal issue on competitions as a problem for geography:

An architectural competition can be regarded as a “site” marking the convergence of diverse interests (for example, those of the building industry, private investors and governmental institutions), findings from various fields of research (for example, structural analysis, sustainability and preservation order) and discourses from very diverse societal fields (relating, for example, to topics such as aesthetics, fairness/justice or profit). Indeed, it is this interdisciplinary aspect that allows an architectural competition to draw together different fields of actuality and to enable translations between them. (Van Wezemael, 2011: 2)

Competitions do not just bring together movements of physical stuff, says Van Wezemael, but different modalities of presence and process: 'diverse interests', 'findings' and 'discourses'. Thus, he says, what begins as a problem within state politics might translate into a problem for design through the work of organising a design competition. What is key here is that a competition is not just a selection procedure but a 'process of opening up (i.e. of producing ideas or creating a multitude of propositions) and narrowing down' (2), of selecting a solution. This process of 'opening up' involves not only an accumulating stack of entries but a complex ordering of sites. And here the joining of *discourses* with objects and practices takes a central role.

Thus a number of studies in the management scholarship on competitions look at the specific sites that are brought into some kind of constellation. Van Wezemael et al (2011b) carry out a historical study of Swiss design competitions for post offices in the late 19th century. The argument is that the competition helped to make *normal* the presence of the nascent Swiss state within towns that would otherwise resist it. The way to the conclusion is through discourse: jurors talk about the entries in functional and aesthetic terms, taking no issue with the presence of the state. Here a competition becomes a *convergence* (Van Wezemael 2011:2) in another sense, bringing together material and discourse. Paisiou (2011) also looks at competitions within a historical lens, again focusing on a shift in scale. Here the competitions are for the New Acropolis Museum in Athens, the four held between 1976 and 2000. The change in scale was a result of the way the competitions were run. In 1976, the jury was a panel of Greek architects. By the third competition it was an international panel run through a legal framework built from the one that guided UNESCO and the campaign to repatriate the Parthenon marbles. The particularity of sites gave way to an international narrative. Here the organisation of competition implied an event that was more than local.

But a competition is not only a convergence of discourse and material, of the places in which things happen with the narratives *about* place that make it possible to say things about the existence of the Swiss state or Greek-ness of the New Acropolis Museum. The competition here owes its existence to a network of sites. Perhaps the only study of competitions that examines multiple sites and events within the same contest is Valand (2009). One that comes close is Silberberger, Strebel and Tränkle (2014), though this is based on interviews with practitioners *about* sequences of events and is compiled into a preliminary conference paper; this line of research has not yet fulfilled its promise of

following the non-human actors that move across a design and construction process. What is noteworthy in Valand is the use of the category of *translation*, which Valand quotes from Latour as ‘displacement, drift, invention, mediation, the creation of a link that did not exist before and that to some degree modifies the original two’ (Latour, 1999: 179). Valand finds displacement in three moments: a process designer responds to the proceedings of a workshop; architects respond to a brief; and a jury selects a winner by responding to submissions, meeting neither the process designer, the workshop participants nor the architects themselves. If Valand’s ethnographic account seems fragmented, with a visit to the workshop and a few months spent with a process designer, it is because what is also fragmented is the competition itself.

Competitions are *convergent*, Van Wezemael (2011) says, in part because they bring together ‘discourses from very diverse societal fields’ (2). Here we see how fundamental language is to the management scholarship on the multisitedness of competition. Not only do we see *representations* moving between sites, as in Valand (2009), but cases of speech and writing that *refer to* other sites as well. But at the same time, a reader might wonder about the extent to which the association of competitions with the site-spanning qualities of speech and writing is the result of an approach to fieldwork or of a surprise in the field, a ‘discovery’ within the offices of clients who procure buildings. For what is striking about the recent competitions literature is how little the presence of materials makes its way into observations in the field.

2.3.2 The competition as a matter of language

The mercurial role of speech and writing in the multisitedness of competitions is particularly clear within the various studies of activity within particular sites: jury deliberations, client meetings and, from one ethnography (Kreiner, 2009, 2013), architects preparing a submission. For example, in a study of one dialogue-based competition (Kreiner et al, 2011), the environment of the meetings between jurors and bidding architects recedes into the background. The study summarises the speech of participants as a series of events. The authors use these events to assess the unintended effects of the competition format: competitors learn *what* the jury want but not *how* to achieve it. Here it is speech that moves the situation along, what gets us from one event to the next: in criticism, an order, an announcement and so on. What recedes is the situation as a material environment. Meanwhile, Svensson’s (2009) approach to the analysis of discussions among jurors is a search for *positioning* behind the statements. During the

three jury deliberations for one competition, Svensson concludes that 'A positioning emerged between the architects and the laymen; it arose out of different preferences in taste, but also from different strategies for assessment' (103). Here the movements that take place within a jury deliberation take root in language. And Kreiner (2010) acknowledges that the meetings that make up a competition depend upon a process of *designing* competitions, a process in which the intentions of a designer do not anticipate the outcome. But unlike the ethnographic literature on architectural studios, the contingency of the situation has no relation to the material quality of the environment. Kreiner argues that a dialogue-based competition designed for efficiency, creativity and fairness turns out to stifle creativity. But what takes place within the dialogue-based competition seem to be able to take place anywhere, whether within a conference room or as a conference call between offices around the world. The competition emerges as a contingent fact, but a contingent fact of conversation.

And instead of transformations in drawings and models within the studio of architects, studies of architectural responses to competitions focus on rhetoric, discourse and strategy. Kreiner's ethnographic work, for example, investigates strategies in two situations. One sort of strategy consists in the relationship between the way architects *read* a brief for a design competition and the way that members of a jury evaluate the entries (Kreiner, 2009). Selecting a strategy, an architect might read a brief for inspiration, instruction or illustration. While Kreiner compares the firms' selection of a *reading technique* with a jury's selection of a winner, what does not enter the study is what takes place *between* these two decisions, the process of carrying out a given strategy for reading the brief in terms of the submissions themselves. We also see this in a later writeup of the same study (Kreiner, 2013). Here Kreiner is interested in the strategies that architects adopt when responding to a competition brief, given that the client is often unavailable to the architects before they submit their proposal. Kreiner asks *what* it is that the architects decide upon in their sense-making strategies, and how that *what*-content relates to the jury's own decision-making. Focused on decisions, this analysis takes the ethnography as a backdrop from which to analyse the transcribed statements of architects in interviews.

At the heart of Kreiner's ethnography are not practices but statements and strategies. This elision is deliberate. Kreiner (2013) divides the process of entering a competition into '(1) The delimitation of a solution space; (2) The search for an organizing theme for the design

proposal; (3) The production of the entry in text, pictures, and sketches' (226). He makes it plain that he only focuses on the first two. Thus while Kreiner shows architects arriving at a single *concept* that will organise their entry, it is not clear what it looks like within the submission in terms of objects and materials. Also focusing on managerial concerns with strategy, and again focusing on the speech of architects, Manzoni, et al (2010) interview architects from firms in Italy and the UK about their work on competitions. Their conclusion, that "Managing time constraints and resources in an effective and efficient way is also critical to maximize competitions' results and minimize unpaid work' (985), is based on what architects *say* about architectural work, rather than on observations. This is not to say that studies of language are unhelpful. Focusing on focusing on briefing documents for state-level public competitions in the US and the introductory letters of the architects that respond, Jones and Tarandach (2008) find that individual words tend to differ from those architects use in other situations, suggesting a process that would be difficult to describe otherwise. And in one strand of my own research (Chapter 5), I investigate the words through which architects talk about competitions. But unlike Manzoni et al, who take the competition as a given and focus on *strategies* of entry, I am interested in how competitions are *brought together* through what architects and clients do and attend to. If the managerial focus on language reveals a gap in the literature, then, it is because it has remained distant from the attention of recent architectural ethnographers toward objects and practice.

As with studies that focus on strategy, in studies of jury deliberations the physical setting recedes into the background. If anything takes on the properties of an object, it is speech itself, or perhaps the things that speech refers to. We see this in Van Wezemaal et al (2011a; see also Van Wezemaal, 2010), a study of four meetings in which jurors discuss proposals for a football stadium in a city centre. This study is noteworthy for its attempt to study language in material terms: not simply as representational content or an instance of 'judgment', but as a form of activity in itself. As with other studies of jury deliberations, the data come from transcripts of recordings. The meeting centres on a 'boiling pot' design as an 'open top' design is proposed. The 'boiling pot' is questioned and eventually doubted. By borrowing terms from DeLanda (2002, 2006), the authors conclude that 'The unfolding trajectories of "what the jury is looking for" may therefore be viewed as a tracing of the singularities of the relational space that is mapped out by the competition entries' (171). Here Van Wezemaal et al (2011a) and Van Wezemaal (2010) want to analyse the voyage of competition entries between the virtual and the actual.

But these studies only meet DeLanda halfway. DeLanda seeks to overturn the argument that a category for a set of entities (e.g. 'species') also specifies the *essence* of those entities. Instead of essences, what make something *the way it is* are the processes through which it has developed (DeLanda 2002: 10). Van Wezemaal et al (2011a) and Van Wezemaal (2010) consider competition entries as objects that, like other relationships in DeLanda's model of agency, produce certain *effects* in the jurors, existing as they do because of *regular, repeated behaviours*. But at the same time, competition entries remain as objects of speech and writing. In Van Wezemaal et al (2011a) and Van Wezemaal (2010) competition entries are not sheets of paper, mounted boards or .pdfs on screens, but *concepts* that can be both objects of speech and objects on a table, shifting between the two. To talk about a 'boiling pot' stadium is also to mobilise its features as ideal qualities, independent of any A1 boards, isometric drawings, photographs of models and so on. This framework, then, runs the risk of placing all material reality *within* the conversation rather than casting the conversation as one way among others of acting in the world.

And when the management scholarship on competitions turns to the submissions themselves, they look at the images and text less as material objects that can *move* (circulate, transform) than as historical documents with representational content. That is, in the management literature on competitions we do not tend to see artefacts as they become entangled within practice. Katsakou (2009), for example looks for 'the parameter of innovation' among the entries for several architectural competitions in Switzerland that took place in the middle of the first decade of the millennium. The winning entry for one exemplifies formal innovation by 'reinterpreting the classic urban block' (83), for example, while the second-place entry for another becomes a case of programmatic innovation. Here the author becomes something like a juror, evaluating competitions entries in relation to a predefined category. For Tostrup (2009), the category of interest is *rhetoric*. Here, rhetoric can include both images and text. Tostrup analyses the rhetoric of entries for competitions in Norway from 1939, 1973 and 2000, noticing a shift in emphasis from nationalism to iconism. And Cucuzzella and Chupin (2013) arrive at the conclusion that environmental concerns trump all others in several Canadian competitions by casting their own judgments on the entries, comparing those judgments to the jury reports. Here the authors have available to them artefacts from competitions but not the process of deliberation, the specific and changing relations of jurors to the objects they sort through. But in these studies it is also clear that the authors were simply unable to look at jury

deliberation as a process of relating to 'real' objects in a 'real' setting. Because these authors are examining entries in multiple competitions over several years, observation of the jury deliberations would be infeasible if not impossible.

What is key is that in much of the management literature on competitions, the *activity* that unfolds within the competition emerges from recordings of meetings, jotted statements and the printed text of jury reports. We see movements within the competition, but these are movements within the representational content of *language*: shifts in topic, rhetorical tropes, statements that respond to other statements. It becomes difficult in this play of language to see the sort of material practices that have no such obscurity within the ethnographic literature on architectural practice.

2.3.3 The competition and interior processes

With such a focus on strategy and language as phenomena of deliberation, where the environment of deliberation fades away, it would make sense that much of the management literature on competitions focuses on processes of *judgment*, *motivation* or other qualities of autonomous individuals acting outside of any particular situation or material environment.

One particularly explicit focus on judgment is Chupin (2011), who argues that a competition involves judgment on four occasions. What this entails is that the competition takes place across situations that are removed from one another but nevertheless come together as a competition:

Judgement is clearly a complex issue, yet I would like to suggest here that the principles of design thinking may benefit the understanding of judgement particularly when comparing 4 phases of a generic competition process: 1 – during the writing of the brief, 2 – during the designing of the proposals, 3 – during the jury and, last but not least, 4 – during the public and media reception of the results. All these are distinct phases concerned with judgement in some way. (Chupin, 2011: 173)

What the competition presents, then, are gaps between sites. Each gap is the occasion for judgment. Thus Chupin (2011) asks what it is to make judgments within a competition and how this process of judgment might be taken as a form of design in itself. Here the receding quality of the material within the competitions literature becomes particularly clear. Chupin (2011) starts from the work of Schön (1995[1983]; see above). This analysis preserves Schön's idea of *reflection-in-action*, but for the most part does away with the *materials* of Schön's *conversations with the materials of a situation*. The crucial move in

Chupin is to take from Schön the idea *that* practitioners reflect in action, but refer to a different model for what that reflection consists of. This is the role of John Zeisel's (1981) *spiral model of design thinking*. The model is one of interior mental states. Designers begin with a 'domain of acceptable responses' (Chupin 2011:179), a domain that grows smaller as designers make a series of *conceptual leaps*, representing the project anew by thinking analogically. Because architectural products here are *concepts*, there is an ambivalence to their precise material form. Judgment takes place independently of its situation in the world.

Other management scholars of competition share this interest the interior mental processes of autonomous actors, but do so more implicitly. Here the focus is not on the *material* process of responding to others in a rich environment, but on decisions as a set of relations between concepts. One example of a cognitive (mental, interior) process that is taken to anticipate a course of action is the *dilemma*. Rönn (2009) is interested in dilemmas that take hold among clients, architects and members of juries. In posing dilemmas Rönn's study assumes that the categories at each prong of a dilemma represent courses of action that obtain as planned in the actual world. The normative problem is not *how* an action propagates, but *whether* it is advisable to take this action or that action. We see a similarly normative approach in a later article (Rönn, 2011). Here the keyword is *quality*, particularly 'how architectural qualities are presented, debated, articulated, reasoned, and assessed inside the jury room' (101). While each author attributes to language a different sort of efficacy and reference, it is *language* that is presumed to move a competition from one state to another.

Aside from judgment, there is *motivation*. Lipstadt (2009) investigates motivation with an eye to the received wisdom that 'the multiplication of solutions instigated by competitions not only benefits the competition's sponsor but society' (14). The object of analysis is the category *architects*, particularly 'why architects not only tolerate competitions but actually clamour for more of them' (18). The empirical material comes from rhetoric surrounding US competitions in the late-19th and early 20th centuries. By focusing on motivation and its relation to the architect as a category of professional who acts within a system of values shared by other professionals, Lipstadt can conduct this analysis without examining the constants of any particular competition (see also Jones, 2011; Larson, 1994 for instances of this outside of management studies). In exploring the reasons *why* competitions operate and architects enter them, Lipstadt (2009) does not explore the *how*, that is, the

practices and materials involved in the existence of the competition from one day to the next.

Within the management literature, the process of running a competition seems to detach from architectural objects. Submissions become concepts, existing within the descriptions of conversing jurors. In Van Wezemaal et al (2011a), there seems to be a choice between *the boiling pot* and *the open top*, rather than the boards, images and so on in which these submissions exist. And in many competitions, the jurors finish the deliberation process by writing a jury report (see Schmiedeknecht, 2013 for one example). What appears as a linguistic process results in a linguistic product. Indeed, given that open design competitions tend to feature a brief, the linguistic life of the building extends even further. Silberberger (2011) demonstrates as much in a study of the brief-writing process: conversations about what to include in the brief produce written specifications about a building. We might even say that the production of architectural objects, the building as a multiplicity of isometric drawings, models, renders and so on, is an interlude between the conversations that produce a brief and the conversations that produce a jury report.

The question of how competitions engage with the everyday practice of architecture may well be less a question about dynamics of the two processes than about the way one suppresses the other. For among the various sites through which competition takes place, where future 'users' take part in workshops with process designers, where jury panellists go over entries and so on, it becomes difficult to tell how the coming-together of a competition makes a difference in the way architects work from one moment to the next. Perhaps if the competition is a site that brings together the material transformations of architecture with the discourse of, say, statehood, what happens at that site is a kind of subsumption of the objects beneath narratives *about* objects. By investigating the way architectural practice and architectural competitions come together, we can see how the *representation* or *description* of practice within briefs, jury reports and so on relate to the ways in which architects interact with the objects of a studio.

2.4 Objects and practices meet strategy and judgment

After a review of recent research on architectural practice within the studio and managerial practice within the organisation of competitions, the competition as a research problem only deepens. For not only do architects entering a competition have to correspond in some way to the competition format, but doing so seems like a digression from the

temporal progression of design within an office as anthropologists have described it. Competition seems to proceed from stage to stage, beginning to end. Architectural practice takes unexpected turns and can accommodate a limitless flow of new inputs. Not only that, but the administration and organisation of competition appears to be a process that is far *less* materially rich than the preparation of architectural products. The world of a juror seems to be one filled with words, written and spoken, deriving their existence from submitted images but leaving the images behind. Exactly *where* and *how* the world of the jurors and the world of the architects come together is a question for empirical research.

What is more, because the language of procurement seems to determine architectural practice but also seems to exist outside of it, the question that remains is one about process. Even if we do attend to objects, it is not enough to analyse finished images only, as Schmiedeknecht (2007) does. Schmiedeknecht (2007) is worth considering here because, unlike both the ethnography of architecture and the management research on competitions, he examines the relationship between procurement and design. But Schmiedeknecht considers design as a finished *product*, rather than an ongoing *process*. With the help of interviews with the two partners of one firm, Schmiedeknecht compares a private commission and a design competition in terms of expressing a particular concept. Schmiedeknecht observes that the competition entry relies on generic types and forms, which communicate more clearly to a jury, while the private commission includes more fragmentation among images, which emerge over the course of negotiations with a client. While this study does reveal aspects of design and procurement, the focus on submitted drawings says little about the relations between objects and practices through which a competition comes to exist on the same plane as the work of design. As the ethnographers of architectural studios make clear, there is a range of objects that crop up over the course of a design process, few of which are finished drawings. Somewhere within this flurry of documents, images and models, the language of procurement takes hold. It is this multiplicity of objects that I am interested in, and that the managerial focus on language has not yet described.

The gap between language and practice is one that I address by exploring the concept of *competition* through concepts from actor-network theory (Chapter 3). I then arrive at a *relational* view of competition as a complex *thing* (Latour, 2004, 2005b) that emerges from practices and the objects through and around which they take place. In the empirical

chapters (Chapters 5 – 9), I look at different configurations of objects and practices that, each in its own way, participate in producing the competition as a thing.

Chapter 3

Competition, language and practice

3.1 Connecting objects and practices with categories and formats

Formal architectural competitions present a tension between determinism and indeterminism, the described and the undescribed. In reviewing the language of competitions in the UK (Chapter 1), we see a language that overlaps with that of procurement. A competition is a part of a procurement route, a way of setting out in advance the relationships that make up a project, the order in which things are done. Competitions specify part of a sequence: who submits what and when. At the same time, to specify a competition as part of a procurement route is to leave part of the path unpaved, awaiting results. No one knows who will be selected, only that *if* some firm is selected, the sequence continues, the firm develops the design, a planning application emerges, there is a tendering process for a contractor (if the procurement route is 'traditional') and the construction process begins. In the definition of a competition, some things go undescribed.

Thus in a procurement route, the competition is something of a caesura. And within the caesura of the competition is a moment of architectural practice that has received little empirical attention. Within two literatures that come closest to studying competitions and architectural practice (Chapter 2), one is noteworthy for its detailed observations of design as a process. If any scholarship were to see the competition enter the working lives of architects, this would be it. Yet within the studios of the ethnographic literature, competitions do not seem to present themselves. Where the competition does become more explicit is in a strand of management studies, where researchers observe situations such as the writing of the brief or the announcement of a selection. Yet in a curious disjunction between the two literatures, interactions between practitioners and surfaces tend to go unmentioned in the management research.

We come away from the literature on architectural practice and architectural competitions with two puzzles. First, the two literatures seem in some ways to be inversions of each other. One focuses explicitly on competitions as a matter of language while putting materials outside its scope. The other focuses explicitly on materials while setting aside any formats, 'routes' (Chapter 1), structures, or other categories for architectural projects

that take hold (seemingly) outside of routine practice. This puzzle has to do with the connection between architectural competitions, language and practice.

The second puzzle is that it is not clear how whether architects work *competitively* given the sparse ethnographic attention of the management literature, nor is it clear from the anthropological literature's attention to what takes place *within the studio* how something that spans sites, the competition, enters into practice and connects with the language of the procurement route. From the definitions of procurement routes or kinds of competition (Chapter 1), we are left to wonder whether the competition includes *competitive practices* or whether the competition is abstract and removed enough from practice to *organise* architectural work without having any bearing on the moment-to-moment interactions of architects and objects.

In the case of competitions, the two puzzles arise through a gap between the management literature and the studio ethnographies. But in other literatures, no such gap exists: theorists have managed to make crossings between practice and competition as well as practice and language. The task of the moment, then, is a brief investigation of these literatures to see *how* these crossings are possible and *whether* we might make the same crossings in the case of architectural competitions. The chapter begins with the most prominent theorisation of practice and competition within actor-network theory (see Gregory, 2014 for a contextualisation), Callon's (1998) analysis of competition within markets. With a brief consideration of similarities to Callon among ethnographies of practice in various market situations, we see that competition is *relational*, emerging from processes that are not at first glance 'competitive' but that *become* situations of competition through particular objects and practices. We can thus examine the way the architectural competition *comes together* on its own terms, without having to refer to some 'bigger' or 'underlying' concept of competition (such as the definition of procurement routes; see Chapter 1).

To resolve the second puzzle, I turn to a number of theories of language as it interacts with practice, drawing mostly from actor-network theory but also on studies of architectural practice. Just as ethnographies of architecture (Houdart and Chihiro 2009; Yaneva 2009a, 2009b) have taken methodological cues from actor-network theory in order to analyse the way *a building* comes about from the objects of a studio and architects' engagements with them, I draw from actor-network theory in order to analyse the way *architectural competitions* come about from objects and relations that move between sites. Here I

illustrate ways in which these theories can connect *categories for* architectural practice with architectural practice itself.

By the end of the chapter we will have a set of theoretical tools that we can use to address the gap between management studies and studio ethnography, language and practice, competition and design. This theoretical toolkit gives us a basic set of terms, *practices*, *objects* and *things*, that we can use to account for what we observe in the 'field' as we look at the connection between architectural competitions and the work of design. Here we can describe the *elements* and *arrangements* of these objects and practices. This way I can interact with the objects that make up the world of the competition, following their possibilities for action into different, diverging paths of research (Chapter 4). Along each path we find a set of processes, emerging in another way from the others but related to the possibility of engaging with the architectural competition (Chapters 5 – 9). Thus we can describe the ways in which the design work of architects in their studios can come together with the organisational work of clients (Chapters 10 – 11).

3.2 Actor-network theory

This study gleans concepts from actor-network theory because these concepts have been used to answer similar questions. In asking how architectural competitions come together with architectural practice, I am looking at something that is apparently *bigger* than an individual, that seems to transcend practices and objects, and examining how that thing operates from one day to the next, how it holds together, how it keeps from falling apart. Concepts associated with actor-network theory have helped scholars talk about the coming-together of things that otherwise seem to exist 'above' or 'below' the world of humans and objects (see Latour, 2005a: 167 – 172). We see this in studies of aircraft (Law, 2002), atherosclerosis (Mol, 2002), electricity networks (Akrich, 1992), refutation within science (Latour, 1986), scientific knowledge (Callon, 1986) and the production of markets (Callon, 1998). Here I explain my use of terms from actor-network theory as a way of clarifying the architectural competition as it takes place in practice.

In drawing from actor-network theory I follow studies of architecture over the last decade or so. For Yaneva (2005, 2009a, 2009b, 2012), actor-network theory is a methodological inspiration, a cause to look beyond the apparent monoliths of architectural history (i.e. 'modernist' style or 'Welsh' style) to study the 'making of a building' (2009a) in terms of practice: moving objects, gathering actors. That is, '[an] ANT approach to design would

consist in investigating the culture and the practices of designers rather than their theories and their ideologies [...]’ (Yaneva, 2009c: 282). Taken broadly, this is also a stance we see in Houdart and Chihiro (2009), where in architect Kuma Kengo’s projects is ‘not just the general framework of Kuma’s work or a declaration of his intentions—but instead, a network of relationships [...]’ (35). Here actor-network theory is a constant reminder that what seems to be a ‘transcendent’ source of explanation for something less durable can emerge to be just as subject to routines and vicissitudes if only we commit ourselves to ethnographic rigour. And with this aspect of actor-network theory in mind, I can ask how the announcements of competitions come in contact with the lives and practices of architects.

Different ideas from actor-network theory have come under criticism when used to describe practices of making. Ingold, for example (2007, 2008) argues against the use of the term ‘network’, instead favouring the ‘meshwork’ as something that ‘consists not of interconnected points but of interwoven lines’ (Ingold, 2007: 35), where a relation ‘is a line *along* which materials, flow, mix and mutate’ (35). Individual things dissolve into the interwoven flows of process. We see a similar criticism of actor-network theory that targets the research of Jacobs (2006) and Jacobs et al (2007). In these studies, what comes from actor-network theory is a broad notion that ‘big’ things like buildings are *achievements* of ‘smaller’ actors like concierges, residents and news articles. A building can seem stable and whole until a crisis reveals the rootedness of that whole in a set of relations. This approach, say Rose et al (2010; see also Lees and Baxter, 2011), steers us away from *feelings*, with ‘little analytical interest in how feelings might be part of what holds big things together [...]’ (337). That is, the authors want to flesh out this use of actor-network theory with previous geographical analysis of *affect*. The literature on affect is beyond the scope of this thesis, but it is enough to say that the criticisms of Ingold and Rose et al have a similar thrust: the focus of actor-network theory on *things* (as in Latour, 2004, 2005b) eschews the various flows and processes through which those things become involved with one another, and the only way we can say that things are bounded and discrete is by leaving out important processes such as feeling, flow, affect and so on.

My response to this criticism is that the treatment of the competition as a discrete *thing* is adequate for research on architectural competitions. In fact, it is important to consider the competition as bounded and whole. The reason for this is that in certain situations, competitions *do exist* as things, or at least produce the possibility of responding to them

as such. Industry periodicals such as the *Architect's Journal* publish announcements of competitions, broadcast the winners and report on debates about competitions gone awry. It is common for architects to speak and write *about* competitions. Thus one architect who entered a competition for a Glasgow theatre remarks to a reporter from *Building Design* (7 December 2012), 'We have no faith in the competition system in Scotland'. The possibility of making this claim, or even the possibility of announcing a competition, is predicated on the existence of *some thing*, some set of objects and practices as they relate to the practitioners, that can be called 'a competition' or 'the competition system'. It is the existence of the competition as a thing that serves as a puzzle for this research. Indeed, the reason I employ terms from actor-network theory is because scholars who have used these terms work within a tradition of unpacking concepts that both operate within the daily lives of various societies *and* seem impossible to point to as objects in the world. Latour's (2004) analysis of the *matter of concern* makes this clear. Matters of concern exist as objects as well as interests. The matter of concern exists insofar as it assembles actors. But at the same time, the matter of concern *stands apart* (236). It is this process of standing apart and holding together that motivates my research into the architectural competition.

The concepts I draw from actor-network theory are thus ways of linking what seems to be intangible, transpersonal and 'out there' with the objects and practices that exist 'over here'. Each term I use comes from its own body of analysis, often drawing on empirical situations that are very different from that of architecture. Nevertheless, I use these terms because they engage with a broad set of theoretical problems similar to my own. Thus I refer to Callon's (1998) concept of *calculative agency* to describe the way the market competition emerges from practices of relating to *calculative devices*, particular objects. I do this to suggest a way in which competition as a 'big' thing emerges from 'smaller' things like pots and vending stalls. And when I point to terms like *matter of concern*, *inscription* and *description*, it is to make the claim that apparently linguistic processes like *naming* are bound up with practice, not divorced from it. That is, we can describe research findings like documents and interviews as *situations of practice*. Finally, I use the terms *detour* and *translation* to frame the technologies from which the competition emerges and thus make the concept of the competition more amenable to ethnographically inspired research.

3.3 Relationality

One question we can glean from the research in management studies and studio ethnography is this: What is competition practice? Is practice *within* a competition (i.e. that satisfies the definitions of competitions of the sort we see in Chapter 1) the same thing as *competitive practice*? Each possibility presumes a different assertion about competition in relation to practice. If architects act *within* competition, then competition is a set of parameters, objects, sites, elements that interact with practice. That is, competition is a specific situation, not a quality of practice. But if architects act competitively, then they *do* engage in a certain kind of practice, competitive practice.

The category of *competition* becomes even more complex when we list the different contexts in which the word appears. Writing within the response section of Colloredo-Mansfeld (2002), Weismantel suggests ways in which the category of competition might provide the basis for ethnography. Here we see just how variegated competition is:

As a first premise, an ethnography of competition might distinguish between the several meanings of the word which surface at different moments here: the ideology of competitiveness so beloved of free-marketeers, actual competition between capitalist enterprises, and the far older and more pervasive sense of competition as rivalry, which need not be part of capitalism at all. Capitalist culture continually conflates these in its drive to naturalize its own artifices; our job as social analysts might begin with separating them out so as to understand their relationship to one another and to the neoliberal and other practices they underwrite. (Weismantel in Colloredo-Mansfeld, 2002: 130).

With so many possible senses of the word ‘competition’, it will be helpful for this study to clarify what ‘competition’ means in terms of everyday practice. By looking to other theorisations of competition as a matter of practice, we can see what sort of *thing* to look for in the field of architecture.

One lineage of social theory has already situated practice within competition. Following the idea from actor-network theory that a researcher can follow ‘big’ things between the ‘small’ sites and practices through which they become active, Callon (1998) introduces an edited volume that focuses on practices within *the market*. I bring in this theoretical work because it has supported a wave of ethnographic and historical research in the field of ‘cultural economy’, all looking at techniques as they participate in the emergence of the market (for analysis of the influence and implications of cultural economy, see Gregory, [2014]). Since Callon, there has not been as fundamental an inquiry into the basis of economic practice within the ethnographic literature on cultural economy. Callon and Muniesa (2005) elaborate the processes that Callon (1998) introduces, describing this as

an ordered series of movements and transformations (I discuss Callon and Muniesa in more detail in Chapter 6). Since Callon (1998), theoretical engagement with the notion of competition has been rather sparse. One high-profile example is a debate with Miller (2002). But Miller's argument takes issue with one aspect of Callon's analysis (the frame) that has no bearing at all on Callon's analysis of competition. And when Callon and Muniesa (2005) clarify the concept of calculation, they do not return to the discussion of competition. Thus Callon (1998) guides my discussion of practice as it relates to competition in this particular sense.

For Callon (1998), practice within competition is an extension of practice within a market. By focusing on *actual, physical* markets, Callon takes the sort of practice we see in the ethnography of architectural studios (see Chapter 2), that is, practice which acts through relations with *things*, and connects it with the notion of the market. For Callon, competition is an outgrowth of the market as a set of relations between humans and nonhumans. What allows Callon to bridge the abstract market of economics with the concrete markets that he sees as neglected is the notion of *calculation*. Calculation, he says, is a process in which agents list states of the world, rank them, then 'identify and describe the actions which allow for the production of each of the possible states of the world' (4). But this is not a process that takes place within a single human mind. Echoing the work of Hutchins (1995), Callon says that to calculate is to enter relations with calculating devices. Here calculation, calculative agency, 'follows its combinatorial logic, that of connection and disconnection, which is entirely relational' (11). A market is in this case something that emerges from relations.

And if the market is a network of calculating devices, then *competition* becomes something that takes place within the network. That is, Callon is careful to clarify that he has not distinguished between the activity of competing *within* a market and the organisation of a market itself. He writes,

The market is not a two-step process with a competition phase followed by an exchange phase. The type of representation puts the creation process of products and demand for those products in parenthesis, a process which we know involves a web of close connections between designers, producers, distributors and consumers'. Preparing the final transaction, that is to say, capturing a customer and engaging her in an exchange from which each party leaves as a stranger involves [...] a long process of networking. (Callon, 1998: 43)

For Callon, competition is not so much a struggle for *access* as it is a two-way process of *joining*. Thus exchange within a market is not a crossing of a threshold. *Access* becomes

another word for adding more things to the network. To access a market is to *change* the configuration of the relations that make up the market. The configuration of the market becomes the configuration of competition.

In the decade after Callon's (1998) analysis, various ethnographic research among craftspeople and financial practitioners have supported the idea that markets, and thus market competition, are *relational*. While the craft research tends not to refer to Callon, it brings out the rootedness of competition within practice and within particular relations. Here the ethnographies add a new dimension. In looking at the processes through which practitioners participate in markets, these studies demonstrate how competition assembles in different situations as a process of *learning to compete*. Thus among ethnographies of craft practice (see Colloredo-Mansfeld, 2002; Gillette, 2010; Naji, 2012), we see the competitive relationship to be one that overlaps with *other* relationships, between kin, colleagues and so on, blending with practices of care and collegiality (Colloredo-Mansfeld, 2002; Gordon, 2011; Naji, 2012;). Potters in one Chinese town might experience their trade as one of rivalry and secrecy, employing only family members and hiding their production from visitors (Gillette, 2010). In another town, potters might drift in and out of one another's studios, saying no hellos or goodbyes, a kind of ongoing familiarity (Gowlland, 2009, 2012). The patterns of behaviour in these cases are so divergent—secrecy in one, openness in the other—in so far as each is a configuration of a different market. In all of these cases, competition *as a matter of practice* is an extension of other practices: negotiating relationships with clients and colleagues in the course of developing one's craft.

The analysis of Callon (1998) has contributed to a relatively recent ethnographic tradition focused on the everyday practices of producing markets. Here I refer to ethnographic work in finance, again a phenomenon of the last fifteen years (see Buena and Stark, 2004; Riles, 2011; Zaloom 2003). What is particularly useful about this research is that, unlike much of the research on craft, it engages directly with the theoretical side of cultural economy (as in Callon, 1998). Indeed, in a review of cultural economy as a theoretical position, Gregory's (2014) examples of relevant fieldwork come from the ethnography of finance. Market participation among craftspeople and among financial traders share important similarities for a consideration of competitions within architecture. Like market participation among craftspeople, the production of a market among the practitioners of finance requires skill in navigating through everyday relations with others as well as the

challenges and affordances of working through one's environment (Buenza and Stark, 2004; Knorr-Cetina and Bruegger, 2002; Miyazaki, 2007; Zaloom, 2004a, 2004b). In all these cases is a need for *learning how to respond to* the environment, the objects, of a room, whether this includes long tables or the computer screens that stand on them. We might ask, then, how architects develop within a situation of competition or otherwise *learn to compete*.

With this discussion in mind, we can refine our research question. To ask how architectural competitions come together with architectural practice is to ask how the practices and objects, humans and nonhumans involved in both architecture and in the architectural competition relate to one another in a certain way. Whether a situation of competition takes place among potters or stock traders, to *participate* in the situation entails developing particular practices. And what is key is that the practices are particular *to the situation itself*, rather than to some essential quality of competition. Thus potters in one town and (Gowland, 2012) and painters in another (Colloredo-Mansfeld, 2002) act in ways that might be considered collegial, rather than rivalrous, even if in the sense of being able to sell they might be described as rivals. Applying the same kind of perspective to architecture, we might say that a competition is not something that an architect merely *enters*. It is not something that pre-exists architectural practice or has a *necessarily* more durable kind of existence. There must also be *practices of doing competitions* that take part in the assembly of the competition. Of architecture and competitions, a relational, emergent, contingent practice exists on both sides. The preparation of the entry is certainly an important aspect, but what is also important is the process through which preparing an entry *becomes* so important in the first place. For we see in the sheer contingency of competition in a range of cases, from craft markets to stock markets, that the organisation of a competition is as fundamental a question as the way actors 'compete'. As I prepare a method for studying competitions (Chapter 4), then, I consider the architectural competition as a *complex thing* rather than a monolithic whole that architects 'enter'.

3.4 Agency

If theories of competition and market participation in Callon (1998) hold for architectural competitions as well, then the competition is something that *develops along with* architectural practice, not something that architects merely *enter*. That is, the possibility of entering a competition only exists because the format of the competition has already

anticipated a certain kind of architectural practice. Competitions enter the lives of architects as much as architects enter competitions. To enter a configuration of competition is to learn how to act *along with* these things. Competition and practice *emerge together*.

To make it clearer what I mean by this, and how we might talk about architectural competitions in terms of *emerging together with* architectural practice, I use the term *agency*. Here I follow claims about agency that we see in actor-network theory, particularly in Latour (2005a). What is key here is that agency is *distributed*. Acting in the world, doing things to other things, becomes an extension of being acted upon. It is a set of relations, not a single, determinant actor, that brings about action. Actors act *through* other actors and are brought *to act* by others more. For Latour, what is important is that something *makes a difference*:

An invisible agency that makes no difference, produces no transformation, leaves no trace, and enters no account is *not* an agency. Period. Either it does something or it does not. If you mention an agency, you have to provide the account of its action, and to do so you need to make more or less explicit which trials have produced which observable traces. (Latour, 2005a: 53)

What Latour wants to do here is avoid any notion of *invisible* agencies that do not bear upon the world in some way. This is similar to Latour's earlier (2004) argument against lazily *critical* accounts of things that explain the world with reference to either transcendent concepts 'above' the thing or underlying processes 'below' it, that is, anything that avoids reference to the thing's relations with other things. Agency becomes a process through which changes take place.

The result is that the range of actors we can include within an account of agency can include both humans and non-humans. Here Latour's analysis becomes especially helpful for talking about architectural competitions and architectural practice. What is crucial for Latour (2005a) is that 'making a difference' can be subtler than cause-and-effect. The image we get from Latour is not of billiard balls striking one another against an otherwise neutral backdrop. Instead we can draw a kind of heat map of the ways that actors nudge, pull and press against one another, inclining one another into new possibilities for movement and being. Of humans and non-humans,

This, of course, does not mean that these participants "determine" the action, that baskets "cause" the fetching of provisions or that hammers "impose" the hitting of the nail. [...] Rather, it means that there might exist many metaphysical shades between full causality and sheer inexistence. In addition to "determining" and serving as a "back-drop for human

action”, things might authorize, allow, afford, encourage, permit, suggest, influence, block, render impossible, forbid, and so on [...]. (Latour, 2005a: 71 – 72)

What this is to say is that agency proceeds through a network. A network is not a set of things that act *on* one another (even though things in a network exist *as things*), but set of *relations* through which action takes place. Here we can see why it is possible to say that architects do not *enter* competitions but act *along with them*. If architects are to encounter something ‘big’ like the competition, and the competition is to *make a difference* within the practices of architects within their studios, architects encounter the competition as *relations in the world* rather than some ‘invisible agency’, not as an abstract ‘invited competition’ or the ‘open competition’ but as things that affect them and are affected in return. That is, architects and competitions encounter one another *on the same plane*. And in the empirical investigation that follows I ask what this plane looks like and how the process of relating takes place.

We can compare this version of agency with one we see among prominent texts in architectural history and theory. One recent line of research, for example, looks at *spatial agency* (Awan et al, 2011; Schneider and Till, 2009). In exploring ‘alternative’ architectural practices, the authors describe ways of reimagining the relationship between architects, clients and users, particularly the role of the architect as an *author* of buildings. Here the concept of *agency* comes from Giddens (1987: 215): agency ‘presumes the capability of acting otherwise’. Thus while Schneider and Till (2009) grant that architects’ work upon the world is *mediated* through objects like buildings, they argue that the idea of agency within actor-network theory is inadequate. The problem with the idea of the actor-network, they say, ‘is that it lacks intentionality: it might describe a dynamic state of affairs but it does not institute what we have taken as the defining point of agency, namely its potential to transform the given’ (99). If the authors want to envision an architecture that *intends* to subvert practices of commodifying buildings, separating users from clients and so on, they say, they need to preserve some notion of intentionality.

In debating this point, it is beyond the scope of this thesis to pit Latour against Giddens. What is possible is to state simply that concepts from actor-network theory allow me to describe architectural competitions *from the inside*, through the objects and practices out of which it becomes possible to talk about competitions at all. A formulation of *agency* as a network of humans and nonhumans allows me to describe the competition in a way that avoids the ‘invisible agencies’ of abstract categories existing apart from other things. And

as I show below, terms I draw from actor-network theory also draw from premise that ‘big’ things like ‘society’ or ‘buildings’ do not exist ‘above’ or ‘below’ the everyday world of practice but *within*. This will allow us to go beyond the definitions of competitions we see in official guides and explore the way they operate within architectural practice.

3.5 Language within practice

In reviewing studies of architects in their studios alongside studies of architectural competitions as phenomena of management, it becomes clear that there will be no account of competitions without some engagement with *language*. For while architects in their studios react to unfolding transformations, taking part in a *dance* (Yaneva, 2009b: 51 – 63) that moves in tandem with evolving surfaces, they also work among descriptions of procedures that have not yet taken place. The definition of a procurement route (Chapter 1) is one such description. In each format of competition is an enumeration of moments, a story about what architects will be doing from one juncture to the next. Here speech about architecture is something architects, particularly in competition, have to engage with.

An account of language that would least obscure the relationship between architectural practice and architectural competition would give a role to speech, writing, techniques and surfaces without trying to substitute one for any of the others. In finding such an account, we might follow Markus and Cameron’s (2002) response to a similar requirement. Language, Markus and Cameron say, is not peripheral to architectural practice but woven throughout. Thus we either attend to both practice and language or we lose sight of both. To arrive at a suitable theory, Markus and Cameron refer to Forty’s (2000) earlier work on language as well as more semiotic accounts of architecture. To begin with, it would be impermissible to treat architecture *as* language, as this would ‘[obscure] the role played by actual language, speech, and writing’ (Markus and Cameron, 2002: 8). Another relationship the authors consider between language and practice is a broad gloss on Foucault’s treatment of *discourse*. Markus and Cameron want to preserve this sort of account as ‘a source of insight into the way in which reality has been and continues to be constructed’ (12). But they also want to retain the notion that the world has qualities that exist independently of language. Buildings are not just artefacts of language here but things in the world. What Markus and Cameron set out to do, then, is analyse language not as a stand-in for practice, but as something that participates in the activity of design. Following Markus and Cameron, then, it might be possible to take the objects that circulate within architectural competitions as participants within practice. That is, we can

acknowledge that competition entries *are* representations and that the language of, say, jurors *does* refer to or represent something. But here, it is important to recognise the *movements* of representations and the *situations* in which reference takes place. The set of practices of design would include practices like conversing, reading, evoking, describing and so on.

Beyond the general acknowledgment that language participates in practice, there are particular theories of linguistic-material processes can help connect the figure of the competition to the figure of architectural practice. As with *relationality* and *agency*, I derive these loosely these from actor-network theory. These processes combine language and practice without substituting one for the other. One becomes clear when architects give names to things. In speech, as in practice, named things become significant. This becomes clear in one quotation in Yaneva (2009a). The quotation follows a moment in an OMA project, the extension of the Whitney gallery in New York City. The client has revealed to the architects that the design is over budget. As they change course, the architects come up with a number of *options*. Earlier in the project, the architects had produced a plan diagram of the site. Part of the plan are brownstone buildings that a 1987 Landmarks Commission report had designated as ‘no-style’, making them safe to alter. In one option, the ‘no-style’ brownstones would be demolished while the ‘historically valuable’ (45) brownstones would not. But in the midst of a budget concerns, the architects consider another option: to ‘retain the brownstones completely’ (166):

If we retain the brownstones completely, if we do not demolish any part of them, *it means* that the footprint gets reduced. [...] And also we would have to rethink all the issues of circulation and the way you get into the building and the way you move around the buildings, because if we retain the brownstones entirely it would mean that the escalators that go along the building would no longer work (Interview with Erez quoted in Yaneva, 2009a: 166, emphasis in original).

What is noteworthy here in terms of language and its connection to practice is the word *brownstones*. For the architect, this term needs no qualification. Brownstones are simply brownstones. At the moment of the quote, all of this prior activity culminates in a word that, as seems to be the case here, is readily understood by all involved. That is to say, the word *brownstones* seems to retain different relations: the 1987 report, the question of demolition, the distinction between ‘no-style’ and ‘historical value’ and so on.

In other words, the *brownstones* have become a *thing*, which Yaneva (2009c: 284) takes from Latour (2005b) to mean ‘a contested gathering of many conflicting demands; a

disputed assemblage that will divide and congregate and will engage new assemblies of humans and nonhuman'. What seems to be the case is that in the term *brownstones*, a thing that has assembled demands and practices now receives a name. As things, the brownstones have a particular relationship to language. We can think about this through Latour's (2004) theorisation of the *matter of concern*. Much of critique, Latour says, accounts for the existence of a thing by asserting that it is *actually* something else, whether hidden causality or a projection of this or that belief. An alternative move deploys matters of concern, including not only objects but the interested actors that they gather:

The stubbornness of matters of fact in the usual scenography of the rock-kicking objector—"It is there whether you like it or not"—is much like the stubbornness of political demonstrators: "the U.S., love it or leave it," that is, a very poor substitute for any sort of vibrant, articulate, sturdy, decent, long-term existence. A gathering, that is, a thing, an issue, inside a Thing, an arena, can be very sturdy, too, on the condition that the number of its participants, its ingredients, nonhumans as well as humans, not be limited in advance. [...] For me it makes no sense to reserve the realist vocabulary for the first one only. The critic is not the one who debunks, but the one who assembles (Latour, 2004: 246).

Latour's argument is a claim about *explanation* but also a claim about thing-ness. That is, the way an explanation (or a critique) moves from one moment to another depends on the things that the explanation mobilises (or evokes, refers to, deploys—the argument obtains for either). What is important here is that the matter of concern, as a thing, is 'in one sense, an object out there and, in another sense, an *issue* very much *in* there, at any rate, a *gathering*' (233). Latour seems to be intentionally ambiguous about language. The pragmatic processes through which gathering takes place, through which matters of concern come together, also form the basis of explanations that *contain names* for those matters of concern. The concept of the *matter of concern* is useful here because it addresses the problem of practical relations as they come into contact with categories of things. What this concept allows us to do is describe the former through the latter. Latour (2004) is claiming that categories do not stand *apart* from relations but exist *within them*. A category such as 'procurement route' is only meaningful in so far as there is a set of interests, a set of agencies, organised around that category. Without the efforts of a collective in relation to an issue, in researching, debating, promoting, denouncing, gathering allies and so on, the issue does not have the same scope, the same set of referents, the same associations. Here (and especially in Chapter 5) I look at the emergence of the competition as a matter of concern, as well as any other matters of concern that become involved in the process.

A second process that puts language and practice alongside one another is the *script* as elaborated in Akrich (1992). Like the *matter of concern*, this is a term from actor-network theory. And like the matter of concern, the script can be taken as a fact of language or of things in the world, or perhaps of one participating in the other. We find the script where designers *inscribe* a 'vision (or prediction about) the world in the technical content of the new object' (208). The ambivalence of the script with regard to language is this: the script lends itself to *description*, to 'inventory and analysis' (209), but only becomes present through negotiations between the object and its 'users'. That is, a description is not simply an extraction of the script from the object itself, but an account of relations between the object and its world. At the same time, the script is not *only* present through description. There are moments when a technology becomes *black boxed*, where the designer is absent in the world of the user, and the user 'has already taken on board the prescriptions implied in interaction with the machine' (211). In some cases, it seems to the users as though there were no alternative, that the technology and its script were *natural*. In this way, something that can be taken as linguistic, a *description* (an analysis, an inventory) also participates in the interactions that users have with objects.

A third process that joins text, speech and material also comes from actor-network theory, this time from a more squarely scientific origin: the *inscription* (Latour, 1986). For Latour, laboratories produce arrangements of images and text that can travel into scientific journals, conferences, other laboratories and so on, in effect allowing scientists to refute one another. While the situation of a scientific laboratory is very different than the sites of the architectural competition, I want to extract two broad implications for the architectural competition from Latour's analysis. First, the processes of *writing* and or *drawing* can be described as interactions with the world, not just detached representations of it. Inscriptions gain the ability to refute as *cascades* of inscriptions, where one inscription is transformed into another. This requires *practices* of inscription, whether through an inscription device (laboratory equipment involved in experiments) or as an intervention into a previous inscription. That is, text and image can be taken not only in terms of their representational content, but also as the *finishing point* in a trajectory of movement or transformation, a *trace*. While the artefacts of the competition are not necessarily inscriptions in Latour's sense (a full comparison of the inscription with the competition document is beyond the scope of this thesis), it is useful to understand written language as something with a *trajectory*, a path, as an object in the world.

The second point is related: inscriptions are *mobile*. Their durability allows them to travel. Inscriptions can be removed from one document and placed within another, copied, compiled or otherwise transformed, all on the basis of their material qualities. In the inscription, words and images *respond to* the material world, but also participate within it. While competitions are not necessarily laboratories, a study of architectural competitions can derive from the notion of inscription the observation that documents can be analysed not only for what they ‘say’, but for the conditions through which their visual elements are arranged to enable them to ‘say’ it. Documents circulate like any object. It is not enough to describe the competition entry as a representation of a building: it is also the product of practice. Thus I look at different kinds of inscription that circulate through one building project (Chapter 6).

From studies in actor-network theory, we can name four processes that connect written or spoken language with the agential relationships that unfold among humans and nonhumans. First, the concept of the *matter of concern* allows us to talk about the relationships through which a thing is held together as such, where each thing is also a gathering, a set of practices of relating. Second, by talking about *description* we can position speech and writing about the objects through which competition emerges within the negotiations between production and use, the way those objects act in the world. Finally, *inscription* as a category allows us to talk about documents as not only passages of text but as *artefacts*. Here we can follow the paths that documents trace through the world, through movement and through transformation. With these concepts, we can study the way that the categories that make up the discourse of procurement move within the world of the architectural competition.

3.6 Detours and translations

If competitions are complex, emergent *things*, we can nevertheless expect them to have at least one point of entry. In other literatures (Chapter 3), we see a selection of ethnographic cases in which the existence of ‘big’ entities like markets become describable in situations where a researcher has visited a ‘field’ and recorded observations. Architectural competitions take place over sites that may have little access to one another (see Chapter 2). Kreiner (2013) shows architects fumbling with the question of how to make the client present within the studio during a design competition, and Silberberger (2011) shows consultants discussing how to write a brief that they can then send to architects who, as Kreiner (2009) tells us, struggle to represent to

themselves what it was the client had intended all along for the brief to do. If there is to be a point of access to an ethnographer of architectural competitions, then, it has to contend with a network of sites.

But since competitions take place between offices, through circulations of briefs and tenders, through contacts between architects, clients and consultants, a researcher looking for a point of access can expect to encounter a range of technologies: telephones, meeting rooms, the .pdf format, email, tables of computers, text as well as speech and activity. To follow competitions as a researcher is to engage with the unique affordances of their relations. And as these affordances diverge, the research splits into strands. Thus I encountered sites as actors told me about them or gave me access. Just as I assumed that competitions would be, like architectural practice, reticulated across sites, I approached my fieldwork as something that could take me to unexpected places.

This unexpectedness is a result of following technologies. For if the 'competition' as a *thing* emerges from relations between human practices and non-human objects, it is these objects and practices that a researcher would encounter in the 'field'. And in engaging with *objects*, I as a researcher work through the capacity of those objects to organise activity. If we attend to objects, we follow their affordances. To do this I refer to another bit of analysis from within actor-network theory, Latour's (1999: 176 – 192) account of agency and technology. Latour begins with the concept of a *programme of action*, 'the series of goal and steps and intentions that an agent can describe in a story [...]' (178). Here the programme of action involves non-human objects. Somewhere along the line, the agent becomes *interrupted*. Here the detour is one of *goal*. Latour gives three possibilities: returning to the original goal; shifting to *another* goal, a *script* that belongs to the object; or 'the creation of a new goal that corresponds to neither agent's program of action' (178). In the first two possibilities, one actor in the situation becomes the sole agent, determining the course of the programme of action. But the third is what tends to happen, Latour says. This is a *translation*, by which he means 'displacement, drift, invention, mediation, the creation of a link that did not exist before and that to one degree modifies the original two' (179). The critical point here is that *networks* in Latour's formulation are more like trajectories than power grids. They are not so much stable nodes with indefinite traffic between them but tangles of action that respond to one another, mutually attuned. It is not objects *waiting to relate* that populate the network, but *objects relating*, networked only as long as the relating takes place.

Thus in following the technologies through which the architectural competition emerges as a relational *thing*, I become subjected to multiple *detours*. As a researcher, I develop my own programme of action, with *intentions* (to examine the world of architectural competitions) and a *goal* (to produce an account of architectural competitions in which the *practice* of the competition is made clear). In the meantime there is some series of actions that can be described as a story. That is, the network through which I as a researcher come in contact with architects, consultants, drawings, models and so on *in the field* does not exist before I make that contact. Even if regular relations *were to* exist between certain actors, by encountering those actors I would produce new detours, new inflections of my programme of action with the actors I meet in the 'field'. This is less *ethnography of a site* than *ethnography as a trajectory*, that is, ethnography describable *as a story*. Here the state of the research at the beginning is not the same state at the middle or the end, as new associations emerge along the path.

We might recall that the definition of translation that I draw from Latour is the same definition that Valand (2009) uses in her study of *moments of translation* within one architectural competition. My goal here is to expand and enrich this sort of analysis while framing it in terms of *agency*. The empirical discussion is dotted with moments of translation. What I want to do is take the fact of translation as a starting point: given that competitions are multi-sited (as the management literature tells us) and that architecture is a process of engagement within a studio (as the anthropological literature says, Chapter 2), I ask how a certain set or relations engages with the activity of design to produce what we might call *competition*.

3.7 Objects, practices and *things*

Looking only at the ethnographic scholarship on architectural studios and the management scholarship on strategy and organisation (Chapter 2), we might see the competition as straddling a gap. On the one side is the engaged, situation-bound practice of architects as they move in concert with the organising possibilities of objects. On the other side are the strategies and judgments that seem to come with being in a competition. There are jurors choosing a submission; clients choosing how to write a brief (Silberberger, 2011); and architects choosing how to read it (Kreiner, 2009). Between regular studio practice and the world of the competition is a shift from activity to language, collective agency to determinate choice.

After a theoretical side-journey into competition and language, it becomes possible to make our way across the gap and study competition as a matter of practice. The way to do so is by drawing on actor-network theory and thus taking the competition as a complex *thing* in the sense of Latour (2004, 2005b). Here we can examine the way that thing emerges from, first, human practice and, second but no less important, the nonhuman objects through and around which practice takes place. It seems plausible to describe the competition as a *thing* because of the way it emerges relationally in the ethnographic literatures on craft and finance, as well as through what we see in the 'gap' between the anthropologies of architects and the management scholarship on competitions.

In Callon (1998) and the anthropologies of craft and finance, we see how 'competition' unfolds differently with different sets of practices, tools, trajectories of learning and relationships with non-craftspeople. In some cases there is rivalry, others not. In some cases individuals compete, in other cases groups do. Some sellers trade behind tables in plazas. Some trade from workshops with mass buyers. We might say that what makes each situation one of *competition* is the fact that some practitioners do not trade or sell as much as others, that opportunities to do so are limited. This is competition as a *result*. The way to *get there* is through many different processes that in themselves may not appear to resemble 'competitiveness' or 'rivalry' at all.

And in the case of architectural competitions within the management literature, we already see how competitions are assembled. Each competition could have existed differently. Competitions are *designed* (Kreiner, 2010), the discussions of jurors take place through the jurors' own contributions and their interactions with the entries, rather than some external mechanism (Svensson, 2009; Van Wezemael et al, 2011a; Volker, 2012), architects respond to briefs in which the text is subject to debate at the office of the client (Silberberger, 2011) and emerges through a particular series of translations (Valand 2009). It seems clear that architectural competitions are relational, but not how this relationality engages with architectural practice.

If the architectural competition is a *thing*, then it organises a collective, mobilising actors, becoming a focal point for activity. Here *agency* is important. And as the ethnographic literature with architects has shown, architectural practice takes place through the unique organising possibilities of particular objects. Objects and practice are inseparable. That said, for the purpose of this analysis we can separate them, naming both the objects that architects work with and the ways in which that work takes place, knowing all along that

each is involved in the other. Thus as I lay out my research methods (Chapter 4), I describe five separate *detours* through which my intentions to follow the objects of the architectural competition moved along with the affordances of those objects. I focus on objects and practices while mindful of the *things* that exist through them. Here I identify a number of *elements* and *arrangements*, that is, objects or practices and the relations in which they exist. I then analyse the way these things come together to make it possible to engage with the architectural competition.

We might imagine different configurations of objects and practices in the world of architectural competitions. As a hypothesis, it could be the case that competitions exist *as a particular set of objects in the studio*, such as the brief. We already know from Yaneva (2009a, 2009b) that architecture responds to the world ‘outside’ the studio through objects within the studio. Objects come to stand in for cities, zoning regulations and previous attempts at the site, along with what the architects know about the client through a brief (as in Kreiner 2013). It might be possible that the competition exists entirely through these kinds of things. Thus the practices through which architects *work on competitions* are the same practices through which they work on other projects. They still make small experiments with massing (as in Yaneva, 2005), working along the multiple affordances of different tasks and technologies (as in Houdart and Chihiro, 2009). In this view, what we do not see is *competitiveness* as a kind of rivalry. The competition translates into just another set of objects to incorporate into the process of designing a building.

The way this analysis will unfold, then, is by looking at *objects* and *practices* in the ‘field’ while observing the *things* that emerge from them. Thus I begin with the category of the competition, following it to different situations in which it acts as a *thing* (Latour 2004, 2005b). In each situation is a different set of objects and practices, and by following these, by subjecting myself to their *detours*, we can describe the sorts of processes through which architectural practice engages with architectural competitions (Chapters 5 – 9).

Chapter 4

Journeys through the agency of competitions

4.1 Taking ethnographic journeys

As we learn from other instances, competition emerges from practices that at first glance may not seem competitive (Chapter 3). That is, the fact that we know that competition exists at some site says little about the everyday practices we will find if we were to conduct ethnographic research there. Thus we can approach the architectural competition as a particular situation of practice (Chapter 3). And a discussion of the *language* of competition (Chapter 1) reveals even in an idealised vocabulary just how contingent competitions can be. Architects might participate in an invited design competition, but they may also work for a contractor who is entering a mini-competition through a framework for a 'Design and Build' contract (Chapter 6). And studies within the management literature (see Chapter 2) reveal the extent to which the client must *design* a competition (see Kreiner, 2010), from writing a brief to arranging meetings and so on. Architectural competitions seem to be relational, emergent entities. But what seems to be noteworthy in the architectural competition is that this relationality is explicit. The very definition of a procurement route in *Which Contract?* (Clamp et al, 2012, 15; see Chapter 1) is a 'complex network of relationships'. The idea that competitions are relational seems to be no surprise here.

That said, we still do not know which sorts of objects and practices allow the relational *thing* (Latour, 2004, 2005b) of the competition to come together. To investigate the way architectural agency encounters the architectural competition, I have conducted empirical research that is inspired by ethnography and that adopts a mix of techniques. Since the architectural competition is multi-sited, I begin with the category of the competition itself, following the objects and practices that the competition organises (I do, however, stay within what might be called a European context, with competitions that respond to EU regulations, involve European firms for projects in Europe and so on). What this does is leave open the exact sites that enter the process. As we follow the relations between objects and practices, humans and nonhumans where architectural competitions are present, we move between sites. The way I do this is by following the *detours* (Chapter 3) of the objects that I encounter within the worlds of the architects.

What this site-ambivalent approach means is that I adopt an ethnographic orientation without necessarily conducting an ethnography. Like an ethnographer, I am interested in everyday practices and understandings of the world. But while ethnographers of architects have conducted their studies for months within a single office, my study involves much briefer encounters at a variety of sites. What my work has in common with the ethnographies of architecture, though, is a commitment to following the elements (objects, practices, things...) of a given situation. Thus my version of ethnographic research is in some ways similar to Cuff's (1992), describing architectural practice at a number of firms, based on building rapport and entering relationships, my ongoing engagements taking the fieldwork in unexpected directions. Here we can distinguish my research methods from those of the management scholars of competitions, even though individual strands may be similar. While the management researchers often constrain their fieldwork to particular, pre-defined sites, whether the office of a briefing consultant (Silberberger, 2011) or architectural firm (Kreiner, 2013), I kept my 'field' loosely defined. As I worked on one research strand, I sought opportunities to pursue others.

Thus I trace my encounters with the world of competitions, isolating five strands of research. I then reflect on the technologies of research in the world of competitions. Finally I prepare the discussion for the empirical chapters that follow. I describe relations between objects, practices and competition as a *matter of concern* in five situations of engagement (Chapters 5 – 9). In each situation is a different set of *elements* and *arrangements* that link together the actors that engage with competition. But since each process extends from a similar set of matters of concern, the architectural competition, the strands of research *add up* to an understanding of *how it is* that competitions engage with the practices of architects. Thus by tallying up the elements and their arrangements from all of the strands of research, we can account for the ways in which competitions exist in practice (Chapters 10 – 11).

All individual architects, projects and organisations have been given pseudonyms apart from one firm (but not the architects of that firm), the Office of Metropolitan Architecture, the identity of which is a part of the argument itself.

4.2 Speaking and writing

The earliest strand of the research comes from interviews I conducted with architects (along with some other professionals in the construction sector) around the UK, with a

bias toward the North of England. I arranged interviews in order to look into possibilities for conducting observational fieldwork, but also to learn about the basics of the UK competition landscape. While conducting an interview, an architect would tend to use a term that I did not understand regarding construction procurement, and I would use the interview to clarify the term. That term would later make it into further questions at different interviews, yielding more unfamiliar terms. The cycle repeated. At the same time, to inform the interviews I consulted the websites of the leading publications within the UK construction industry: *Building Design*, *Architect's Journal* (the first and second most-circulated architecture magazines in the UK), as well as *Building* (the most-circulated construction magazine), with occasional forays into other periodicals. The journeys I made to the offices of architects and to the websites of periodicals were regular and brief, and brought me into contact with the language of competitions, things that functioned as what we might call *matters of concern* (see Chapter 2).

Interviews and news analysis both involved the language of architectural competitions, but also shared something else: they both began through the Web. I usually found out about a firm online, whether by browsing directories of firms kept by local architectural associations or by finding out from the architectural press who had won a recent competition. Sometimes an architect at one firm would recommend that I speak to an architect at another. They would mention the architect by name and refer me to firm's website. One sole practitioner did not have a website. For another firm, the website simply stated an address and telephone number. To make contact, I tended to use email. Architects are often in meetings and otherwise away from a single desk, so this was often more reliable than the telephone (see the particularly vivid description of 'the dance' architects perform in their offices in Yaneva 2009b, 51 - 63). The Web and email thus become points of access to competitions as complex *things*. Here I could contact participants in British competitions who were otherwise unavailable to one another. And indeed, the Internet was already a participant within British architecture: it was the way architects would find out about new competitions and hear about the selection; the way that architects and consultants contacted one another; and the way that some clients required architects to submit. The Internet was one way in which distant architects across multiple sites came in contact with the competition, and also the way in which I could arrange meetings with architects who I would not have known about otherwise.

4.3 Organising competitions

As I spoke to architects about their practices and their work on competitions, I met the director of one office, a branch of a UK-wide firm located in the North of England. Making contact in this case was a similar situation to the rest. The business development manager's email was displayed on the website of the firm. When I asked about competitions and procurement routes, he referred me to the director of the local office, to an architect who manages the firm's public projects. We had a meeting about recent work. One regular source of work for this firm is in consultant on public procurement processes. The architect assists schools with procuring construction services, including organising competitions. Because of concerns with confidentiality, the architect was not able to take me to the meetings that made up the bulk of his consultancy work. But he did give me access to documents from a recent project, documents that form the one basis for strand of the research (Chapter 6).

Here my journey took me *into the documents*. Inspired by the notion of the *inscription* (Latour 1986), I retraced the flow of information from one document to the next. The documents provide examples of what an architect might expect in a given public procurement situation, from correspondence with consultants in the process of producing a design brief to the 'Invitation to Mini-Competition' document (see Chapter 1 for a discussion of frameworks) and responses by contractor-architect consortia. Meanwhile, I attempted to piece together the ways in which the documents functioned within the project by looking at the documents themselves. What allowed for this was an affordance of the documents as a technology. I received from the architect a collection of digital files. The result was the ability to trace different *matters of concern* (see Chapter 2, Latour [2004]) as they are described one way in one document, then slightly differently in another.

The very fact that I was analysing documents was a result of an encounter in the 'field'. Doing documentary work was not my original intention. But competitions within the British construction industry are filled with documents. In one sense they provide the warp on which the competition is woven, announcing the beginning, carrying the submissions from entrants to client, allowing the evaluation process to take place and admitting the selected firm into the broader series of documents that makes up the project as a whole. By examining documents, then, I was responding to one affordance of the technologies of competition: in this multi-sited process, between offices runs a paper trail.

4.4 Teaching competitions

Meanwhile, I got in contact with an M.Arch atelier at a school of architecture, again in the North of England. As students at the atelier are encouraged to work on competitions as well as the standard curriculum, this strand of the research allows us to see how the relations through which competitions emerge come to assemble in the first place. In talking to professional architects, it became clear that certain relations, certain *things* within the world of competitions are regular enough to be expected, even described generically (Chapter 5). By looking at an M.Arch atelier, we can see a situation in which these relations did not *have* to assemble as they did. Indeed, architectural education can take place through a variety of configurations (see Mewburn, 2012). As architectural instructors to encourage newcomers to the profession to work on ‘real’ competitions with clients outside the school, they enter a certain set of relations, along with the practices and objects through which architectural competitions emerge as *things*. In this strand of the research, then, I observed the atelier’s weekly studio sessions, recorded presentations, talked to the students, then observed two competitions hosted by the school in concert with a local property developer. Here I wanted to see how students are brought into the relations through which the architectural competition comes to be.

Once again, the architectural school seemed to be a unique product of the competition as a complex *thing*. Architecture in the UK is unlike various situations of apprenticeship (see Coy, 1989; Lave and Wenger, 1991) in that the process of developing skill takes place within a classroom as well as within the workplaces of fully-fledged practitioners. Students in the UK spend three years at the undergraduate level before spending a year at a professional firm, followed by two years as a master’s student, another year at a firm and finally an exam. Thus architectural students do much of their work not with clients in offices but at the architectural school (and some authors, such as Till [2009] have criticised architectural education as taking place ‘away from the world’ [35]). But at the same time, students within the setting of a classroom can participate in design competitions. That is, the competition engages students with things and events *outside* the architectural school. Among the technologies of the competition, here is another aspect: something to submit to from a distance, whether as a student or as a professional.

4.5 Preparing an entry

My opportunity to observe the everyday practice at a firm came in the autumn of 2014. I had met with one architect from OMA over the course of the preceding year. After a series

of emails, we arranged a short visit in which I would observe one team in the Rotterdam office as they prepared an entry for a competition. This was my only fieldwork engagement that did not take place within the UK. Here the architects worked for a developer, who entered the competition as part of a procurement route called a 'Public Private Partnership'. Like 'Design and Build', then, the architects worked by appointment from a property development firm, who bore the cost of preparing the entry. Here I spent time with the seven architects working on the project, talking about what they were doing as they worked or simply sitting and watching.

The three preceding empirical cases involve architectural firms that are based in the UK and that submit to competitions held by the Royal Institute of British Architects, frameworks based in the UK, OJEU tenders for projects on British sites, trade journals analysing the state of British construction and so on. But in architecture, and particularly in competitions, national boundaries do not hold up easily. British architects participate in competitions on the continent, and European architects have shown up on RIBA shortlists. The reason I was able to make contact with OMA was that one architect in the firm worked from a project office in London, sharing space in the headquarters of another firm. And some design competitions are international: *any* firm from any country can enter (though there are often requirements for working with local architects). This research, like the competition itself, drifted from one country to another, but only through networks that it had already begun to travel through.

4.6 Exhibiting competitions

One of the design competitions OMA participated in included an exhibition of the shortlisted designs. The exhibition ran for ten days. For one of them, architects from each firm in the short-list would stand by their displays and answer questions. I visited the exhibition and observed the activity. The possibility of exhibiting entries is an outgrowth of the competition itself. Since the competition gathers complete representations of potential buildings, to display images of the submissions alongside one another is to draw from relations the competition has already produced. That is, a competition has to *keep separate* the things each firm submits while *bringing them together* in order to compare them. What the exhibition does is take the comparative moment of the jury deliberation, the culmination of the competition programme, and place it within another environment: a room where visitors compare *displays*, rather than entries, *walk* and *look* rather than sit and discuss and vote through a computer terminal rather than declare a choice around a

table. By observing an exhibition, then, I could take note of one affordance within the technologies of the competition.

4.7 The technologies of the competition

What the different strands of research amount to is a set of trajectories, each beginning with a separate technological engagement and journeying through that engagement into another aspect of the competition. As I conducted interviews and read publications from the industry press, the engagement became one of *speech and writing about* practice and competitions. As I asked about opportunities with another firm, the affordances of consultant work presented another detour, and I engaged with *representations of practice* within competitions. A further detour arrived in the *techniques of architectural education*: a classroom setting where to study competitions was to study studio sessions in which the work of students was available to their peers and instructors. Finally, my university contacts at OMA in the UK put me in touch with the firm's headquarters, where the long lead time of the PPP competition made it possible to arrange a visit while work on the entry was still going ahead. As the different trajectories of research cut across the networks through which architectural competitions emerge, my research aims to enrich our understanding of architectural competitions as complex configurations of agency.

While the research takes place in four different directions, through text and observation, with architects who have never seen one another, there is one aspect of research as a practice that pulls them together. That is, I began all of them with inspiration from the ethnographic attention to studio practice we find in the likes of Yaneva (2005, 2009a, 2009b) and Houdart and Chihiro (2009). In particular, I was interested in the fact that buildings have multiple realities within the studio, not just richer and richer shades of being finished. Design takes place across many different situations, each with its own set of relations and possibilities for development. Because I was attending to objects, to *follow* the objects subjected my fieldwork to the affordances of technologies, in other words, to detours. In asking how competitions *emerge* from particular practices and objects, then, I give myself the task of beginning at certain access points and from then, accumulating detail.

4.8 Conclusion

At the point where we describe the architectural competition as a complex *thing*, assembling practices and objects, we encounter layers of affordance and unexpected

directions. In the language of procurement (Chapter 1), the competition proceeds along one dimension, linear time. We go from one event to another: in a 'traditional' procurement route, a client announces a competition, receives the entries, selects a firm, submits a planning application and appoints a contractor. What we do not see are the processes that weave between events. Once the competition is rooted in *technology*, it develops along with human activity, affording a particular range of behaviour. That is, through the concept of the *detour* we see that once the competition becomes a thing in the world, it *participates* within programmes of action. Sequences do not pass through them but inflect on contact, branching in different directions.

The result is an ability to address the scholarly gaps between the managerial and anthropological literatures (Chapter 2). Between the object-filled studios of architectural agency and the narrated world of architectural competitions, some interaction has to take place. By following the architectural competition as a complex, relational *thing* (as in Chapter 3), we should be able to describe the world of the competition in the same terms as architectural agency: as objects, practices and things. To do this, I group objects, practices and things into *elements*, that is, common patterns of object-practice relations I find across one or multiple strands. Elements themselves come to relate to one another in what I have called (rather loosely) *arrangements*. By using these terms, I can classify the objects, practices and things I find in the field, making it possible to produce a more general theory of competitions within architectural practice. Thus between the empirical discussion (Chapters 5- 9) and the final analysis (Chapters 10 – 11), we can list the elements and their arrangements and thus describe, across the different strands, how competitions operate.

Each strand of the research addresses the gap between the studio and the boardroom, practice and language, programme and design (see Chapter 1) in its own way. In one are cases of architects *talking about* competitions (Chapter 5). What they do is describe competitions as *matters of concern*. Competitions are *things* (as in Latour, 2005b) that they have responded to in their daily practices, that their firms have organised around, things that matter to them. One way in which architects engage with competitions is by responding to written language. Competition announcements and competition documents are available in similar ways to architects across the UK, and by examining the way the language of competition interacts with practice we can come to grips with some of the competition's affordances. Another focuses on the documents that move between the

sites of competition (Chapter 6). If competitions take place *between* sites, and the participants in competitions (whether consultants, clients or the firms who submit) work separately from one another, by looking at the things that travel from one site to another we can see how this multi-sited practice takes place. Thus I describe technologies that many actors operating across distant sites have available to them. And later I ask *how* these processes become familiar to architects by looking at the techniques through which students prepare competition entries within an architectural school (Chapter 7). Next, I continue this focus on studio work, but within the studio of a prominent global architectural firm (Chapter 8). Finally, I look at a situation within a design competition that moves the entries into an exhibition (Chapter 9). Between the five empirical chapters is a journey through the technological web that competitions weave, a web that joins the practices of architects with the formal procedures of the competition.

Chapter 5

First journey: narrating competitions

5.1 Competitions in the speech of architects

We have learned from the gulf between the management studies of competitions and material-minded ethnographies within studios that architectural competitions are complex, contingent and multi-sited. A competition is *in* the studio just as much as it is *in* the office of the client or the briefing consultant, in the submissions or in the building site. Thus we may approach architectural competitions from a number of points, engaging with a variety of objects, practices and actors (Chapter 3), that is, *elements*, that we can follow through their diverging possibilities for engagement, their *detours* (Chapter 4). Architects can encounter the same competition from different sites. Competitions are broadcast, announced on the RIBA website or the online OJEU portal, through firms on a framework, as news stories on the websites of trade journals. The competition here stands in relation to architectural practice even if architects are not preparing an entry: they think about competitions, talk about them—competitions exist among the things that populate their working lives. One way into the reality of the competition as something that engages with architectural practice, then, is through *language*. Here I examine one such possibility, that of *speaking* about competitions.

The analysis of the language of competition comes from a series of interviews I conducted with architects in the UK between May 2013 and February of 2014. With these interviews the intention was to learn in a preliminary way about the practices architects adopt as they take part in competition. Since my background is in anthropology rather than in architecture, this became something of a crash course. Questions about routine practices would bring up terms I was not familiar with, and the conversation would often drift from the ways architects responded to competitions to the makeups of the competitions themselves. I found interviewees through personal networks, web searches and the recommendations of other interviewees. I conducted 34 interviews, varying from fifteen minutes (in one case) to one and a half hours, usually lasting around an hour. While this is not a random sampling of architects, it should reveal a variety of ways in which competitions are spoken or written about as *things*.

I also collected news articles in order to improve my ability to ‘speak the language’ of the architects I was interviewing. I began in the summer of 2013. Every day I would check the

websites of leading architectural and construction-related publications (*Building Design*, *The Architect's Journal*, *Building*) and download any stories that related to either architectural competitions or construction procurement (stories about one were often about the other). If one story included a sidebar that listed relevant stories, I downloaded those as well. Since the aim was to supplement the interviews, I limited the articles to those published within five years of the end of my PhD course (2010 – 2015). While this period coincides with the time it takes to write and research a thesis, it is also significant within the world of British architecture. This was a time that features some controversy. The RIBA's Procurement Reform Group published its report *Building Ladders of Opportunity* in 2012, and in 2013 the RIBA announced a new Plan of Work. The government launched its initiative to make financial savings the emphasis of its procurement policy, including new initiatives like the Priority Schools Building Programme. This was a fruitful moment for examining matters of concern within the world of competitions.

By bringing news stories and interview transcripts together, this analysis aims to address the question of what competitions *are* within the working lives of architects. What the language of architects in the situation of an interview with a researcher shares with the language of architects in an interview with a journalist is that in each case the architect *responds to* a certain kind of existence, a certain set of things that he or she responds to from one day to the next. As we learn from Latour (2004; see Chapter 3), to refer to a thing is also to refer to relations and processes that attach to it. Thus in the ways architects talk about architectural competitions, as in the ways trade journalists write about them, the *elements* of the competition are verbal. They include generic definitions of procurement routes and generic categories for *parts* or *qualities* of competition, whether a specific document or an attribute like *building typology*. What is key is that these elements *stand on their own* even as they allow architects to put together a narrative about the competition as something that exists beyond any particular moment of design or construction. At the same time, the speech of architects connects the trajectories of their firms to the qualities of competitions.

I begin this exploration of the competition as a *thing* that emerges through speech with a focus on the ways in which architects talk about the *documents* that circulate within a competition. For documents are what architects often come in contact with as they participate in competitions. I then describe two other common features of architects'

narratives: a process of deciding how to enter competitions; and descriptions of *time* that draw from the *language* of competitions. In these three kinds of narration I point to qualities of the competition as a matter of concern. Next I point to one case that illustrates the intermingling of these qualities, the autumn 2013 contest to design the Salford Meadows Bridge.

5.2 Architects on competition documents

Every time a competition takes place it brings in a new client, a new site, new entrants, a new brief, a new set of deadlines and new negotiations as to how these aspects fit together. At the same time, we also find that competitions do not just involve *events* but also *descriptions of events* (Chapter 1): categories for processes that have not yet taken place. Architects encounter a similar sort of duality with the documents that make regular appearances within competitions. While in each competition, the objects themselves will have changed, some *kinds* of objects remain constant enough between events that architects can describe them as generic categories.

One such document is the Pre-Qualification Questionnaire (PQQ; see the Introduction in Chapter 1 for a definition). PQQs ask for information about a firm: CVs of team members, financial data and other aspects of a firm's operation. Firms often divide the work of responding to a PQQ among several colleagues, who then collate the responses. We see this in the way that 'Sam', an associate partner at a firm with offices across the UK, talks about the way his office responds to PQQs. Here I was asking about the process of preparing for competitions as we looked through a binder containing one entry to a competition.

Generally all of this stuff, [...] this kind of pass/fail stuff, in any company, registered numbers, the structure of the company, you can see all the questions. These are all the questions just copied out of their document, just descriptions of the company, about the business, the hierarchy of the company, and then they asked for various things, you know, audit accounts, bank details and stuff like that, which we've generally always put separately in an appendix so this document is easier to read for people. That's just generally how we usually submit these things. (Interview with 'Sam', 21 Feb 2014)

A PQQ, he says, asks for 'background information'. From one PQQ to another, the division of questions is relatively similar. Further, as 'pass/fail stuff', the PQQs typically determine *whether* a firm has the required information, that is, whether the information exists within the PQQ response. The firm, then, store documents with the anticipation that the documents will end up in a PQQ. This is also how 'Rupert', an architect at a small-

projects subsidiary of a large firm, talks about PQQs. I had asked, 'Is [the PQQ] the sort of thing that you can automate?' Rupert responds,

Um, no. I mean you can have like a library of stuff that you know you've got. And we do this in connection obviously with [a larger firm nearby], because we're part of the same group. So we decide if we're going to be individual or together. So it's, if we've got all the usual stuff like CVs or personnel or stuff like that, yeah, we've got those. So in a sense that's automated. We can't press a button and it just goes 'ffwiit'. (Interview with 'Rupert', 12 July 2013)

As architects narrate it, extracting documents takes work. And the work that does take place is one of selecting from a library. In short, then, we find in the narration of the PQQ BOUNDED elements (existing on their own, self-contained, apart from others) that can be COMPOSED into a document. A PQQ is made up of *things to do*, and thus describing the PQQ is also a process of describing its elements.

Another document that architects readily talk about is the *design brief*. As I point out in the Introduction (Chapter 1), the design brief does not always precede a firm's entry into the competition. For architects, it is clear that a brief will make up *some* part of a formal selection procedure, and thinking about *where* the brief will make a difference in the process becomes a way of thinking about the process itself. 'Chris', for example, is a manager at a firm that tends to work on projects for state schools. As these clients go through public procurement routes, these tend to involve prequalification. This has implications for approaching *detail*:

It sounds like the bulk of the procurement methods that you would engage with as a firm would be the sort that would have a kind of 'Expression of Interest' requirement or a PQQ requirement rather than starting with a design, like an open competition.

[...] And you may, even in that initial [prequalification] response have done some design work, but just to start thinking, because you know where the site is, probably, start to do some site analysis or something. So at least you've got something that is job specific within that. But you can't go too far because you haven't, you haven't been invited to tender yet. If you haven't been invited to tender then you haven't got the full brief. So if you haven't got the full brief, then your responses are being completely arbitrary (Interview with 'Chris', 7 Nov 2013).

For competitions where only some entrants get to see an 'Invitation to Tender' document and thus a full brief, Chris says, the information the firm will send to the client at an earlier stage cannot traipse too far into 'design work' without risk of irrelevance. It becomes possible to talk about state school procurement as a particular ordering of PQQs and 'full briefs'.

Because a client can issue a brief, even partial, successive versions of a brief, at different junctures within a competition, it becomes possible to define a competition in terms of the brief and how it develops. Here 'Calvin', an architect in a management role at a regional office of a national firm, talks about a hospital competition where competing contractors each hired an architectural firm. The procurement route is called *competitive dialogue* (not to be confused with the dialogue-based competition discussed in Kreiner et al, 2011). I was asking Calvin to describe the competitive dialogue.

And the idea behind competitive dialogue is that the brief is fixed by the trust or the client. And the design team, the bidding sort of team, which includes all disciplines, puts the design together in quite a lot of detail, actually. The idea is that once you get through the competitive dialogue process, because you're in dialogue with the client, he manipulates the design and the brief, so that when you get to the preferred bidder, when you are successfully named as the preferred bidder, you then, in theory should be able to just go straight to site and build the project. (Interview with 'Calvin', 30 Oct 2013)

Here Calvin can talk about the 'competitive dialogue process' in terms of the brief and its capacity for development. A distinctive feature of competitive dialogue is that the brief develops *alongside* a series of design submissions. Here a document, a brief, becomes a way of describing the configuration of a procurement route. And as with Chris's description of school procurement, the brief can be taken as a GENERIC CATEGORY that, along with other such categories, COMPOSES a category of competition.

At the same time, the COMPOSITION of the brief allows architects to narrate *ways of working*. While architects can talk about the brief as extensions of a client's aspirations, they can also talk about a brief as a list of required objects. This is how 'Lawrence' responds to my question, 'How do you manage the allocation of time during the day?'

Yeah, you look at the brief, see what the outcome—let's say most of it will be —there'll be a—most competitions have a very string formula in terms of what you are allowed to submit so, a number of A1 or A3 boards or whatever it might be, and what they require, a written report of x number of pages or whatever, so there will be a clear sort of limited amount of material you need to produce. It's just a case of saying, okay, 'What will we do, how long will it take?', just go and apportion who's doing what and get it done, really, so it's just a case of judgment, really, yeah. (Interview with 'Lawrence', 23 May 2013)

Architects can talk about *hypothetical* briefs that may or may not include requirements for A1 or A3 boards. Similarly, the sequential position of a brief within a competition allows architects like Calvin and Chris to talk about qualities of the competition itself. Because architects can talk about 'briefs' as *artefacts* without getting into the *content* of the brief, describing a brief can become a way of describing *types of* competitions, processes that have not yet taken place.

Not all the predictable elements of a competition are elements that the architects *receive*. Others are items that architects produce. One example is the *submission board*. Competitions where design is part of the submission often require architects to submit a large-format sheet (A1, A0...) that contains a slew of images: isometric drawings like plans or sections might share a space with a 3-D render of the interior, a description of the concept, detail renders of technical elements and so on. The work itself proceeds with images that are already complete: architects *select* those images for the submission board. This tends to be a much smaller sample of the full set. Here is an architect from OMA based at a temporary office in the UK. In response to my question about preparing the competition boards, 'Patricia' (who we also hear from in the discussion of OMA in Chapter 8) talks about using placeholder images.

We had earlier models or even other projects that had a similar kind of scale to them, just a little project that, it will be like this. And we just said placeholder, placeholder, placeholder. So we know, the idea would be this would be a photograph or this will be in context, [...] but sometimes they might be like this, make sure we had a section, I think, a drawn section, rather than a model image to start. And then before we had our section ready, we used another project because we liked the graphic style of it. [...] But then actually the long shot's better, so we brought that in. (Interview with 'Patricia', 9 July 2014)

By adding placeholders, Patricia's team kept the COMPOSITION of the images on the board stable as they determined which 'graphic style' of image to select. Here we see that selecting images is a practice on its own, separate from the production of images. It poses its own challenges for the architects.

And it is not just the *kind* of images that architects consider but the overall visual progression from one to the next. This is what 'Harry', an architect at a vast international firm, says about producing the submission boards for one design competition. I had asked, 'How did that work, the production of the boards?'

[...] So because the heavier drawings, your elevations and your sections, because they're always kind of sky and ground and stuff, it always made sense that they sat top and bottom. The wide space in between was where the plan sat. The key images where your eye is drawn in somewhere in that white space, starting the concept diagram and moving into how you experience the building as you, from the outside, as you arrive at it, and then move into the building. (Interview with 'Harry', 17 March 2014).

In Harry's account, the images on a submission board anticipate a pattern of viewing, one that moves from image to image across the whole surface. As he implies, these are not images that will be taken in isolation. Instead, the architects choose images based on how much sense it makes for them to take different places within the board.

Architects talk about the elements of competition in terms of regular ways of working. Of PQQs, briefs and competition boards, each can be described as a category for an object. Whichever PQQ arrives, the narrative implies, the architect will work on it in a more or less familiar way. What seems to be the case, then, is that architects can talk about competitions that *may* take place within an indefinite future, where the existence of that competition does not depend on a particular moment of practice. They do this by talking about the COMPOSITION of documents through which a competition emerges.

5.3 Architects on entering competitions

When architects talk about competition documents that exist in a nonspecific future, they also talk about the ways they *engage with* those documents. One way architects talk about competitions is as a COMPOSITION. But when architects talk about the way they *enter* competitions, what they talk about is a process of *analysing* the competition, splitting it into aspects. The competition emerges from the interviews less as something that is always separate and distant than as something that can be placed in contact with the intricacies of a firm. In speech, this means naming aspects of the competition and setting them beside aspects of the firm.

In deciding whether to enter an open design competition, according to Lawrence, one element of the decision is an imagination of other teams: who is likely to enter, what skills they are likely to have. One RIBA competition for a police headquarters was ‘almost identical’ to another police headquarters the firm had designed ‘in terms of their aspirations for the office site, the use of space, all of the breakout spaces and that sort of thing’. But, Lawrence said, ‘[W]e know that there’s point in us entering it because we know there’s going to be about fifty London practices entering it’ (Interview, 23 May 2013). The team, he says, ask whether they have a chance of winning before they enter, and in this case, the chance had to do with who else would enter as well.

Nigel tells me about one open competition he entered for the Prince’s Foundation, where the brief asked for ‘a new type of vernacular house’ (Interview, 21 June 2013). Nigel had a repertoire of updated Georgian mansions and, as he told me, ‘appreciate[s] the traditional building technique’. But he also had a predilection for contemporary forms. ‘So I thought, I’m going to enter this competition, but I’m going to do something that’s contemporary, using vernacular building technologies. I thought, I don’t have a cat in hell’s chance of winning, but it’s going to make a statement’. In the meantime, Nigel had not had much residential work. His entry to this competition would be a move toward publicity.

For architects working in managerial roles within a larger firm with multiple offices across the UK and rest of the world, the process of determining whether to enter a competition takes place within some sort of meeting. It is in talking about these meetings that the reasons or considerations become less definite, less comprehensively named. In the case of Karl (who works at another office of the firm Chris works for), I asked how he manages different forms of competition.

We have management meetings once a month, where we have business development section, a competition section. [...] We sit down at the table and have these list of things that—and if I want to say, I want to have a go at another library or what have you, we had probably picked it up already from the business development section and said right, what about this, let's have a go at that, does that fit with the work that we've got coming in and the work that we need to do, does it fill any gaps, do we think we've got the experience, do we think we stand a chance, and that's the discussion we have. Then once we decide we're going for it, then that's it, we go for it. (Interview with 'Karl', 28 August 2013)

Karl's statement lists a variety of reasons that architects may give at a management meeting for taking part in a selection process. Within this statement the reasons may vary (note the list of possibilities), but the presence of the meeting is constant. What is key is that Karl can talk about the competition as something that is readily analysed.

Regular meetings among managers also feature within Hugh's account. As with Karl, the managing architects in Hugh's firm take part in regular meetings to determine which competitions to enter. As before, the competition becomes a set of GENERIC CATEGORIES whose COMPOSITION can be analysed in relation to categories for the direction of a firm.

Right, so I suppose we could start by just talking about the how [your firm] distribute the work on your, we could start with open competitions perhaps, over the various offices around the world?

[...] '[If a project is] going to have UK involvement, it comes into [this office], the Major Projects team decide where, who should bid it and how it should be bid. Then it goes to, either stays in [this office] and those people come to [this office], or it goes to the particular office of expertise that is best placed to deal with it'.
(Interview with 'Hugh', 29 October 2013)

Here the questions of 'who should bid it and how it should be bid' are subject to a to-be-determined set of motives, reasons, judgments and so on. What Hugh is able to talk about is a *general process* for determining whether to enter, based in the regular operation of the firm.

Sam's account has a similar description of process: there are multiple reasons for entering, and all come together at a meeting. As with Karl, Sam lists *aspects* of a given competition, and like Hugh does so in terms of different divisions within firm, responsible

for different building typologies. The question was, 'And how and when is it determined how much effort you'll put into a project, where that effort will go and so on?'

I suppose a tender comes in, we review it, and basically we have a [...] project authorisation process. So the people on the ground will discuss it. Then we have somebody, the head of each typology so we have the head of education, the head of science, head of healthcare, so ultimately we make a recommendation to them and they'll evaluate their budget and say 'yes' or 'no'. We sort of have an approval process, but those discussions take place, 'Yeah, it's a key client, yes, we really want to, we haven't spent too much so far this year, let's go for it'. It's project by project.
(Interview with 'Sam', 27 January 2014)

What is different in this case is the COMPOSITION of the meeting, though the structure of the account follows the same line, a range of reasons, a list of participants and a definite decision at the end. Here we see the competition as a regular presence but also one with a regularly *different* configuration of building typology, client, budget and so on.

The definite element of the account, the meeting, may be an exchange of emails. At Chris's firm, when a senior partner hears about an OJEU notice, that partner sends an email that copies in the managing director and other partners who may have some expertise in the particular sector, building type or geographic region. The decision itself is 'pretty immediate'. I asked, 'And these decision at the beginning of the process are done through email, you said?'

[...]It's done within a half an hour the decision is made. So very rarely does it take any longer than that. Because we all kind of know, we've got joint goals of where we want to be because we talk on a monthly bases and know what the primary strategies are, the sectors and anything we want to go for, so if anything comes up, very quickly we can decide'.
(Interview with 'Chris', 7 November 2013)

What Chris brings out here is the speed of the exchange, rather than its content. And what we also hear about is a process of bringing out aspects of the competition in relation to aspects of the firm: 'primary strategies', 'sectors' and so on. Again, the competition is something that can be divided into components and thus engaged with as a regular occurrence.

Another way architects can link aspects of their firm with aspects of a competition within a narrative is by talking about *collaboration*. With the question of *who collaborates* to enter some competitions up to the bidders (others require certain kinds of teams, e.g. teams of architects and engineers), William says that his firm takes competitions as opportunities to try out new forms of collaboration. Here is William's recollection of one design competition organised by a major housing trust.

That was kind of interesting because [...] we used the competition as a collaborative method [...]. So we worked with [...] a kind of slightly, you know, boring, should we say kind of, practice who do very nice work, but mostly on massive infrastructure projects. [...] We both learnt, we learnt the kind of rigour of, you know, a practice with thirty years' experience of doing competitions. They got from us the naiveté of a young practice who had only done one before, the young bulls with the, kind of, the old hats if that makes sense. (Interview with 'William', 29 July 2013)

Here it is the collaboration itself, in this account, that becomes the focus of William's participation. The competition as something that *allows for* collaboration poses a certain kind of opportunity. Here we see the possibility of isolating *qualities* of a competition in relation to the direction of a firm, the practices of the architects.

When a client solicits tenders from consortia, the partnering requirements are more explicit, but as the architects I spoke to suggest, the partnering process does not become more mechanistic as a result. While contact between the client and the consortium might take the form of pre-arranged meetings and submissions, contact between the contractors and the architects is often less formal. Hugh describes one way this takes place:

And how do you get involved with a particular consortium?

[...] So when a project comes out, we usually get approached by four or five people who will ask us to work on their team with them. And then we need to make a decision: who we think are the best people for that job. [...]

Okay, so it's usually the contractors approaching your firm rather than—

Yeah, I mean it does happen the other way around as well. We will be approaching people saying, 'Are you, this is coming out in three or four months, are you going to bid it?' (Interview with 'Hugh', 29 October 2013)

When one contractor wins a place on a large framework, Hugh says, he will know that they are going to be busy for months, and that another contractor will thus be a more likely partner. Here partnering is a requirement of the brief. Thus, just as architects can talk about GENERIC CATEGORIES of competition through the ordering of a brief, one quality of a competition that architects attend to is whether that competition will include some kind of partnering.

The collaboration that holds together a consortium may pose its own challenges. Here, Sam tells me about the since-elapsed Office of Government Commerce (OGC) framework, which was project-manager led. Here he is talking about aspects of a *type* of competition, but a type that has led to difficulties. One thing architects can do, then, is isolate a particular quality of a competition as problematic.

And how have [one client's] kind of novel of approach to administering the OGC framework entered into the process you've been explaining, determining how much time--

[...] So perhaps on an openly tendered thing or a framework where we're directly on the framework ourselves, we may put more effort and money into some of those submissions because we can more directly influence the outcome. When we can't influence the outcome, we've been burnt a couple of times in spending an awful lot of money, and it's been lost due to the programming from the project manager or something, or the project manager fought poorly in the interview [...].
(Interview with 'Sam', 27 Jan 2014)

This is a situation in which a consortium is what enters a competition, while within the consortium the question of agency, what has an impact, what makes a difference, is more complex. And here, when an architect *evaluates* a competition, he does so through one aspect of the way the competition is organised: the inclusion of a project manager, in relation to the architect's own experience of acting within this kind of partnership.

The architects I interviewed told me about competitions they entered and about the GENERIC CATEGOREIS for processes they use to decide whether to enter any competition. What the two sorts of narratives have in common is an analysis of the competition, a description of COMPOSITION. As a matter of concern, then, the competition can exist as a set of documents, but also as a more coherent *thing* that has qualities of its own.

5.4 Architects on competitions and time

In speaking about competitions, the architects I interviewed were able to make evaluative claims about *time*. What the architects do is state that this or that quantity of days or months has such and such a quality: this period of time is good for x but bad for y. The quality may be a tendency for an office to carry out its work in a certain way, or it may be a sort of value. Either way, to talk about a competition becomes a way of talking about time as a concluded fact, a process that will have already completed itself. Talking about time is thus another way to COMPOSE competitions within speech.

Lawrence tells me that while determining how much time to spend on a design competition is a 'judgment call', he can refer to the firm's earlier work on competitions to come up with an estimate. The bases for this reference are the requirements of a brief. We see this in response to the question I discuss above, a question about 'the allocation of time during the day':

And often you'll be there will be a certain sort of, you can make a reasonably, sort of, educated guess by the amount of information they are requiring in terms of number of boards or the amount of documentation they require, or reports or whatever, so for the A1 boards you think there's five or six images, one each spend a day, just say there will be ten hours each or something [...]. (Interview with 'Lawrence', 23 May 2013)

Lawrence is drawing an equivalence between the requirements of a submission and the quantity of time. And with competitions, time can be divided into regions. As Lawrence says, '[...] architecture is not a nine to five job. Anybody who comes into it thinking that is deluding themselves. There's no time dodging it: you're here until the job is done, basically, and that means that if you work a weekend, you work a weekend'. More junior architects within the firm spend 'their own time' and 'the office resources' working on design competitions, devoting the remainder to fee-paying projects. Here are two ways of making judgments about time. In one, Lawrence begins from the requirements of a competition and moves to a quantity of time associated with each. In the other, he can qualify a certain time of day as one's 'own' time, a time in which to work on entries for competitions.

For Nigel there is also an association between work on competitions and time that takes place outside of one's regular working hours. Here is an evaluation of time in which a given period is time *for* something. In Nigel's case, this is his 'day two', where he 'squeeze[s] two working days into 24 hours'. While this is not every night for Nigel,

Architecture is not a nine to five occupation. I don't think I've ever—well—I have met architects who are nine to fivers. But I find that they don't generally have an interest. They do it as a means to make a living. They tend to be people who work for more commercial practices. (Interview with 'Nigel', 21 June 2013)

Time in architecture can have a regional quality, where time during office hours is for one kind of work, while time outside that period is for another. Architecture is not a nine-to-five job in so far as this kind of *outside* time exists. Architects perform fee-paying work during business hours, competition-related work later.

Eventually, a design competition joins the ranks of fee-paying projects, an object of regular work during the day. The division of competition time and fee-paying project time remains, but the project shifts categories. We see this in an interview with 'William':

So when you invite a team into your office or two offices to work on competitions, that's alongside your other fee paying work, so just to summarise you are mainly working on your fee paying work while directing the team as they do the bulk of the work on the competitions?

[...T]here's times when the whole office needs to be working on the competition. Towards the end everyone will be working on the competition. The fee-paying work will take a slightly back step, not that our clients should ever know that, but that's just the nature of the opportunities you have. And then you have, and then you get moved. And then, you kind of, the other time the fee paying work – the majority will be back on the fee-paying

projects, and then you'll get back into competitions.
(Interview with 'William', 29 July 2013)

It is not the case here that the competition work takes place at the margins of more central work, with the latter occupying the entirety of regular hours. Nevertheless, at different points in the work a team does on a competition entry, a given period of time becomes associated with a given sort of activity.

Another possibility is that of qualifying an *amount* of time as short, long, good or bad. Each competition brings with it a schedule of deadlines, announcements and other events. These things can be evaluated. Here is Hugh on the timeframes of several competition types:

And have you finished the submission?

We've barely started.

Have you? Okay, I didn't realise it was that early—

[...] I think if you come from an academic background it'd probably frighten you in terms of the amount of work that you do in a very short period of time. The, I mean we've done, we've got some schools on site for [...] a big education provider in Dubai. [...] And we had six weeks to do concept design, which is [RIBA] Stage C, and eight weeks to get it to Stage D, so historically in the old days in the old Academies Framework you'd get the odd 26 weeks to get to Stage D. It was a six month process. And we get to that process in essentially half the time. And they'll start on site a week after they give you the job as well.
(Interview with 'Hugh', 29 October 2013)

What Hugh is evaluating is not necessarily the time itself, but the sort of work it will involve. Soon after Hugh's team got the commission and presented sketches to the chairperson, the contractor was asking for piling drawings. 'You produce a lot of information very, very quickly', Hugh said. 'It is a little bit seat-of-your-pants, but it makes the world interesting'. When Hugh ascribes qualities to time, then, he does so by associating a certain duration or division of time with a certain kind of work.

When talking about competitions, the architects I interviewed presented various ways of moving from competitions to time and time to competitions. Common among these statements about time is that within them, work on competition exists either abstractly, as a GENERIC CATEGORY of practice, or as something a firm can anticipate. There is the difference, then, between this way of COMPOSING competitions through speech and the ways I describe above. But different spoken techniques of COMPOSITION are compatible: architects divide their time into measurable units or categorised regions as a way of talking about the practice of working on competitions. Here both practice and competitions

can be split apart as complete, bounded elements and COMPOSED again: competitions into documents, requirements and so on; practice into days and months, company time and personal time.

5.5 One competition, different narratives

As competitions become objects of speech in the responses architects give to interview questions, they remain as complex entities, COMPOSED in different ways. What COMPOSE a competition in the explanations of architects are not only elements of the competition itself, but elements of the firm's practice. Thus in descriptions of competitions are different sorts of COMPOSITION. Descriptions might place documents that belong to a competition in order with the units of time the firm spends filling them in, or perhaps the firm's direction into new markets with qualities of the site and the client's requirements. For COMPOSING competitions within speech, then, the competition offers many possibilities.

The multiplicity and divisibility of the competition became particularly clear in the summer and autumn of 2013, in the months surrounding an RIBA competition for a bridge in Salford. According to the online brief for the competition (RIBA Competitions 2013), the aim was to

Secure a high quality design for a new landmark pedestrian bridge connection to The Meadows from The Crescent across the River Irwell to open up access to The Meadows and ensure that it becomes a well-used resource for the local community, while also attracting new visitors to the area. (RIBA Competitions 2013)

This was an international design competition with two stages, one anonymous, the other a shortlist of three schemes. What was noteworthy about this competition was that several architects I spoke to during the autumn of 2013 referred to it as they gave examples of competitions they were working on. As complex entities, competitions are things that exist at multiple sites, but also that exist *at once* through broadcast representations like websites. As we have seen, architects have different ways of relating in speech to the composition of a competition, and the Salford Bridge competition becomes another such thing.

First, 'Rupert' demonstrates by referring to the Salford Bridge competition what an RIBA competition is in general. Here Rupert is explaining the different kinds of competitions that his firm participates in as GENERIC CATEGORIES.

So you go on the RIBA website and see what live competitions there are. And that varies again from, it can be, it's an open competition, anyone can enter it, and you basically do a

design. The Salford Bridge competition is like that. You do your design, you send in your design. You don't present it. You send in your design, and then when, I think they, I think, they select a shortlist, a shortlist of four or five. You go and present it, and then they make a selection, and commission you. [...] So that's an RIBA competition. If they basically, so the RIBA offer a service where, I think the way they do it is they have a member, an RIBA member on their selection panel. So they will organise the design for the competition for them. [...] That's a private client going to the RIBA, using their service. (Interview with Rupert, 12 July 2013)

In Rupert's description, the Salford bridge competition is a collection of practices: a design, a submission, a shortlist, a presentation. Tied to this is another set of practices, the RIBA's role as a consultant for clients. What is key is that Rupert is taking the Salford Bridge competition as an *example*. Competitions can take on various permutations, he is saying, and one of them is the Salford Bridge competition. In an RIBA competition there is either a presentation at the first stage or there is not, and the Salford competition is an example of the latter. As we see when architects talk about time and the process of entering, it becomes possible to, first, take the competition as a singular, coherent *thing*, and, in the same move, divide the competition into qualities, steps and so on.

Other times, the competition as both an object of speech and a complex *thing* is something that the architect describes along with the firm's own practices. What makes the competition unique as a COMPOSITION is the firm's relation to it. Here Calvin talks about the Salford Bridge competition *along with* his firm's practice of assigning competition work to Part One students (who have just finished their BA):

How do you kind of ensure that on the balance you receive more invitations to competitions?

[...] We generally put together documents and submissions that hopefully will get shortlisted on new projects as they come forward. But we do enter some uninvited, open competitions. We just did a competition for a bridge in Salford. Unfortunately we weren't shortlisted. It was great because we had just taken some new Part Ones from [the local university], and they had that to work on as a kind of first project in the office. It was a really nice way to give them an introduction to the profession. (Interview with Calvin, 30 October 2013)

Here to talk about a competition is *also* to talk about something that the firm did *in addition* to things like a brief, a set of requirements, a site and so on. The competition as an object of speech is not just a matter of victory and defeat. As we see above, architects *analyse* the competition by connecting aspects with the trajectories of their firm.

Architects connect competitions to general practices as well as specific moments of practice. Here is Hugh talking about architects at his firm who participate in competitions

in their own time. Again, the example is the Salford Bridge competition, continuing his response to my question (discussed above) about the way the firm distribute work on competitions.

If it was a little bridge competition in Salford, that you know is not going to be built, um, you know, we've got to wash our face and say, that, you know, you might have individuals that decide that they want to do that, and we wouldn't discourage them to do it. So, you know, like, there's like, I think there's a boathouse competition on Windermere [...] where two or three people decided that they wanted to do the competition. They used our name and, but essentially did it in evenings and weekends because it's not the sort of project that we would generally get involved with. (Interview with Hugh, 29 October 2013)

The Salford Bridge competition thus becomes a hypothetical case. But as I demonstrate above, architects talk can talk about hypothetical competitions because the as regular events, competitions tend to present similar sets of requirements, objects and demands for practice.

Aside from talking about *usual* practices or *moments* of practice, architects also talk about competitions in terms of *ongoing histories of practice*, often the practice of the firm itself. William talks about the Salford Bridge competition this way, branching from an unrelated question:

How were you able to claim tax credits for working on competitions? Is there a standard process for it?

[...] [W]e're doing two competitions at the moment, one which is the Salford Bridge competition. We're working with the same engineers that we worked with last time. We're again collaborating with a landscape designer that we originally wanted to work with and I much enjoyed working with. [...] So with Salford we didn't know the competition was going to come forward, but we looked at the competition and assessed it, and went 'Okay, this is a great opportunity to work with a number of colleagues or people that we would like to work with previously', and we took the decision that it would be worth spending a bit of time on doing that, you know doing the competition. (Interview with William, 29 July 2013)

In this case, the competition exists as an opportunity, in conjunction with the firm's own tendency toward collaboration. Once again, an architect includes in a description *elements* of a competition, both accounting for what makes up the competition and breaking that competition into components. In speech, the competition is a complex *thing*, but one that lends itself to many patterns of COMPOSITION.

5.6 Competitions in the British trade press

The discussion of the Salford Bridge competition illustrates just how *public* competitions are. Architects across the UK are aware of the same competitions, check the RIBA website for new ones and explain issues within the competition format by referring to

competitions that the researcher can easily find out about. That is, competitions have an existence as *broadcast* entities.

And it is in a related kind of broadcast, the architectural trade press, that the multiplicity of matters of concern within the competition is brought out again. Consider this 2013 story from the *Architects' Journal*, one of the two most circulated architectural publications in the UK (along with *Building Design*):

A worrying 21 per cent of schemes won in RIBA competitions between 2010 and 2012 have hit the rocks while the future of 31 per cent of projects remains undecided. Abandoned trophy designs include Rick Mather's Worcester College kitchen and lecture theatre - won against the likes of Dixon Jones, O'Donnell + Tuomey, 6a, Burd Haward and Wright & Wright in 2011.

Deborah Saunt of 2011 Stirling Prize-shortlisted DSDHA said the current situation showed the RIBA's contest service which was set up in 1967 and is rumoured to charge clients upwards of £15,000 to run competitions - 'definitely needs to be reviewed'.

She said: "There seems to be a worryingly high number of competitions that don't deliver. I've been hearing murmurs of disquiet for quite some time concerning [RIBA competition's] lack of acuity and the question is whether the RIBA is properly interrogating the brief and what due diligence are they taking of the client?"
(*The Architects' Journal*, 20 June 2013)

Here we see aspects of the competition as a matter of concern in a way that recalls what architects told me during interviews. First, it is clear that the competition is something that is COMPOSED of other things, and can easily be *split into movable elements*. When it turns out that many competitions have not resulted in a building, Deborah Saunt refers to specific practices and kinds of documents: 'whether the RIBA is properly interrogating the brief'. Further, there is an emphasis on the competition as a regular, repeated thing. The excerpt summarises multiple competitions after which nothing was built. As a *thing* that exists in writing that is broadcast, whether broadcast in the trade press or on the list of open competitions on the RIBA website, the competition is something that architects engage with: they analyse one object of language by associating it with others.

What is key here is that the competition within the British trade press is as amenable to descriptions of COMPOSITIONS of BOUNDED elements as it is within the speech of architects. This is to say that competitions as something *broadcast* are questioned from the beginning, described along with various matters of concern before they can attain the status of the natural, the matter-of-fact. One example is the plight of small firms, which various news articles report as having been excluded from competitions with prequalification procedures. Sometimes, the plight of small firms is invoked as a defence

of the design competition. A letter to the editor at *The Architect's Journal* (4 July 2013) from a former member of the RIBA Competitions team defends the format of the design competition. In a paragraph of reasons to support the format is this statement, unconnected to an argument: 'It [the competition] also gives emerging practices a chance to show their design skills'. Another letter in the same magazine presents a similar argument:

It is increasingly impossible to get a commission unless you have a track record of having designed and built an identical building in the last three years and provide three years of successful finances with huge insurance. This will be the inevitable requirement of competitive interviews and only those already privileged will gain commissions. (*The Architect's Journal*, 4 July 2013)

This defence of the design competition is not without rebuttal. In a column (*Building Design*, 24 May 2012), *Building Design* editor-in-chief Amanda Baillieu argues that the RIBA's encouragement of competitions will not deal with a more fundamental problem: '85% [of RIBA members] are locked out of tendering for public sector work because of current turnover requirements'. Along with the broadcast of *new* competitions comes another kind of broadcast, one that challenges the role of the competition in general.

In other cases, criticism focuses on the design of a specific competition, whether the briefing, the assembly of a jury or something else. One architect, which the *Architect's Journal* (3 July 2013) notes to be a 'high-profile designer—who has entered 20 bridge contests, won 10 but only seen three winners built', says of the Salford bridge competition, 'There is no respected bridge engineer on the jury [and there] is no commitment to build anything, nor to employ the winner. The "prize" is derisory and paid only to the shortlisted teams and nothing to the winner.' As both a representative for architects and a client itself, the RIBA is often particularly subject to scrutiny, especially when the design of one competition seemed to contradict the way RIBA officials had declared a competition ought to be designed. *Building Design* (17 October 2013) reports that while the RIBA had responded to criticism of its competition for renovating the organisation's headquarters, 'it is already facing fresh criticism with news that its procurement reform group [...] will no longer be a standalone body to claims its importance has been downgraded [...]'. Like individual architects, critics whose voices find their way into the trade press point to specific aspects of the competition, raising them analytically as matters of concern.

The competition here is an interesting kind of 'black box'. Like other architectural 'black boxes' (see Jacobs, 2006; Schmidt et al, 2012), a crisis brings attention to the elements of a complex thing, elements that may have received no notice before. But as we see in the

interviews with architects, competitions never really become opaque. Architects identify elements of competitions from the moment someone announces them. What a crisis does is bring attention to *different kinds* of *COMPOSITIONS*. But until then, a competition is always already *COMPOSED*.

5.7 Conclusion

The procurement route, spelling out the development of a building through a particular set of relationships, can be taken as a *script*, a '[definition of] actors with specific tastes, competences, motives, aspirations, political prejudices and the rest [...that assumes that...] morality, technology, science and economy will evolve in particular ways' (Akrich, 1992: 207 – 208). If this is the case, the world of architects in the UK is filled with scripts. Architectural textbooks like *Which Contract?* (Clamp et al, 2012) along with the architectural press, government reports and other broadcast media narrate the procurement route as a set of roles and trajectories. As scripts, competitions are not monolithic but *COMPOSED*. When architects *describe* the way they work on competitions, we can see a number of *elements* come to the fore. The narratives of architects include *GENERIC CATEGORIES* for both documents and qualities of competitions: building type, market, the occasion for the brief, or whether there is a PQQ. They also talk about these things *as they connect to the biography of a firm*. Like the matter of concern (Latour, 2004), categories here encompass both an object and a *relation* to that object. Here we see one arrangement of elements: the *COMPOSITION* of things that are otherwise *BOUNDED* and complete, that stand on their own.

In one sense, procurement routes themselves seem to go uncontested: they are *things* in their own right, categories that stand alone. The architects I talked to readily make distinctions between procurement routes, and the features they talk about differ little from one account to the other. 'Design and Build' will always be 'Design and Build'. What is noteworthy, though, is that in talking about competitions, architects can state a variety of qualifiers and clarifications, bringing out their *relations* to the procurement route. The architects I spoke to perform a variant of what Akrich (1992) calls *description*, '[an] inventory and analysis of the mechanisms that allow the relation between a form and a meaning constituted by and constitutive of the technical object to come into being' (209). When architects talk about competitions, it is not *just* as an abstract segment of a procurement route. Instead they talk about aspects of competitions as those aspects relate to their own practice: documents they receive, hours they work, building types they

explore and so on. The generic categories of competitions become ways of talking about the specific practices of a firm. As architects go from describing *categories* of competition to describing *this or that particular competition*, from present tense to past tense, these matters of concern come to COMPOSE the narrative of competition. A design competition, an architect might say, includes such and such a step, followed by this or that other step. *This* design competition, they might continue, involved the firm's interest in libraries, a client they had worked with before and student interns who could help prepare the entry. Among the elements that COMPOSE a competition, then, are BIOGRAPHICAL MOMENTS as well as GENERIC CATEGORIES (categories for documents, procurement routes or recurring qualities of competitions such as *client* and *building typology*).

GENERIC CATEGORIES and BIOGRAPHICAL MOMENTS can then be COMPOSED into a narrative about a firm's participation in competition. GENERIC CATEGORIES can stand apart from BIOGRAPHICAL MOMENTS. An architect can talk about a PQQ without talking about a *particular* PQQ. But architects can also COMPOSE categories for GENERIC CATEGORIES into a statement about *other* GENERIC CATEGORIES. A brief that is released in multiple iterations is one part of a 'competitive dialogue', as is the organisation of the competitors into contractor-led teams. Meanwhile, these constituent GENERIC CATEGORIES can COMPOSE *other* categories for competition. Contractor-led teams, for example, can be part of a 'competitive dialogue' or a more conventional 'design and build' procedure. Taking these generic categories and putting them in terms of *what has happened* involves another moment of COMPOSITION. Categories for documents and procedures can be combined with claims about a firm's particular practices. Architects can go from talking about a 'Design and Build' procedure to *this* 'Design and Build' procedure. Then they can talk about their work with contractor-led teams in terms of *multiple* GENERIC CATEGORIES: 'Design and Build', 'Competitive Dialogue', a contractor taking on a project management contract and so on. Since the terms of the COMPOSITION are self-contained (BOUNDED), they can be rearranged into multiple COMPOSITIONS, each a way of making claims about a specific competition.

In the ways architects talk about their work on competition, then, we can see the basic pragmatic conditions for other processes that will emerge as the discussion moves along. First, there are *elements*: GENERIC CATEGORIES and BIOGRAPHICAL MOMENTS, both of which come up within the speech of architects. Second, there are *arrangements*: COMPOSITION and BOUNDEDNESS. The categories through which architects talk about aspects of

competition apply not only to one particular competition, but to various different arrangements of briefs, submission boards, client types, budget sizes and so on. Competition objects are BOUNDED and thus COMPOSABLE. Images exist together within a submission board, but they can also exist separately within a studio. Architects can talk about competitions as configurations of qualities such as 'building type' and 'procurement route', and they can also talk about specific requirements, like the number of A1 boards they are told to submit. Second, then, competition briefs have a specific COMPOSITION of elements for architects to piece through and isolate within their practice. And third, the COMPOSITIONALITY of competition documents is something architects find not only among briefs but also among their own submission boards. To prepare a submission board is to be able to speak about *where* images and text fit within the surface and how a viewer will move from one image to another. These processes are clear to some extent in what architects refer to within interviews. As we go through the analysis below, we will also see them within the movements of documents (Chapter 6), the process of producing entries (Chapters 7 – 8) and the possibility of an exhibition within a competition programme (Chapter 9). Taking these processes together, we can describe the competition as kind of movement in which constellations of elements are subjected to transformations during a passage between the architects and the client while *remaining constellated* until a moment of narration within a jury. In doing so, the objects of competitions incorporate architectural practice into a set of relations between project participants who work at a distance from one another.

Chapter 6

Second journey: the documents of competition

6.1 From speech to print

As architects talk about competitions (Chapter 5), they engage with GENERIC CATEGORIES and BIOGRAPHICAL MOMENTS that, since they are BOUNDED in themselves, can be COMPOSED into various orders. Different kinds of competitions can be described as different arrangement of briefs, submission documents, images, clients, budgets and so on. Among these ordered categories of elements are *documents*: briefs, submission boards or pre-qualification questionnaires (see Chapter 5). The documents that run through a competition are often what the participants in that competition will interact with. Document analysis thus becomes a methodological possibility and an avenue for research, an extension of the technologies that we find in the world of the competition (Chapter 4). Any investigation into the practices, objects and things within the world of the competition would benefit from an investigation of the documents themselves.

In performing the analysis, I make use of Latour's (1986) concept of the *inscription* (see Chapter 2), borrowing two broad observations about documents as objects. First, in their production they *interact* with the world, such that inscriptions as documents follow *inscription* as a practice. Second, inscriptions *are* objects that can travel and sustain transformation. They move not only between sites but also into other documents. In analysing the documents, then, I take note of *similar* visual elements that seem to have been transplanted from one document to another. I also carry out a form of *abductive inference* (Gell, 1998), that is, moving from a visual element of a document, a *trace* of an activity of production, to the process that was likely to have given rise to it. Setting documents beside one another and comparing their visual elements, I reconstruct the project as a trail of moving and transforming visual elements. In this way, I can describe *practices* of producing, reading and responding to documents, then describe the relations that documents enter with the 'competition' as a thing.

I begin with an overview of the project itself, one that involves the 'Design and Build' procurement route, architect-contractor consortia and a mini-competition through a framework (see Chapter 1). Next I examine a pattern of movement and transformation through which a briefing document and the tenders of contractor-architect teams work together within the selection process. Here we see patterns of COMPOSITION and

BOUNDEDNESS that I situate this within the project as a whole. After this I turn to DEPICTIONS OF PROCESS, examining the evocative qualities of text both within the tenders and the broader project. The result is an account of the way that competition comes into contact with architectural agency, or how a process of competition emerges from a set of relations (as in Chapter 3).

As architects suggest in interviews (Chapter 5), the practices and objects we encounter in re-tracing the documents that make up a project reveal processes in which many VISUAL ELEMENTS circulate as fragments, never combining into a single, unified entity. Firms produce documents separately and submit them to one another, while at meetings the documents are described at once and related to the project programme. Meanwhile, certain documents are DEPICTIONS OF PROCESS, processes that have not yet taken place. These documents move from one network (that of the project participants) into another (a planning department, the Education Funding Agency, etc). Here these elements sustain PARALLEL TRANSFORMATIONS of text and images within design tenders. Once these and other objects are COMPOSED into a loosely collated packet of documents, the VISUAL ELEMENTS make SIMULTANEOUS MOVEMENTS to other networks of practice.

6.2 The project

The particular set of documents that I was given access to suggests one role that competition entries have within a project. Since the dates of the documents extend from the process of writing the brief to the planning application and beyond, it becomes possible to see where the competition submissions fit into the project as a whole. And since the architect I contacted for this component of the research consulted with the client in organising the competition, this particular set of documents demonstrates the ways in which the products of design are distributed across the project, whether before, during or after the competition. Thus the documents are well suited to discussing the COMPOSED, BOUNDED and thus mobile quality of competition elements (as in Chapter 5). Architects can talk about competitions *as* series of documents. By looking at the documents themselves, I will ask whether a similar process takes place at another point in the network of things that make up a competition.

The documents that I analyse here come from 'Scott', a director at a small regional office of an architectural firm with branches throughout the UK. For this strand of the research, pulled together a selection of files that happened to be stored on his computer, files that

dated from before the brief to after the project got planning permission and the client applied to change the wording of the council's conditions. What I refer to, then, is a collection that I compiled over the course of 2014 as I asked for documents and Scott supplied them. Some documents came from the web, as the council that granted planning permission keep applications and their attachments online.

Part of Scott's consultancy work is helping the client organise the competition. Usually the competition involves a *framework*, a list of firms who bid for work against only one another, rather than (in the case of an OJEU tender) all of Europe (see Chapter 1 for a discussion). In the case of the project I looked at, what follows the submission of the tender are presentations by each team, a selection by a jury and the appointment of a contractor. The architect here works *for* the contractor: this is a case of the 'Design and Build' procurement route (see Chapter 1). At the same time, representatives from the architect, the contractor, the multidisciplinary consultancy and the architect-consultant all appear at certain meetings. Thus while the competition takes place between a small number of large contracting firms, it is also the process that brings the architectural firm into the project and that fills the roster for the meetings.

Several qualities of the project make it particularly suited for this research. Many architects in the UK who work on large projects will find themselves at some point traveling down the procurement route known as 'Design and Build' (Chapter 1). The question of architectural agency as it engages with architectural competition thus goes beyond the design competition: it is the formal competition in general that poses the issues for our understanding of architectural practice that I raise in the first and second chapters. And in this competition, the issues take a central role. First, there is the issue of how the procurement route and its associated form of competition are *described in advance* (Chapter 1). The specification of a formal procedure seems to clash with the temporality of architectural agency (Chapter 2). Thus the school project takes place alongside an established way of talking about process: established frameworks, established sets of choices. Second, there is the issue of competition itself as a process (Chapter 1, Chapter 3): the entrants to an architectural competition do not just follow rules. They follow rules in a way that leads to a selection. In discussions of the ethnographic literature among craftspeople and financial traders (Chapter 3), I suggest that competition is a process that exists through different kinds of objects and practices at different sites, rather than everywhere as the same process of rivalry: we can describe competition because *other*

processes are taking place. If the competition is a thing filled with documents, then by analysing those documents we may be able to name the processes from which architectural competitions emerge.

6.3 Movements through the project

6.3.1 Comparison through transformation

One text we can turn to for help in analysing the movements that take place between the drafting of one document and the next is the theory of calculation in Callon and Muniesa (2005). This article is an elaboration of Callon (1998; see Chapter 3). The earlier text argues that a process of *calculation* is central within the emergence of a market. What Callon and Muniesa (2005) do is set up the notion of calculation as a sequence of *material movements*. What they want to prevent is a situation of ‘dissolving the problem of calculation in the detail of ethnographic description’ (1230). Calculation, they say, is a process that can take place in different situations. Here I follow Callon and Muniesa’s lead in taking *calculation* as a framework on which we might map a pattern of agency. This is not to say that the moments of calculation I identify here are exactly the same as those that Callon and Muniesa have in mind. But Callon and Muniesa’s categories for movement point to an important term in analysing documents: the dynamics of *things* (in the Latourian sense; see Chapter 2). In terms of movement and attachment, processes of becoming thing-like, documents in the tendering process for the school project share similarities with Callon and Muniesa’s notion of calculation. Thus we can use terms from Callon and Muniesa’s analysis to make visible elements of the competition. Here I go step by step through Callon and Muniesa’s account of calculation and outline the way that the documents within the project chart a similar trajectory.

First, for something to be calculated, it has to hold together as a thing (Callon and Muniesa 2005). Here the ‘things’ are two tenders, each produced in response to an ‘Invitation to Mini-Competition’ document (see Figure 1). The document calls for a *commercial* submission (a cost tender) as well as a *design submission*, which must respond to seven questions. In the section of the ‘Invitation’ dealing with design, each question asks for a particular sort of information, from CVs of team members to a suggestion for changes to the project programme. Of the two tenders that the selection team received, each follows the structure of the ‘Invitation’: for each question in the ‘Invitation’ there is a subheaded section in a given tender.

Here the very existence of something that can detach from the world of the bidders and reattach to the world of the client owes itself to the arrangement of text within the 'Invitation'. Before the production of the tenders, there is no *thing* to calculate. That is, the *thing* that the client is selecting has not emerged as a thing until the arrival of the tenders. What the client selects might be a certain set of *capacities* (who *can* proceed with the project), but it might also be a set of *processes that have yet to take lace* (the question of who *will* proceed with the project in a certain way). The tender documents include both. There are CVs (naming each participant's past projects) and text boxes that explain the firms' role in similar jobs, accounts of the way the firm chooses its teams. But there are also descriptions of *what would happen* during the project, how each firm would go about doing the work. Each tender, following the 'Invitation', includes a set of Gantt charts, each presenting a set of dates that modifies the client's own. The client would not only select a *way of working*, the tenders suggested, but also a *product, a thing that has been proposed*. Thus it is not just process or capacity that the client is selecting. It is not just a set of CVs, accounts of experience, cost plans and so on. It is all of these things, and the tender holds them together.

For objects to be transformed into calculable entities, they have to be removed from the worlds of their origin. This is the second step in the process of making things calculable: 'The good leaves the world of supply, breaks away from it [...] and slots into another world, that of the buyer, which has been configured to receive it' (Callon and Muniesa 2005, 1234). Callon and Muniesa admit that anything can be a 'good' (even a service), so long as it has been objectified. And in the case of the school project, the 'buyer' is not a shopper with a trolley but a client team, 'buying' over the course of the selection process. Here the process of 'leaving' is rather literal. Tenders move from contractors to client as attachments within an email. Once this happens, the work of the bidders in their offices, in front of their computers, with access to their own consultants and libraries of information, all this is no longer part of the selection process. Everything the selection team needs will be in the room with them on the day of selection. Thus the next time the bidders see the client team, it is in on the day of the presentation.

In Callon and Muniesa's (2005) formulation, entities are brought together at a centre of calculation and transformed, rendering them calculable. In the case of the school project, a set of transformations allowed the selection team to compare two *things*, two possibilities for the school project, as a set of filled-in forms. Each form is a copy of an

‘Evaluation Tool’ (see Figure 3). The ‘Evaluation Tools’ were then made comparable to the *presentations* that each bidding team delivered to the selection committee on the morning of selection. First, participants in the meeting took notes on presentations. Second, the two tender documents the client team received underwent a transformation of their own: into a single *score* within the evaluation sheet. If a team received an acceptable score, the selection committee could then decide on the basis of the presentation.

What enabled this movement were qualities of the score sheets themselves. When both tenders arrived, a member of the consulting architect team sent an email to the rest of the selection committee. One attachment was the ‘Evaluation Tool’. This is a spreadsheet in Microsoft Excel. For each question in the ‘Invitation to Mini-Competition’ is a row in the spreadsheet. In the first cell of each row, the question from the ‘Invitation’ has become a statement. Thus in one row, Question Six, ‘What added value would you propose to deliver via this project to both the client and the local community?’ becomes ‘Added value to client and local community’. The next transformation is a simple movement of numbers. In the ‘Invitation’, each question is weighted. In Question Six, for example, the weight is 10%. In the spreadsheet, one column is a list of the weightings, a separate weighting for each question. Here the weighting as it is printed within the ‘Invitation’ receives a new capacity to act. In the ‘Invitation’, a number can only be read. In the spreadsheet, it gains the ability to take part in a *formula*. When a number is entered in a ‘Score’ column, the formula multiplies ‘Weighting’ by ‘Score’ and divides the product by 10. The resulting percentages add up to a score out of 100%, a cell marked ‘TOTAL’. The scoring system is built into the spreadsheet. Enter a number over 10 in a given ‘Score’ column and an alert box issues a warning. Thus a scheme, a project, transforms into two entities: a filled-in spreadsheet and a presentation, ready to be placed together within a boardroom.

For Callon and Muniesa, the movements and transformations of objects that mark the previous three steps form a necessary condition for calculation. The springs tighten, the situation set for a moment of comparison:

The good has been placed in a frame with other goods. Relations have been established between them, leading to new classifications that allow forms of comparison: the good can finally be calculated. All these operations constitute the material base for the extraction of a result (a price, a classification, a choice). (Callon and Muniesa, 2005: 1235)

Once everything is in place, the course of the comparison as a moment of action might very well be indeterminate. This is the case with the selection of a tender in the school project. The client’s team set aside one day for the selection. They would meet in a

boardroom and hear presentations from the bidders. In the boardroom with the selection team would be copies of the 'Evaluation Tool', one for each member of the selection team. The team talked about the presentations and about the scores, then made a decision. As the consulting architect explained,

'We took [the winner] just for that the other tender's information and their performance in the interview just wasn't good. It felt like they pulled everybody out of the pub basically and brought them in. Whereas [the winner] were a lot more measured, you know, focused approach. They just performed well. By the fact that they're on this [framework], they're almost deemed to be compliant anyway. So it really is about their performance on the day' (Interview with 'Scott', 21 July 2014).

The biggest criterion, recalls Scott, was the 'performance on the day'. He and others had remembered one team (with the help of notes) to be more 'measured' and 'focused' than the other. The scoring document played a role, though the team's presence on the framework had already assured the team that both contractors were 'almost deemed to be compliant anyway'. When the committee selected a 'Design and Build' team, they did so by selecting a complex *thing*, a combination of a performance and a score. What is key here is that the selection took place through a process of *bringing together* certain objects: the score sheets and the presentations. With the ingredients in place, the moment could be recalled almost as an act of pure intuition.

The selection of a tender corresponds to what Callon and Muniesa (2005) take as the final stage of calculative agency, the production of '[a] new entity [...] (a sum, an ordered list, an evaluation, a binary choice, etc.) that corresponds precisely to the manipulations effected in the calculative space [...]' (1231). In the case of the school project, what incorporates the 'Design and Build' team is the set of documents that enter the project after the selection process. In the months that follow, a series of meetings go over design-related issues. The minutes for the meetings take place on standard forms with the letterhead of the selected team's architect-partner. Drawings come from the studio of the architects. The images discussed at meetings eventually make it into the planning application. Here is what Callon and Muniesa call a 'binary choice': the drawings, the meetings, the planning submission: within the project there is simply room for one architect-partner.

The documents from the school competition do not simply exemplify Callon and Muniesa's (2005) notion of calculative agency, they do it in a particular way. What move and transform are *documents* and *elements of documents*. In addition, these documents move

between offices, with one firm completing a product and *sending it* to other firms. What are central here are the qualities of the documents themselves. The ability for the selection team to perform *transformations* and *comparisons* in the manner of Callon and Muniesa comes down to the existence of certain VISUAL ELEMENTS within the 'Invitation to Mini-Competition' and the subsequent documents. Written questions split the 'Invitation' into BOUNDED visual regions, giving the 'Invitation' a set of distinct *parts* in response to each of which the bidding teams produced various arrangements, COMPOSITIONS, of image and text. This divided quality continues from the 'Invitation' to the tenders and from the tenders to the evaluation tool: sections never need to be taken as a whole, only considered piecemeal. What combines them, preparing them for comparison, is a formula in Microsoft Excel. What is more, as *documents*, the bidders' responses can travel. It does not matter in the calculation what has taken place within the offices of the bidders. All that is available to the selection team is the written product. What the documents do, then, is enable complete, BOUNDED VISUAL ELEMENTS to be COMPOSED, move, and then be COMPOSED again. They come together as a tender document and split apart as separate scores in the evaluation tool. This practical logic of BOUNDEDNESS and COMPOSITION produces a kind of partability, propelling the movement between stages of calculation.

Questions

1. (3 Pages)

Please confirm the identity of the proposed supply chain members for this Scheme, including design teams and provide a project organisation chart with names, key roles and responsibilities identified (which should include the whole of the team, along with the delivery office locations in each case where possible). Please provide project related CVs for a maximum of 10 key members of your teams, which should include framework manager and lead architect, (CVs are in addition to the specified maximum pages) and details of the organisation's relevant experience.

2. (2 Pages)

Please set out the methodology of how you have chosen the design team and why this particular team will respond best to the challenges of this scheme including delivery of the specialist spaces required for The Studio curriculum.

3. (2 Pages)

What do you consider to be the key risks and challenges in delivering this project successfully, including how you would deal with and manage those issues? Use recent project experiences to evidence your answers.

4. (3 Pages)

Explain what your approach will be in managing and developing innovative design within budget for this project. Examples of how the budget could be maximised would be considered.

5. (3 Pages) the handover period is a key concern for this particular scheme. Please outline your approach to handing over the completed facility taking into consideration:

- training and building awareness for School staff, users and facilities management operators;
- how you propose to interact with relevant stakeholders to ensure a smooth transition into the new facilities;
- Integration of ICT.

6. (2 Pages)

What added value would you propose to deliver via this project to both the client and the local community?

7. (3 Pages)

Please comment on the overall programme provided, setting out your approach to how this could be improved making reference to each stage of the process.

12.0 Commercial Submission

Based on Framework Submissions, the commercial element of this proposal should be built up for the following:

- Design fee build up.
- Prelims build up.
- Overheads and Profit.

The summary pricing schedule in Annex 5 shall be completed with the **above build ups**.

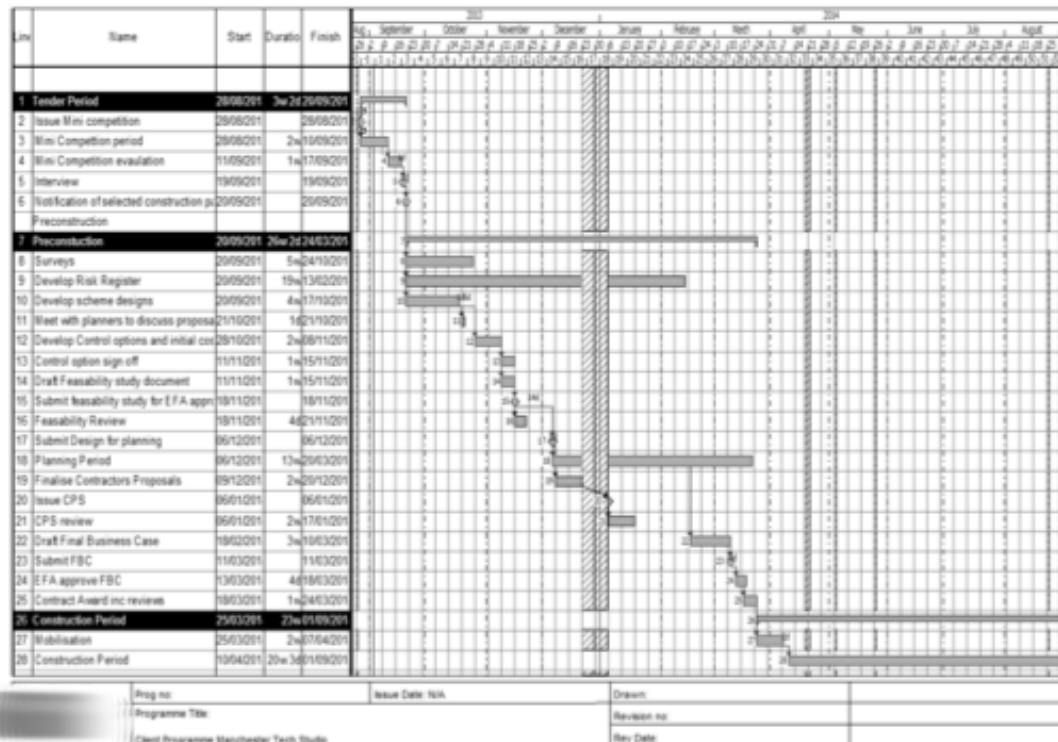
13.0 Evaluation Matrix

Figure 1 Questions within the 'Invitation to Mini-Competition'

Question 7 | Programme

We have undertaken a detailed review of the programme shown within the mini competition document and appreciate the logic of how the client foresees the pre-construction and construction stages progressing. Although we agree with this programme logic we believe there a number of dates and timescales that will need to be reassessed to allow the project to run smoothly and ensure the project is delivered within the required timescales and budget.

The programme below is a summary of the programme provided within the invitation to tender document followed by comments and "Snap shots" showing our proposed amendment.



Surveys | The programme above identifies the commencement of the design being undertaken concurrently with the site surveys. The initial design period from appointment will be utilised to meet the client, determine the brief produce adjacencies diagrams to determine an overview of the scheme. A fully integrated design will not be able to take place until the relevant information from the surveys is provided. We feel this is of particular importance in relation to the measured building survey as the design cannot commence past the initial concept stage until the physical dimensions of the site are proven.

The results of these surveys will also have an impact on the overall costs of the works as the full scope of works can not be established until the relevant surveys have taken place. Taking this into account and incorporating into our programme below makes all design items dependent on the surveys. We have allowed a 2 week period to progress the measured building survey and key structural surveys prior to any detailed design commencing.

16

Figure 2 One tender's response to Question 7 in the 'Invitation'

Bidder Name: _____					
General Compliance Check					
Section		Provided		Remarks	
Within Page Counts (excluding CVs)		Yes/No			
Scoring Matrix					
Ref Q.	Criteria	Weighting	Score	Weighted Score	Remarks
1	Identity of the key supply chain members, including design teams, office location, organisation charts, CVs, and organisations' experience. Methodology for choosing the Design Team and dealing with specialist spaces.	15.0%		0.0%	
2	Methodology for choice of design team and why this particular team will respond best to the challenges of the scheme including delivery of specialist spaces.	5.0%		0.0%	
3	Key Risks and challenges How these issues managed. Examples of recent projects as evidence.	20.0%		0.0%	
4	Approach to managing and developing innovative design within budget	20.0%		0.0%	
5	Approach to handover, taking into account: • training and building awareness • stakeholder interaction • Integration of ICT	10.0%		0.0%	
6	Added value to client and local community	10.0%		0.0%	
7	Comments on overall programme, approach and improvement	20.0%		0.0%	
TOTAL		100.0%	0	0%	

The scores will range from 0 to 10. The following table illustrates the meaning of each score:

Score	Meaning
0	Rejected - Evidence is unacceptable or non-existent, or there is a failure to properly address any issues.
1 - 4	Poor - The evidence is deficient in certain areas where the lack of detail or information requires the reviewer to make assumptions.
5 - 6	Satisfactory - The evidence is acceptable, but with some minor reservations.
7 - 8	Good - The standard of evidence meets expectations with some evidence provided.
9 - 10	Excellent - Comprehensively meet requirements with high quality and substantial amounts of evidence and information provided.

Figure 3 The 'Evaluation Tool'

6.3.2 The competition within the project as a whole

It seems plausible that the school competition came together as a competition at least partly through the ability of documents and VISUAL ELEMENTS within those documents to move and transform. The structure of the 'Evaluation Tool' ensured that responses within the tenders would correspond with the structure of the 'Invitation to Mini-Competition', and correspond in a way that would be subject to the 'Invitation's' weighting. And as the bidding teams submitted tenders to a team of client representatives and consultants, they *separated* their bids from the rest of their activity, from any more site visits and meetings among the team. That is, by the time the client team met on the day of selection, the question of *what it is the bidders had prepared* came down to two things: the scoring document and the bidders' presentations. Meanwhile, the presentations guaranteed that the bids would not *only* be present through the tender documents. What the evaluation sheet did was give the assurance that each bidder had met a set of basic criteria. Here we see different kinds of movements: first, *preparing* documents; second, *collecting* documents at a site separate from their production; and third, *speaking about* documents in a moment of conversation. What seems to be the case is that these sorts of movements, of preparing and collecting documents, *also* take place throughout the rest of the project, even outside any moment of comparison (i.e. of competition). Here moments of preparing documents, collecting documents and meeting *about* documents set the rhythm for the project.

We see one kind of movement in records of meetings. In the early days of the project, the multidisciplinary consultancy who had partnered with Scott produced a Gantt chart that outlined the project as a series of events, from developing the education brief to conducting analysis of the curriculum and issuing the 'Invitation to Mini-Competition', through to conducting a feasibility study, appointing a contractor, drafting a business case for the Education Funding Agency and carrying out the construction. Among the events that the Gantt chart spells out are not only moments of production, but also meetings. In the chart, meetings take place as several series. In the first three months of the programme are six Design User Group meetings. The next two months feature six Engagement Meetings. What the programme suggests is a punctuated rhythm: events in which meetings take place or documents are submitted, with periods of production that go unrecorded in between.

The meeting minutes themselves bear traces of moments in which documents are discussed and proposed. Each meeting minutes document has a standard set of headings, listed in the 'Agenda' that makes up the first page. For the 'multi-management meetings', these include boilerplate meeting topics ('Apologies', 'Introductions'), but also stages within the project: 'Feasibility Approval', 'Planning', 'Programme', 'Design', 'Surveys Update', 'Employers [sic] Requirements', 'Contractors [sic] Proposals' and 'Risk Register'. These categories for agenda topics are also categories that we see in listings for events within the programme. At the same time, they are *documents* that, over the course of the project, will be produced and submitted. After the agenda comes a grid with two columns. In each row is a headline, usually an item from the 'Agenda' page. There are boxes for 'Design' and 'Programme', but also 'Commercial' and 'M&E' (mechanical and electrical). While the range of topics is broad, the categories appear regularly. And each of the minutes documents of management committee meetings I received (there are three) includes the same headings in the same order. Within the record, then, the meetings become a sort of gathering point that takes elements from the programme and lays them out in such a way that project participants can comment on them, and that those comments can set an agenda.

Within each box of the minutes document, the text is broken into paragraphs, each about a sentence long. Beside each paragraph, in the 'Action' column, is a set of initials, either for the name of an individual at the meeting or of a whole firm. Here the text can be said to be less of a description, bringing out details of something, than a *label* for something to be done or considered, a state of the world. When one meeting minutes document says, for example, 'M&E workshop to be held on 14-March-14', it might be expected that project participants will know *about* the workshop, but someone who did not attend the meetings would not. The text does not describe the workshop but simply *declares it to exist*. The minutes, then, become a record of *what* has or has not been done, and *what will be done*. Thus when new items are added to the minutes, they name new actions and new states of the world, each in one or two sentences: '[Contractor] to review ICT tender that [Participant] confirmed was issued. [Participant] also confirmed that 2 sub contractors are currently pricing and have attended site for review'; '[Architect] noted that they are also enquiring whether the Planning decision will be made via delegated powers'; and so on. What these items do is indicate *that* something has happened without describing exactly what it is. Instead, they fix an event that has been named in advance (the ICT tender, appointing sub-contractors...) within a particular moment in the programme. Moments of

meeting or document production, BOUNDED in themselves, are COMPOSED together in the minutes and brought in correspondence with the programme.

While the meeting minutes include a constant set of headings, the items *under* each heading can both vary and remain the same. The difference between what varies and what remains suggests one role for the meetings and the meeting minutes documents. The items that remain are often about *waiting*. In one document, for example, the boxes labelled 'CP's' (cost plans) and 'ER's' (employer's requirements) say, '[Contractor] are awaiting ER's to enable the CP's to be put together' and '[Consultancy] to issue ER's to [Contractor] for review'. In the next documents, the 'CP's' box copies the text from the previous document while adding a few words: '[Contractor] are awaiting ER's to enable the CP's to be put together. [Participant] to provide FTP link. Still outstanding'. And in a minutes document from a meeting one month later, the 'CP's box said the same, adding only a date: '[Contractor] are awaiting ER's to enable the CP's to be put together. [Participant] to provide FTP link. Still outstanding from 14-Feb-14'. Here the minutes name *things* from the programme and associate them with dates, actions and actors.

From meeting minutes, what the meetings seem to do within the project is *pull together* other things from the programme. The programme names 'Employer's Requirements', and the meeting minutes name this document as well, only in each meeting they associate the document with things that are not mentioned within the programme: actions, actors, dates, events that have taken place partially, that is, situations of waiting. Practitioners at the different firms who participate in the meeting seem to work separately and then convene again at the meeting to report the status of such and such an artefact. The meeting minutes, then, can be said to operate similarly to the project programme but with a different set of visual affordances. In the Gantt chart, names of things are associated with icons that are mapped from left to right across a timeline. On one date, a feasibility study is submitted. On another, the team complete a planning application. In the meeting minutes, the same things are named, but without the timeline. Instead there are names of *states* and *actions*.

Other artefacts that move through the project are the *drawings*. In the collection of documents I received are isometric drawings—plans, sections, elevations—with the same graphical conventions of the drawings that would make it into the planning application: a 1:100 scale, A3 size, logos of the both the contractor and the architect. In the upper right hand corner of each drawing I received is a space labelled 'NOTES/REVISIONS'. In all cases,

what these name are *meetings*. In one plan drawing, for example, the 'NOTES/REVISIONS' section includes two lines:

RevA 1.11.13 Updated following Engagement Mtg 5

RevB 6.11.13 Updated following MM [multi-management] Mtg

Iterations, then, follow meetings. Within the documentary record, the meeting becomes a moment in which iterations produce a trace. There were probably many iterations and version of the drawings *between* meetings, but it is only after the meetings that the iterations are given dates and inscribed within the drawings themselves. Meetings become a point in which the indefinite rhythm of *producing* documents, a rhythm only some project participants are privy to, corresponds with the definite rhythm of the project programme.

Another moment of gathering and submission is the production of the planning application. This is available in full from the website of the city council. What is interesting about the planning application is the role of attachments. The planning application itself is an online form with 27 questions, covering basic information like the address of the site, yes/no questions about pedestrian access, numbers of parking spaces and tick boxes to indicate how sewage will be disposed of. Longer text boxes describe the work proposed for the site, what demolition work will be done and the machinery and construction procedures that will be involved. Beyond this is a slew of documents, 32 in all. There are the isometric drawings discussed in meetings, but also *reports* by consultants: an acoustic design report, a heritage assessment, a transport assessment and a crime impact assessment, each prepared by a different office. Reports are pulled together and submitted. What is noteworthy here, then, is that the process of collecting documents and submitting them as the *basic pattern of movement* within the project is not unique to the competition. What *is* unique to the competition is a process of comparison.

Across the school project, then, we see three different sorts of movements. First, documents are *produced* at different offices. While the processes of production are not visible within the documents themselves, authorship is clear. Within the planning application are reports produced by different consultancies, each with its own logo. Each drawing includes the logos of the architect and contractor, and the 'Invitation to Mini-Competition' includes the logo of the framework. Second, there are moments of *gathering*. Different things that the project participants produce are brought together. Part of the

gathering process is *submission*. After different consultants have produced a design brief, 'Education Vision' and so on for the 'Invitation to Mini-Competition', the document goes to the architects. Once reports and drawings have been gathered into a planning application, the application goes to the council. And in a third movement, these events are placed in correspondence with the programme: what is produced and gathered is declared finished. One moment in the programme has concluded; the next will begin. The rhythm of the project seems to build on its multisitedness. Firms produce things separately and compile them at meetings. The project emerges as a linear process, in line with the programme, only in so far as various documents, various matters of concern, are collected and named at the moments in which the team come together.

Within this overall pattern of movement, the selection meeting can be taken as one gathering point in a series of gathering points. The date of the interviews and the selection itself had been set in advance and made clear within the 'Invitation to Mini-Competition'. The objects that would appear at the meeting had been produced separately: tenders, evaluation tools, the brief and so on, all by separate offices. The meeting brought them together. What distinguished the *selection* meeting from other meetings, then, was a moment of COMPARISON. Unlike the management meetings, the selection meeting determined who would participate in subsequent meetings. The comparative move of the selection meeting produced a *choice*. From the selection meeting, some actors continued on to other meetings and some did not. If management meetings placed actions in relation to the programme, the selection meeting COMPOSED other meetings, naming the participants who would attend.

Recalling the arguments of Callon (1998, see Chapter 3), the competition for the school seems to receive its structure as an outgrowth of other processes, in this case the structure of the project itself as a network of consultants, each with a different office. Just as the whole project moved from meeting to meeting, submission to submission, the competition also worked as a set of meetings and submissions. And the artefacts at work within the competition, from the 'Invitation to Mini-Competition' to the evaluation tool, moved and transformed readily. The competition, then, presents one moment of COMPARISON within an overall pattern of separation and reattachment (i.e. a COMPOSITION of BOUNDED VISUAL ELEMENTS).

6.4 DEPICTIONS OF PROCESS within documents

The competition for the school took place as teams produced documents and sent them to one another. But this is not the only process through which the documents operate. By looking at the movement of elements between documents and the movement of documents into other, larger documents, it becomes possible to see one way in which the competition moves through time. Here another thing that is significant is the content of the documents themselves. There are moments when the documents appear to have an *expressive* function, and this expressiveness plays a role within their mobility.

6.4.1 The tenders

Two firms of contractors responded to the 'Invitation to Mini-Competition': 'BuildCorp' and 'Mason and Carpenter'. The tenders are .pdf documents that combine images with text and devote several pages to each question in the 'Invitation to Mini-Competition'. There are no drawings in the tenders. Instead, the 'Invitation' asks teams to describe approaches and refer to experience. The first question, for example, asks teams to 'set out the methodology of how you have chosen the design team [...]'. And Question 3, asking teams to identify possible risks, tells them to 'Use recent project experiences to evidence your answers'. Thus in the tenders, text describes the approach of the firm and their architect-partners, first in the CVs of the partnering architects as well as the CVs of the rest of the bidding team, and second, in response to a question about 'Methodology for selecting design team'. Here we see different ways of evoking both *future capacities* and *past experience*.

One way this takes place is in describing the client's brief in terms of the contractor's ability to deliver. In the BuildCorp tender, the specifics of the 'Studio School' arrive on Page 1. Here are claims that, first, the firm *has done something* similar to the client's brief and, second, that the firm *can do* what the client has proposed.

The team proposed for this project have extensive experience working on educational projects and have worked together for over four years on varying sizes of projects from complete new build schools to listed building refurbishments. They fully appreciate the specific nature of how a [Studio School's] requirements differ from a traditional teaching facility and the involvement the key stakeholders have in the decision making process.
(‘BuildCorp’ tender: 1)

The text discusses the *past achievements* of the firm and the bidding team. Likewise the tender proceeds to an organogram and a description of the way the team work together. A more direct reference to the brief comes earlier in the same paragraph of the tender:

It is considered important that the [the school] should develop and promote links with local creative businesses, and the facilities need to reflect a mature and businesslike approach to the needs of the curriculum and yet provide potential opportunities for out of term use by creative industry.

('BuildCorp' tender: 1)

The tender's mention of 'links with local creative businesses' is expanded ten pages later, where the text says that the firm itself will provide links with students, doing so in addition to the links it will produce through a focus on local labour.

[...We] propose to utilise our own in- house expertise to offer work experience and training, and will encourage our suppliers and project stakeholders within the local community to do the same, in recognition of the vocational nature of the school and the [...] skills framework [spelled out in the school's brief]'.
(BuildCorp' tender: 1)

BuildCorp's tender, then, talks about the client's brief *selectively*, and does so within the course of a more general expression of the firm's ability to 'add value', its success with similar projects in the past. The result is a narrative in which the firm's past projects become continuous with a project exists unrealised in the present: the client's brief.

The text of the second tender includes the same sort of description as the first: the *capacity* and *previous projects* of the firm. When talking about the client's 'Education Vision', they do so in terms of similar projects they had completed in the past, along with the firm's ability to harmonise with the client's team. For example, the top paragraph within the section entitled 'Understanding the end user requirements and delivering them' reads, 'Our design partners [...] have recently completed a similar scheme [...], turning vacant Victorian warehouse buildings into individual, flexible business spaces for use by emerging creative industry businesses' ('BuildCorp' tender: 13). Here the particular sense of 'flexible' goes unmentioned. What the text emphasises is the fact that the firm *have completed this sort of thing before*, even if there is no precise specification of what exactly that is. The implication is that, whatever 'flexibility' means here, the contractor's past activities have taken place with regard to it.

Another question within the 'Invitation to Mini-Competition' document asks teams to name possible risks within the project. Here Mason and Carpenter's tender mentions one aspect of the client's 'Education Vision'. Each 'risk' receives a sub-heading and a short description. The subheading of one risk is 'Finished building doesn't satisfy teaching requirements'. The description begins, 'From initial discussions and information, we recognise the importance of providing a flexible teaching and working environment within

the building' (16). The description goes on to talk about 'Understanding and meeting the clients' aspirations within the limits of programme and budget', the 'client engagement process' and the firm's experience 'in working closely with multiple stakeholders'. Again, what the text expresses is capacity: the firm avoid the risk that the building does not fulfil the client's 'Education Vision' through their own way of doing things, from *understanding aspirations* to *working closely with multiple stakeholders*.

The 'Invitation to Mini-Competition' also asks bidders to comment on the programme. Thus the two tenders include elements in their responses to Question 7 (see Figure 2) that reflect different sorts of description. BuildCorp's response divides pages 16 through 18 into sub-sections. Each sub-section is accompanied above or below by a Gantt chart. Sections are given themes: 'Feasibility and Design', 'Planning' and so on. In one sense, then, what BuildCorp provides as commentary on the client's programme is a set of *additional* programmes, one for each theme.

In BuildCorp's response, the sub-programmes do not exist separately from one another, and the text in each section puts them in relation both to one another and to the 'Invitation to Mini-Competition'. In the section titled 'Surveys', for example, the text gives two weeks to investigate the conditions of the site. Any design work that takes place in the meantime would 'be utilised to meet the client, determine the brief [and] produce adjacencies diagrams to determine an overview of the scheme' (16). And in a section titled 'Feasibility and Design', the text says that while the client's programme had left 11 weeks between the award of the contract and the submission of a planning application, 'From discussion with our Architect team we believe a design period of 10 weeks should be sufficient to allow the design to be developed from its current state of maturity'. Along with the time required for site surveys, says the text, this would move the date for submitting the planning application from 6th to 13th December, a move that

[...] will be more advantageous as it will allow more time to produce a design that suits the client's budget and will mitigate against the potential for planning re-submissions for any times that could potentially be missed from the initial submission. ('BuildCorp' tender, 17)

The text does not just *propose* dates and periods, then, it *justifies* them by ascribing them *qualities* ('more advantageous'). In commenting on the project programme, then, BuildCorp's response to Question 7 includes a variety of inscriptive genres. There were *proposals of benchmarks and timelines* followed by *visual inscriptions* of those

benchmarks in the form of a Gantt chart and *explanations of qualities* of the benchmarks within the text.

In Mason and Carpenter's response to Question 7 is a wholly different set of descriptions. Where BuildCorp's response is divided into subsections, each with its own Gantt chart, set of dates and justifications for those dates, the response from Mason and Carpenter is a broader description of the firm's capacity. This is clear from the first paragraphs. While BuildCorp's text *proposes* alternative benchmarks and periods of time, the text in the Mason and Carpenter tender begins in support of the heading for the Question 7 response: 'Delivering the building early'. One paragraph, for example, says that 'A key factor is the initial development of the brief, scope of works and completion of design in time for the planning submission / change of use application' (24). Then the text summarises the response of the firm: '[...] we will support / provide a very focused and dedicated team to deal with this very busy period' (24). In the statement that the team will '[deliver] the building early' is not the sort of positive proposal that BuildCorp include in their tender, but a *qualification* of the contractor's way of working: by providing 'a very focused and dedicated team', the text says, Mason and Carpenter will finish ahead of schedule.

After four paragraphs qualifying the contractor's approach to 'Delivering the building early' are three other kinds of description. The first begins with the statement, 'We utilise a system of [RIBA] Stage B and Stage D reviews' (24), each of which includes a report. Next is a series of bullet points, listing the contents of a report ('Architects report', 'Concept drawing', 'Design progress report'...). Instead of qualifying a way of working, the text turns to *listing objects*. Compare this to the text within the tender for BuildCorp, which *delineates* periods of time and *names them* as being part of a particular process. In doing this, the text mentions objects, but with no claim to comprehensiveness. In the case of Mason and Carpenter, what are proposed are *specific objects* rather than *specific periods of time*.

And to the list of specific objects the response from Mason and Carpenter adds a list of activities, also bulleted, with an introductory sentence: 'There are several activities which we will undertake to ensure that we deliver the project ahead of programme'. Like the paragraphs that began the section, this passage qualifies the claim that the firm will deliver the building early. Each 'activity' includes a nominalised verb phrase that has been given some positive quality. The first item, for example, is this: 'Production of an efficient

design [...] – removing the need for revisions / variations in the construction stage which delays the process’ (24). And unlike the descriptions of time periods in the BuildCorp tender, the descriptions of activities do not refer to one another. Each bullet is separate from the next.

What the tenders include, then, are elements, text and images, that either make some statement about capacity and experience *or* provide a demonstration of capacity in the element itself. There is no one way in which this takes place. Instead we see a great variety of descriptive techniques and inscriptive genres. As we see in a comparison of the two tenders, beyond the basic division of the tender into questions, the visual layout is indeterminate. There might be bulleted lists, diagrams, descriptions of previous projects or claims about a yet-to-be completed programme of action. What all of these elements have in common is what they refer to: either a firm’s *past*, the projects it has completed, things it has done, or its on-going capacity to act, what it has planned for the client’s project. As we will see, this expression of the past and future is important for the movement of documents within the project and, in turn, the way the architect-contractor teams are taken up within the competition.

6.4.2 Outside the tenders

But just as the qualities of *movement* we see in the competition fit within a broader pattern of traveling documents, the expressive qualities of the text within the tenders have counterparts at other stages within the project. The text within the tenders approaches the expressive in making claims about *capacities* by appealing to the past, as well as about beneficial outcomes. Other documents made similar sorts of claims. If we take together the products of the different participants in the project as a single series of events, we see a rhythm of *gathering* and *application*: for funding, for planning permission, for a change in the *wording* of the planning permission.

We see one form of application earlier, in Scott’s narrative about the way the project had begun: to receive public funding for a Studio School, an education provider takes part in a formal application process. As of May 2015 it is possible to download the forms from the Department for Education website. Part of the application is a description of the client’s ‘Education Vision’. In the application, the client had attached a document that set the Studio School in the context of the intended city’s creative industry, which the application

says is burgeoning and offers opportunity. The school itself, the document continues, will feed into this environment:

[The education provider] will have an ethos that promotes and affirms academic rigour alongside creativity and technical skills. Our offer will be more akin to that experienced in world-class workplaces rather than a traditional school setting. Students will wear business dress rather than a uniform, and will attend regular briefings in place of assemblies. Learning will take place in workshops and project groups; individual support and guidance will be provided via coaching sessions, and students will have appraisals rather than traditional reports. ('Education Vision': 8)

What is noteworthy here is the presence of *will* statements: 'Learning will take place [...]', '[...] students will have appraisals [...]' and so on. The text describes a situation that has yet to exist, bringing out *details* of that situation. That is, within the 'Education Vision', the situation is something available to description. Like the tenders, the 'Education Vision' is a DEPICTION OF PROCESS.

Five pages of narrative describe the school's place in the city and what it would achieve. Along with the text are tables displaying the academic pathways pupils take through the school, along with the number of hours devoted to different aspects of the curriculum. What the text and tables do here is *describe education as a process in time*, where time is quantified and divided into periods. Each period is given a purpose. The business case notes, for example, that

Over their time at MCS, students will spend on average 60% of their timetable in Project-Based Learning, complemented by substantial experience in workplace settings. This means that for over half of their time at school, students will be learning, demonstrating and refining their employability skills ('Education Vision': 8).

Here is a description of what students *will be doing* that achieves its evocation of a yet-to-begin process by dividing time into periods. A weekly calendar depicts, for example, a 'Monday' column with the hours 9.00 – 10.00 and 10.00 – 11.00 devoted to 'English Focused PBL', the hour after a 'Morning Break' devoted to 'English Lesson', and the two two-hour blocks that alternate with the lunch and afternoon breaks devoted to 'Design', either as a 'Work Placement' or as 'Project Based Learning'. Before discussions begin on sites and buildings, then, comes a description of the school as a process in time, where time is both narrated and divided into hours. That is, the *will* statements that the text is making depict a complex process: they seem to reach into the process and pull out specific attributes. These are not events that are separate from one another, but a situation with various overlapping ways of doing things, a single flow of operation.

In the first excerpt from the 'Education Vision' document, claims about yet-to-begin processes mix with claims about *benefit*. Similar claims are made in the planning application, which the client submitted to the council about three months after appointing a contractor. The application includes an HTML form submitted through the council website, plus attachments: drawings, reports, and a narrative summary, a 'Design and Access Statement'. Here we see claims made in a similar way to those of the 'Education Vision': depictions of a yet-to-exist situation, plus benefits of the situation.

The proposals will retain the sympathetic refurbishment and reuse of an existing building within the [neighbourhood] whilst both providing specialist education for 14 – 19 year olds and supporting the development of new and existing Media and Creative companies within [the neighbourhood].

The development of [the school] will offer students a rigorous academic programme with the opportunity to engage with a vocational curriculum, work with real businesses, and experience real workplaces. This combination of academic and applied learning is a distinctive feature of the Studio.

[The school] will be a creative regional centre of excellence working closely with local employers and the region's major commercial players to create the next generation of creative minds. (Design and Access Statement: 13)

It is crucial to note here that these are not just claims about future events or the qualities of a future building. As with the 'Education Vision', the client is depicting processes: an academic programme, an opportunity, collaboration with businesses and so on.

And when the document goes into the more specific features of the building, it also talks about processes of construction. As with the visions of the programme, the text is a description that both names elements of a yet-to-begin situation and associates these elements with *good effects*. Once again, claims about the life of a building merge with claims about benefit. The text describes what it is that the features will *do*, expressing these effects as having positive qualities:

The design intent is to refurbish the interior of the warehouse whilst retaining the internal character and open floor plans as far as possible. This will create flexibility and function for active learning areas on all floors together with administration, welfare facilities including a canteen and dining area together with meeting rooms and quiet study/exam areas. Wherever possible original features, such as the original goods lift fire doors and corner stair tiling, will be retained to provide interest and context to the proposed future use. The open plan interiors are an essential element of the [school's] ethos and seek to replicate the working environment and atmosphere that students will experience in both work placements and their future careers within the Media and Creative industries.

(Design and Access Statement, 7)

Statements about interventions in design and construction are also statements about benefit. To ‘refurbish the interior’ is to ‘create flexibility and function for active learning [...]’, while retaining original features will ‘provide interest and context’. These are not just specifications of features for an object that is removed from time, but claims about how these features will operate, *what will happen* after these features come into place

Another moment of DEPICTED PROCESS is clear when the client appeals the decision of the planners. Once again, the client submitted what amounted to another application, evoking a yet-to-begin process to get the approval of another collective entity and proceed with the project. When the council approved the client’s planning application, one condition of the approval was that

The premises shall not be open outside the following hours:- [sic]

08.00 to 18.00 Monday to Friday

(no openings on weekends or bank holidays)

Reason – In interests of residential amenity in order to reduce noise and general disturbance [...].

(Planning Permission: 3 – 4)

In response to these restrictions on the opening hours of the building, the client prepared an application to change the wording of the permission. A major part of the application is a *supporting statement* that the client had commissioned from a consultant. Like the planning application itself, the supporting statement rests on claims about yet-to-begin processes and the benefits that extend from them. But there are also statements in the present perfect tense:

The impacts to the adjacent residential use have already been considered as part of the planning application. An acoustic report has informed the preparation of effective mitigation and a separate condition exists to deal with this matter. Residents moving into this area will be expecting noise and activity from several surrounding uses, not least from traffic noise from the nearby presence of [a four-lane road]. The School will not significantly increase these noise and activity levels. In conclusion therefore, the proposed variation of condition 5 will not have significant negative implications on the amenity of the surrounding area. (Supporting Statement: 8)

In the passage are claims about the interactions between residents and the building, interactions that *have yet to take place*. Residents ‘*will* be expecting noise and activity’; ‘The School *will* not significantly increase these noise and activity levels’. But at the same time, there are claims about what *has* happened: ‘An acoustic report has informed the preparation of effective mitigation [...]’. Like the tenders, then, this passage moves from

claims about the effectiveness of an operating procedure that *has already begun* to claims about the benefits of something that *has yet to begin*.

There are moments in the project when one set of actors applies for the approval of another. Here the competition tenders share much with the planning application, change of use application and 'Education Vision'. In all of them, narrative text works by *depicting* processes that will at some point take place. Here I point to studies in which 'competition' is an extension of other processes, a complex *thing* (Chapter 3). The formal architectural competition (or competition among architect-contractor consortia) takes its unique qualities from multisitedness, a need to receive permission and funding from entities 'outside' the project itself.

6.5 Conclusion

As a matter of concern within the speech of architects, competitions are COMPOSED in different ways (see Chapter 5). In one sort of description, architects talk about competitions as featuring particular documents, either as GENERIC CATEGORIES or specific engagements with this or that document. Here I have looked at the *objects* and *practices* (See Chapter 4) involved in one set of *technologies* through which the competition becomes describable as a thing: documents from a project. In the documents that circulate throughout a particular project, in this case one client's efforts to commission a Studio School, it becomes possible to see how the COMPOSITION of the competition comes into contact with other practices: meeting, filling in forms, producing drawings and making submissions. And here we see a new set of elements: VISUAL ELEMENTS and DEPICTIONS OF PROCESS, coming together as COMPOSITION, PARALLEL TRANSFORMATION and SIMULTANEOUS MOVEMENT.

What is key about VISUAL ELEMENTS is that they are BOUNDED and can move on their own. As they transform, they preserve their boundary lines. They move not in convergence, but in PARALLEL. Thus the questions within the "Invitation to Mini-Competition' transform into sections within the tenders, which in turn transform into numbers within the evaluation document. All the while, the *divisions* between each question are also division between sections of the tenders, which are in turn divisions between rows of the score sheet. At the same time, the 'Education Vision' within the client's application for funding is itself a BOUNDED VISUAL ELEMENT. It announces its own divisions from other elements: its own pagination and headings. As a VISUAL ELEMENT, the 'Education Vision' can move into the

‘Invitation to Mini-Competition’. And divisions between categories within the project programme can translate into divisions between sections within the meeting minutes. As VISUAL ELEMENTS, these things can *move into other surfaces*, one document produced by transforming the elements of another. That is, versions of some VISUAL ELEMENTS come to COMPOSE the surfaces of the documents. Thus the generic term ‘visual element’: it does not matter what is *inside* the VISUAL ELEMENT, so long as it is BOUNDED from other such elements and capable of movement and transformation.

What the documents appear to do here is *operate over a distance*. VISUAL ELEMENTS can be transformed and placed together in other documents as a way of making the work of one firm calculable within the office of another: they come together as COMPOSITION. Here the competition becomes an extension of the techniques that contribute to the project as a whole: practices such as holding meetings bring together the work of various project participants, work that would otherwise be concealed between one office and another.

And when documents travel *to* or *from* actors who can be said to be *outside* the project, we see SIMULTANEOUS MOVEMENT. Here documents that have already gone through a kind of COMPOSITION of elements that have TRANSFORMED IN PARALLEL come to move as one, taking their elements with them in unison. It is at these moments that we see particular kinds of VISUAL ELEMENTS: text and images that DEPICT PROCESS. These can be claims about capacities that extend from the past or processes that will take place in the future: relationships to the community, practices of construction, commitments to building on time, programmatic sequences and so on. The competition, then, extends from configurations of the project itself: firms working apart, submitting documents to one another and meeting at an agreed date to talk about those documents in relation to a programme. In the client’s application for EFA funding, the contract-architect teams’ tenders and finally in the planning application, text and visual elements describe *processes of operation*. What is noteworthy here is the way these expressive documents move: from one network into another. The EFA has not been involved in the production of the client’s funding application. The client has not been involved in the production of the tenders. Thus when the funding application *moves to* the EFA or the tenders *move to* the client, they break away from one set of relations and enter another. As the first set is no longer involved in producing the documents, the documents themselves are what act upon the second set. At moments where one set of practitioners *sends something* to another set (SIMULTANEOUS MOVEMENT), the documents form the basis of the relationship.

Thus alongside the COMPOSITION of the competition out of building types, categories for procurement routes and documents, we also see the PARALLEL TRANSFORMATION of VISUAL ELEMENTS along dividing lines, allowing these elements to be brought together, COMPOSED, into new documents. Once a set of documents is collated (again, COMPOSED) into a packet, whether a funding application, a planning application or a competition submission, the elements MOVE SIMULTANEOUSLY. This mobility takes place between places that would otherwise remain separate: architects' studios, a planning department, the office of a client, the office of consultants and so on. Since the competition has this collage-like quality, it continues along as a competition even while its elements exist in different sites. The result is that the competition preserves its own identity even while it takes place across different sites, with participants acting together over a distance. We see another aspect of these processes as we follow (student) architects in the course of preparing a competition entry (Chapters 7 – 8). Here we see COMPOSITION as a kind of design work that engages with images rather than qualities of a scheme, as well as the relationship between the imagery of the competition board and its treatment among a jury (Chapter 7). Architects at OMA respond to a distant client through an interpretation of the brief, encountering the mobility of the competition even as they work on a *scheme* rather than the COMPOSITION of a submission board. This is to say that at OMA, the competition as a competition is not present in every moment of building design, but is added to it as a distinct set of processes extending from the technologies through which competitions emerge (Chapters 10 – 11).

Chapter 7

Third journey: students in competition

7.1 Adding participants to competitions

Outside of architectural theory, the connection between everyday practice and competition poses less of a gap than it does in the ethnographic literature on architectural studios and the management studies of competition (Chapter 2). Considering this connection in Callon (1998) and in ethnographic research in craft and finance, it becomes clear that situations of competition rest on prior sets of relations that may not, taken alone, appear 'competitive' (Chapter 3). Members of a collective do not begin with certain behaviours and dispositions toward one another that are essentially competitive. Competition is assembled.

Later (Chapters 5 and 6) we see some of these relations unfold. First, competitions are COMPOSED in that architects' descriptions can jump back and forth between whole and parts, the parts subject to arrangement into new categories. Second, the objects, the products of competition are part of a broader pragmatic situation that gives a central place to *travelling documents*: COMPOSITION into collated packets; PARALLEL TRANSFORMATION of VISUAL ELEMENTS to make them suitable for placement together on a surface. Some of the documents work as DEPICTIONS OF PROCESS, evoking a yet-to-begin moment of operation. And competition submissions are part of a series of SIMULTANEOUS MOVEMENTS, where COMPOSED elements move at once to a new network. The competition itself extends this pattern of traveling documents, of work done at a mutual remove.

And what is key is that for the participants in competitions, these patterns of practice are familiar and routine. Architects describe the COMPOSABLE elements of the competition as standard, regular presences (Chapter 5). One architect consulting on the Studio School project describes the procedure as one permutation within a set of repeated choices (Chapter 6). We might ask, then, *how* these features of the competition become so familiar to architects, how the relations that make up the competition begin to assemble. There must be some process through which architects take the brief or the submission board as typical occurrences, and how the submission of documents in general becomes the mechanism through which formal competitions take place.

We might begin to look within the sites where architects are first brought into a situation of professional practice. Thus the object of the chapter is an M.Arch unit at a prominent UK architectural school, which I call 'Atelier Eco'. Here students are encouraged to work on competitions. Nearly everyone in the unit, both fifth year and sixth year, worked on at least one competition during the term in which I visited. What is more, the individual projects of students, the projects that make up the students' portfolios for evaluation at the end of the term, are often based on competition entries. The competitions that the students enter become one way of *doing architecture* from the position that students occupy: students can enter some competitions (ideas competitions, competitions for small pavilions) *as students*. The competition entries, with some alterations, then become additions to the student's portfolios for evaluation as part of the M.Arch course. When the students worked on competition projects, they worked in response to actual competitions, often national or international, with organisers, deadlines and entry fees. Thus the students were not only responding to the curriculum of the architectural school, but to particular situations of competition. Further, relations of competition that take place with regularity *outside* the atelier can be replicated *inside*. Toward the end of the term, a property developer with interest in the area organised an ideas competition especially for the atelier. Here students from the atelier teamed up with visiting students from a university overseas to spend six days preparing, submitting and presenting entries. They visited a site, developed a concept and received the judgment of a jury. Competitions are regular enough within the activity of the atelier that *if* the architectural agency of students were to be taken up within the sets of relations through which the architectural competition emerges, then this would be one place in which we could see it happen.

In one sense, the student atelier is a site in which certain relations within architectural practice begin to assemble. The pedagogical techniques that we see in architectural schools are already one of many possible configurations (Mewburn 2012). And the relations that the students at Atelier Eco enter in the course of competitions parallel those we have seen already (Chapters 5 – 6): the COMPOSITION of mobile documents as a constellation of readily separable (BOUNDED) parts. The competition lends itself to design over a distance through the visual qualities of the documents that circulate (VISUAL ELEMENTS), as well as through the practices with which practitioners on both the architect's 'side' and the client's 'side' engage with them (Chapters 10 – 11).

7.2 Objects and practices within the classroom

The classroom is a situation from which the student architects at Atelier Eco find their way into the networks of relationships that can be described as architectural competitions. Within the student atelier are particular practices through which architectural education takes place. Learning to do architecture is a process that can bring in many different kinds of relationships, routines and environments (c.f. Webster, 2005, 2008; Mewburn, 2012). This is to say that any given situation of architectural education is not self evident but must be *assembled* in the sense of Latour (2005a; see also Chapter 3 for a discussion of Latour's analysis within actor-network theory). Since 'doing architectural education' is not a straightforward task, it has to mobilise a particular set of objects and practices. One example of this is Atelier Eco itself. With a central focus on competitions, the atelier is rather (but not completely) different from, say, the Beaux-Arts model described in Till (2009) and Cuff (1992). A critique of architectural education itself is outside the scope of this thesis, but what is important here is that *since* Atelier Eco has to maintain a set of relationships, and those relationships put students in contact with architectural competitions, it becomes possible to observe the ways in which new members of the architectural profession engage with the objects and practices through which competitions emerge. Thus we might ask how the relations that students enter and the practices they take part in fit within an overall ecology through which the competition exists as a *thing* (Latour, 2004, 2005b).

The contingency of architectural education as a set of practices and relationships is clear within criticism of one popular account of teaching and learning, Schön's (1987) analysis of reflection-in-action. In a study of one English architectural school, Webster (2005; see Webster 2008 for a similar argument through a Foucauldian lens) finds the assembled objects of a studio contributing to the architectural crit as a situation of heightened affective intensity, where the arrangement of chairs to face the student and the act of pinning one's drawings to a wall become sources of anxiety. Rather than focusing on the individual trajectory of the student, Webster says, the crit functions as a technique of acculturation into the architectural profession. And this acculturation, says Till (2009: 8) is a mismatch with the profession as it exists outside the architectural school, producing 'alien vocabularies (spoken and drawn) understood only by architects, arrogance [...] and a complete inability to listen on the part of both tutor and student'. Cuff (1992), a precursor to Till, notes not only that the 'socialization process appears to sacrifice public responsiveness for intraprofessional strength' (122), but also that 'many students

complain that they never “got a good crit” during their education’ (126), that is, a crit that is ‘positive, specific, and perhaps showed a way to improve the scheme’ (126). In both of these accounts is the argument that the crit is a holdover from the Beaux-Arts schools of previous centuries. What these scholars do is expose a practice that seems enshrined within architecture and argue that it does not have to exist the way it does.

Some scholars have explored alternatives to the design studio model. Crowther (2013) summarises literature that points out the advantages of the design studio, which he says uniquely prepares students for the architectural profession. But Crowther also notes how the design studio risks exhibiting the more coercive qualities of apprenticeship. What is key is that the ‘design studio’ is not monolithic, and the author illustrates this by mapping various possible teaching and learning activities on to different kinds of technologies, from libraries and the Web to laboratories, field trips, essays and so on. Pak and Verbeke (2013) consider the possibility of overcoming the more coercive aspects of the design studio by taking advantage of recent developments on the Web: wikis and other web-based learning spaces. And Cai and Khan (2010) consider the implications of one ‘hot desking’ studio environment they observe, where students work at a different desk depending on the circumstance and clean their workspace each day. Here we see that while the design studio might have a firm lineage within architecture, there are many ways of putting one together.

One analysis of the design studio as a contingent process is particularly interesting, for it takes on board the sorts of assumptions from actor-network theory that also guide the ethnographic literature on architectural agency (see Chapters 2 and 3). Mewburn (2012), taking inspiration from actor-network theory, analyses the design studio from the claim that ‘[...] there is not one singular “architectural profession” which is true and real but multiple practices and actions which assemble the architectural profession differently in different times and places’ (365). In the course of this analysis is a criticism of Schön (1987) for having too limited an account of architectural pedagogy. Indeed, much of Schön’s work owes itself to a single encounter between an instructor and a student during the Architectural Education Study of 1981. ‘Coaching’ à la Schön in the sense of individual desk crits is one set of relations within an educational studio, but another might involve round-table discussion of group projects. We might ask, then, like Mewburn does, how the very possibility of architectural education is assembled. And just as Mewburn derives her understanding of assembly from actor-network theory, we can follow the way a student

atelier engages with competitions by naming the objects, practices and relationships that begin to move in response to one another.

This kind of question, about how one situation of education *comes together* from various relations, puts us more in league with another touchstone of educational theory than it does with Schön (1987): Lave and Wenger (1991). Lave and Wenger account for learning processes regardless of whether we find them in a classroom. *All* learning, they say, takes place within a given *community of practice*, and does so as an increasing level of participation within the community. Practitioners do not need to know *what* they are learning. Instead they take part in activities that are laid out before them, adding to their repertoires as the situation allows, as more members of the community permit them to do so. There is a vagueness in the terms ‘community of practice’ and ‘legitimate peripheral participation’, and this allows Lave and Wenger to observe a pattern of learning across many situations, from midwives to non-drinking alcoholics. Schön’s contribution, then, is to identify this sort of process in the specific context of design. While desk crits may involve students in a community of practice, they are not the only ways of doing so.

Thus we can ask how an Atelier Eco and its relationship to competitions are *assembled*. Since the students at the atelier work on competitions for organisations outside the school while also moving through the school’s own curriculum, we can ask how the atelier enters the set of relations through which architectural competitions take place. Thus in the first section I look at an activity within the atelier that orients itself to architecture as a whole, rather than just competitions: presentations. The next two sections look at the atelier’s involvement in a pair of competitions. I then compare the activities that are exclusive to competitions with activities that have a broader architectural focus.

7.3 Presentations

Atelier Eco is one unit within the architectural school. As with the others, it follows a set of term dates and significant events, and students work on projects for marks within a formal curriculum. Thus much of the activity that takes place during studio time has to do with architecture in general as well as competitions. And after a semester of studios come two days of ‘supercrits’, where students and instructors from different ateliers come together in a single room. Here teams of students present a project and instructors sit as a panel and offer comments. The upshot is that the atelier’s work on competitions and conversations *about* competitions extend from educational techniques that are oriented toward a broader

architectural curriculum: communicating a scheme, letting it *come through* for the audience. Here the qualities of the scheme itself are bound to the technologies of evocation. To refer to one is to refer to the other. This, we will see in the next section, has implications for the student architects' work on competitions.

At the end of the semester, students and instructors from the different ateliers within the school of architecture took part in what is called a *supercrit*. During Friday studio sessions, students would stand next to a pole-mounted television displaying a scheme, fielding questions from the unit's instructors and fellow students. The supercrit takes place in the same way, but combine instructors and students from all M.Arch units, assigning one set of student teams (about six) and one set of instructors (four) to a single classroom. On the allotted day, supercrits for a given year take place all throughout the architectural school. When a team presents, slide presentations accompany a *spoken monologue* by one student or several students taking turns. The movement between slides accompany the narration of the student. Instructors offer comments either after a presentation or by interrupting the student. Teams present competition entries as well as projects developed for the instructor's own briefs. In either case, the students have to evoke their scheme within a presentation.

The role of the slide presentation becomes particularly clear in the students' work on one competition for the Global Schindler Award. This was the project that sixth-year students from Atelier Eco presented at one supercrit. The site was a Special Economic Zone in Shenzhen, China. The object of the competition was to produce a masterplan that would, according to the brief, respond to the theme 'Designing the City as a Resource'. Students would submit two A0 panels showing '[a] range of representational modes' (Brief: 12). They would also submit an A4 booklet. The booklet would be a 'maximum of 15 pages containing additional information such as analysis, preliminary studies, calculations, narration, and the derivation of the project through written annotations, diagrams and drawings [...]' (Brief: 12). Thus while the competition itself would not include a presentation, students would submit an artefact, the booklet, that lent itself to a slide show. And a slide show is what the 6th year students participating in the Shenzhen competition presented one Friday toward the end of the year (compare to Webster, 2005 where crits focus on drawings pinned to walls). Entries to the Shenzhen competition were not the only projects being presented. Presentations, then, were not necessarily *for* competitions, but were incorporated into the broader activities of the school of

architecture. Teams participating in the Shenzhen competition had to produce a booklet for the competition itself, but to fit within the curriculum of the school they also responded to another requirement, the need to prepare a presentation.

The comments of the instructors suggest the unique affordances of the presentation as something students learn to produce. At the sixth-year supercrits, one of the presentations described a plan to replace an old core/periphery model of urbanism with a model that was polycentric. A strategy of preceding construction with demolition would become a strategy of sustainable development. The team pointed out the high percentage of migrant workers living at the site, as well as the urban fabric that currently exists: buildings for industrial and logistical use. The result, they said, was an extreme form of urban heat island that they would attempt to cool. At the same time, by 'intensifying' the grid they would ensure a more pedestrian-friendly plan. As part of the assignment, each member of the Atelier Eco teams working on the Shenzhen competition would insert her own building into the masterplan. These buildings would be used to assess individual work. For the polycentric urbanism team, the buildings would be research centres, each serving as a source of renewable energy and as a nucleus for a different urban core (thus the polycentrism). Buildings at different heights would draw the air into a pattern they said resembles the cooling microclimate of a rainforest. The presentation described their plan, but also presented a certain picture of the special economic zone and of Shenzhen itself.

Then came the questions from the instructors. Some addressed aspects of the masterplan itself, though only in relation to the presentation as a technique. One instructor, 'Gus', sat next to the lead instructor for Atelier Eco, 'Peter'. Gus said, 'Can I ask a question about your overall masterplan approach to the city? I think you've got unaddressed issues of zoning there, or surely distance and walking were an issue [...]'. One student ('Frank') said that the scheme would be mixed use, precluding walking long distance. Another student ('Rebecca') said that since the site is 1.7km one way and 3.8 km another way, it is walkable. But in the end, the question emerged as an issue with the presentation, not the scheme. The instructor said he had not seen the distance on the screen, and the student pointed out that in an earlier map this would have been visible.

In these cases, the instructors have *missed something*, something that seems to have passed already in the presentation, at the junction between speech and screen. What is missing has to do with the scheme itself, but only as expressed through the presentation, bound to the technology of presenting. Here is a more extended example.

Ralph [sitting to the left of Peter]: It's not apparent from the plan where these hubs are that are going to be—

Frank: Things like a transport hub, which has a relationship to the city that is kind of flexible— [here he is cupping his hand and placing that gesture overtop parts of a map of the site on the screen]

Ralph: But in your diagram before, it had the idea of rather than zoning, that you'd have mixed uses in these nucleised buildings. Is that the plan?

Rebecca: The colours represent the stages of—

Ralph: Because the diagram shows shopping trolleys and things, which suggests that it is going to have a mixed, well, when you're going to have a mix of uses [at this point Frank has moved through the slide show to show the diagram in question], so it's going to be polycentric. I can't where—I can't see the different nuclei. When you actually go to describe the buildings, two of them are higher education, maybe four are higher education of some kind. [...] I missed where [polycentrism] is in your plan. Unless you can explain where that is.

(Recording of Supercrits, 14 November 2014)

Ralph's questioning appears to correct a discrepancy within the slide show. One diagram suggests a mix of uses in each of the different nuclei, while the presentations of individual projects seem to suggest an emphasis on research and higher education. What the students do in response to the question is present the scheme again as a different, *non-linear* movement. One student dwells on a slide, gesturing around the image. Another moves *backward* through the slides to a diagram the instructor has trouble with. Presentation itself becomes a technique that has to be restaged and adjusted to questions from the audience; it is not the scheme that the students revisit, but the slide show itself.

Later in the question and answer session, Peter summarised some of the comments from other instructors. Here he refers to the technology of the presentation, making it explicit that the issues with the presentation are issues with images. He then recommended another way of organising the slide show:

[...Y]our process is telling you to do hybrid, mixed-use, cross-programme environments which have significant higher education components to it, planning a city, because a city is fuelled by knowledge and activity which must be sustainable. The logic of the argument is quite easy to communicate; you've just not done it very well. It seems to me that you need to be much clearer, use much better visual language. You can get it down to probably ten really coherent, impressive slides that lead into—it's like [...] every time you cut it, you get closer. And every time you get closer, you see more of the same thing, another thing, a different thing. (Recording of Supercrits, 14 November 2014)

What Peter advises here has a parallel to what Stark and Paravel (2008) have identified as one affordance of PowerPoint slides: the management of rupture and continuity. The effect is visible in their study of presentations among teams entering an architectural

competition. Slides reveal a succession of different images that also bring out one aspect after another of a single thing. In Stark and Paravel's case, these were proposals for the site of the former World Trade Center in New York City. In Peter's case, the *thing* that would persevere *could have been* the masterplan, but what he has seen is no single thing at all. To make such a thing visible is a task for the techniques of presenting.

But it is not just the slide show *as a slide show* that receives criticism. Instructors can, after all, make comments on the scheme without those comments emerging as issues with the slide show. Toward the end of the question-and-answer period, Peter talks about the team's approach to masterplanning, bringing up the team's goal of producing a certain kind of density:

Whether things get built intensely or not is probably not a function if you like of a masterplan. It might be something embedded in a masterplan, which would make that intelligent, which is something you hinted at. But actually you never really explored it, the idea about what if this thing doesn't grow as fast as this, and I think that's the other aspect of the temporal nature of the masterplan. [...] Masterplanning these days is about economic models. [...] How do you deal with the transition from old urbanism, which was entirely morphological, from this kind of fussy sort of tailoring objects in space, to something that is entirely opportunistic in economic terms?
(Recording of Supercrits, 14 November 2014)

Here Peter seems to be referring not to particular aspects of the team's *presentation* as a temporal sequence with discrete points (slides, statements...), but something that exists apart from the presentation, an approach to masterplanning. That said, what is available to Peter is the slide show. And thus what Peter comments on is not one approach to design at the expense of another, but a variable level of emphasis within the presentation. The students *could have* explored what he says is lacking, but instead it 'is something [they] hinted at'. The presentation, the object of criticism even when the instructors refer to the scheme itself, seems always to have something more to offer, images to be made clearer, statements that refer to something more.

During the presentations, the instructors talk about both *what* the architects presented and *how* they do so. They two are inseparable. As the instructors piece together for themselves the content of the scheme, they ask questions about the presentation itself. For the reality of the scheme is something that both the presenters and the instructors talk about by referring back to the presentation. Architects learn how to bring their schemes into existence through speech and images choreographed within a presentation, making them come alive before an audience to whom they are completely unfamiliar. Issues that

instructors have with the presentations refer to things that have *not sufficiently come through*.

7.4 Competition boards

When the students at Atelier Eco work on competitions in the studio, *what* they work on is often a *competition board*. For part of the term I observed at Atelier Eco, the fifth year architects worked on a design competition for ArchTriumph. This would be a pavilion in Bethnal Green, London, which the selected team would receive a budget to help build over the summer. This is a yearly competition, though not a competition with a long history: on the ArchTriumph website are the entries of shortlisted teams since 2012. This year, the theme would be 'sky'. Each team entering the competition would produce a single A1 sheet that would include all the images and text a team would send to the client. At each studio session leading up to the deadline for the ArchTriumph pavilion competition, the fifth years presented their entries. Presentations took place around a flat-screen television mounted to an upright trolley: two poles and a rolling platform, a shelf for a laptop.

In the competition board, the students have to work out where to place their renders, plans, exploded technical drawings and so on. The COMPOSITION of elements within the competition board is subject to the work of the teams who submit (see Figure 4). It is not a self-evident fact. Consider the competition boards for the three finalists for the ArchTriumph competition that the Atelier Eco students were entering (Figure 4; Atelier Eco did not make the shortlist). In the three entries, some aspects of content and COMPOSITION are the same: there is a large render that shows the exterior of the scheme, where all of the scheme is in the frame; there are smaller renders adjacent, and in even smaller images, some kind of site plan and various isometric drawings. But other COMPOSITIONAL qualities vary: the number of renders, the use of text (how much, where it goes) and the use of exploded technical drawings and photographs of models. All of these are considerations the architects make in the studio. What I observed, then, was one process through which architects made these considerations. Thus for the fifth years during studio sessions, *working on the competition* and *working on the submission board* become one and the same activity.

One team developed their concept after talking about the theme of the competition. They explored the idea of walking as a process of moving *through* the sky. When I visited the

team for one studio session, the scheme was a wooden structure lined on one exterior surface with mirrors and unclad at the ends, producing a kind of tunnel. The idea would be that passersby could engage with the mirrors not just by *looking* but by *adjusting them*. The tunnel would add another sort of engagement, making the structure something that would attract children as well as their parents. Two studio sessions later, the scheme had transformed. Mirrors did not line a surface but stood on posts like stands for sheet music, angled toward the sky.

The way in which I found out about the transformation was the board itself. Beforehand, the students only alluded to changes as they prepared their laptops and fiddled with cables. This speaks to the techniques through which students in the atelier work on competitions. That is, the crits themselves draw their commentary *from* the prompts of the competition board. Whether producing images or talking about images, students attend to the surface of the submission. What is key is that a team standing by the television would not *present* their scheme but field questions and comments from the audience. When the 'mirror post' team presented the scheme that day, Peter first noticed something about the text that accompanied the A1 sheet. The text should talk about *ideological* aspects of the scheme, he said, not the technology of how it works. The staggered upright rods can serve as a representation of rain, he said, with an indefinite atmosphere on the floor. Here there is a 'sky-ness' at a number of levels. He then asked if the poles should be black or broken up and stripy: the team need to demonstrate that they have inspected every part of the 'visual ecology' of the scheme, he said. He pointed to a scattering of plans and elevations, the elevations showing scale: the team may need less, he said. Make them clearer. He told the team to show more than one condition of the sky. Here, some comments are about 'ideology' while others were about the colours of visual elements. There is a whole range of issues but little to unite them in terms of theme. What brings the comments together is the competition board itself. Comments both respond *to* the board and call for transformations *of* the board.

With the next week's presentation of the same team came another flurry of suggestions. One was to add more contrast to the sky. Someone remarked that the viewer should be able to see the reflections from the mirrors in a certain way. There were issues with the text, which began with a poem. Someone else said he did not like the font. There was discussion about the placement of text and the use of columns. It is possible to see shifts in response to the previous week's chat. The poem was thematic, for example, a

replacement of last week's technical text. There were some new concerns as well. Someone asked 'What are those?', referring to shorter posts at the centre of the cluster. Some of the students wondered whether those were also mirrors, whether you could sit on them. As the concept moved and changed shape from one week to the next, it produced a new set of provocations. The fact that the team had *responded* to certain comments from the past week did not remove elements from consideration. While the last week's suggestions had been incorporated into the board, what was displayed beside the team was in effect *another* board, a new set of things to talk about. Thus while thematic text replaced technical text in response to a criticism from the last week, the text presented a new issue: the typeface. In one sense there was something that could be described as an 'improvement'. The instructor Beatrice said, after one round of criticism, 'Other than that it's a lovely concept and you have got this sort of right'. In any case, it was the *surface* of the competition sheet that organises the feedback, the audience moving from element to element, out and back. Members of the audience do not respond to the scheme itself but to elements within the surface.

The competition sheet thus becomes the focus of attention, choreographing the crit, bringing it from one object to the next. When instructors refer to general principles, they do so *from* the competition sheet, starting at an element on the sheet, explaining the principle, then moving back to the sheet, looking for more elements. What is taking place is both a *shared attention* and the grounds for *shifts in attention*. One aspect of the discussion that allows this to take place is that the competition board is a *common referent*. This is clear in the discussion of another pavilion scheme, 'Lumos', in a crit that took place on the 31st of October. One student talked about the roles of the elevations. He said, 'I don't think you need all of the elevations, or all the perspectives either. Because there's a lot of repetition'. Another student began to respond, but the first student continued: 'I know they are showing you things, but they're all doing the same thing'. The exchange continued with a few overlapping remarks, but the focus shifted. Beatrice said, 'Okay,' then paused. Then she identified a *new* element of the board:

Beatrice: I would rationalise how you set those mirrors out on the floor [...]. It does have a dangerous look. With a bit of judicious Photoshop, make it look really tidy and really, really perfect. Especially as you've got her feet. If you have her feet going over the mirror, so if you drag the mirror out, all the way through to there. It may look dangerous but [...].

Student in project group: Those are, yeah, those are just slight reflections, actually. [...inaudible...] It's just slightly reflected. It looks like a mirror.

Beatrice: Yeah it does. So it goes out. I'd like if you could see his reflection. Bring it over there, so you've got her feet on it and then you'll know it won't look dangerous. If you've got her feet on it.

Student in audience: The light reflection in the floor, put like a Gaussian blur on the edge, just a couple of pixels on the edge. Blurring it a bit more. It looks quite sharp, so when you look in a dark space, you get a square of light, it looks very sharp. You'll have like a slight blur. You just put Gaussian blur on a few pixels on the edge.

(Recording of crits, 31 October 2014)

What stands out here are the different ways that the participants in the discussion use to refer to the same set of images. First there are deictics: '*those mirrors*', '*all the way through to there*' and so on. The deictics not only refer to *elements* on the screen, but *movements to make*: 'Bring it over *there*, so you've got her feet on it [...]' for example, a statement that details the length and direction of a certain transformation. Then there are pronominal references to human figures within the render: 'her feet', 'his reflection'. Everyone in the audience or standing by the television can see the figures, so the pronouns go unquestioned. And when the student speaks from the audience, he uses neither deictics nor pronouns, referring instead to 'the floor' and 'the edge'. The student is not close enough to the television to point, so deictics and pronouns might not be understood. At the same time, he is able to use definite articles: *the floor*, *the edge*. What he refers to is a set of elements available to all in attendance. Those who speak seem to know what 'the mirror' indicates. All attend to the competition board, scanning it for elements to talk about.

Thus at the crit, members of the audience call for *tweaks* of VISUAL ELEMENTS on the boards based on how they describe these elements to have *aesthetic effects* on their viewers. Viewers and jurors are in this case equivalent. We see this in presentations from the 'Lumos' team on the 24th and 31st of October. Here Peter led the discussion, again following the prompts of the board itself. Peter first referred to a series of elevations that lined the centre of the sheet and showed the movement of light across the pavilion at different times of day. He said that the elevations do not need to show every face of the pavilion. For him, the issue with the elevations was also an issue with the *jury*. The thing about these, he said, was that when jurors look at a competition entry, 'they'll have moments like...' and he pointed his index finger to his head as though pressing a doorbell: 'ahh, ahh, ahh'. With each element in the competition sheet is a different impression about the building: with each 'ahh', the impressions accumulate. The elevations, he said, as a sequence of drawings, tell the jurors something different about the scheme. But their

dynamics, showing the effects of sunlight, do not differ from other images. Thus he suggested a 3D bird's eye view instead of elevations. The key, he said, was to add 'complementary pieces of visual data' that add value to one another. Thus while the elements of the competition sheet coordinated the discussion, they were not the sole coordinator. Reference moved from visible elements to invisible jury members. Peter brought the discussion back to general principles: make the jury take in as many *different* aspects of the scheme as possible.

At other times during the term, teams talked about the pavilions themselves. During one studio visit, for instance, one student explained to me his team's approach: to focus on the engagement of parents as well as children with the pavilion. The result, which the student showed me on his laptop, would be a tunnel of wooden panels clad with mirrors. The mirrors would be adjustable, allowing interaction at all human heights. The student, in other words, was talking about the pavilion, rather than a particular *image* of the pavilion. Later, one of the instructors sat with students from both groups around a laptop at the edge of a table. The instructor was talking about making the structure collapsible. On the laptop were small sketches of objects, a spring, for instance, along with various small renders. Here were various images of collapsible shapes. The instructor left and returned with a book about design for collapsibility. At this point, it was the *pavilion*, existing but not yet built, that would weather any changes. The pavilion became susceptible to discussions about collapsibility. Because my observations of the students at Atelier Eco remained within the studio itself, it was not clear whether the students multiplied and selected from possibilities in the sort of way we have seen at OMA (c.f. Yaneva, 2009a). What is clear, however, is that in some moments, buildings exist *as* buildings, and do so *through* a set of disparate images. It is when the students discuss the competition boards, once the boards have been COMPOSED, that their comments turn to line, colour, lighting and so on. The students talk not about buildings but about COMMUNICATIVE ELEMENTS.

When the participants of crits at Atelier Eco speak *from* the elements, naming qualities of the competition board, the modifications they suggest are not to the *scheme* but to the elements themselves. This is to say that the visual features of images within the boards, the arrangement of images or the choice of image, rather than the scheme itself, become the focus of discussion. What is more, commenters talk about the qualities of elements in terms that evaluate their *effects*. These might be effects on the occupants of the scheme (as presented in specific images), but *also* the effects on anyone who *views* the images.

Thus Beatrice says that mirrors have a *dangerous* look, as though someone could trip on them, but also that one thing 'look[s] like a mirror'. These are both visual qualities and qualities of use, spelled out in evaluative terms.

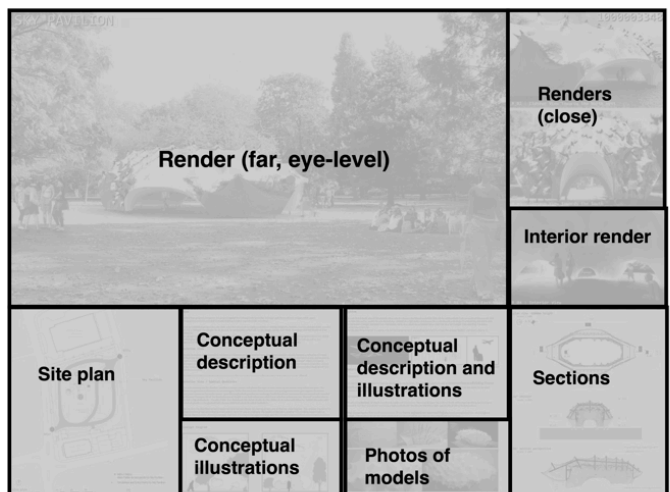
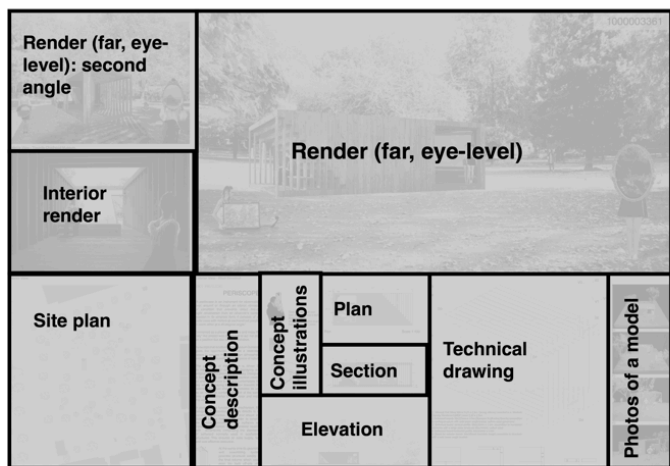
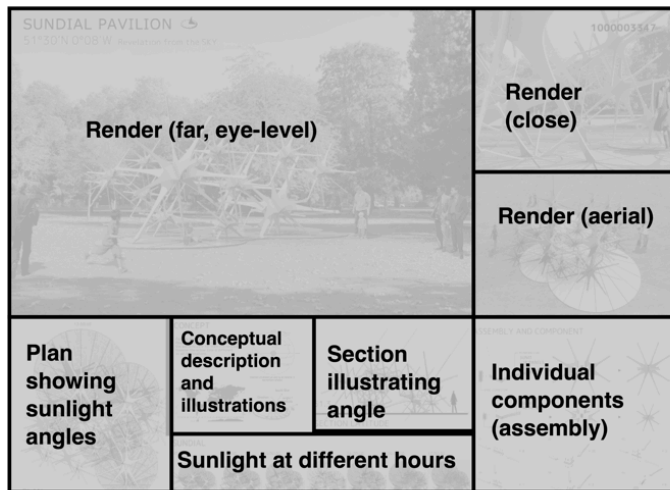


Figure 4: Compositions of the top three entries in the ArchTriumph 2014 Sky Pavilion competition (none is from 'Atelier Eco')

7.5 A competition within the school

Toward the end of the autumn 2014 term, Atelier Eco held a competition over four days with students from another university in Europe. This was an ideas competition for a local property developer, which I call 'FamCo'. The developer had purchased an office block in the centre of the city. The building wraps around a street corner and backs up to a square. Behind the car park is a fenced garden with mature trees, all surrounded by a one-lane access road. The plan at FamCo was to develop both the office block and the garden. The garden would be the focus of the competition. Peter wrote the brief. The competition sheets, in A3 format, would be included in a booklet that would go to FamCo and act as a resource. Students competed in teams of three, each team drawing from both universities. The competition lasted from one Wednesday until the following Monday. On the last day, submissions would take place by noon, presentations of the schemes followed in the late afternoon and a team was selected straight after. If the contingency of architectural education reveals objects and practices within the world of the architectural competition, this mini-competition is a particularly clear case: here all aspects of the competition are contingent to a great extent on the school's own organising activities.

Evaluating the schemes was a jury that included four FamCo employees, the president of the architecture school and the architect who was consulting on the office project. Presentations lasted about five minutes. Some group members spoke and others flipped through the slides. At the end of a presentation, the jurors asked questions. After presentations from the student teams, everyone except the jurors left the room. The jurors stayed at their table. After their decision, the school president walked to the doorway and ushered the audience back in: the instructors at Atelier Eco, the presenters themselves and several visitors from the second year of M.Arch. In other words, this was a series of events with all the accoutrements of an ideas competition as advertised in competition announcements and in the architectural press: a brief, no obligation to build, a small cash prize, submissions in the form of competition sheets, a selection by jury. But this was also a relatively informal arrangement between the property developer and the two universities. The property developer was in effect commissioning a booklet of inspiring images. The competition was informal and short-term but also in line with the other competitions that students had worked on, competitions involving a general invitation and an absent client. What the mini-competition points to, then, is what the competition *is* as an object of pedagogy, *what it is* that students prepare for as they engage with competitions. The competition, in turn, had a specific way of engaging with architectural products. Here I

analyse the deliberation of the jury to examine the competition as something that prepares students for their professional lives as architects.

The jury did not simply choose *between* entries but moved *through* them as well, giving new order to their parts. And unlike the competition boards and presentations I discuss above, the techniques through which the jury deliberated contributed to an ability to talk about the schemes *as schemes*, independent of any particular objects. Here is a parallel to studies of jury deliberations as conversations (Svensson, 2009; Van Wezemael et al, 2011a; Volker, 2012): jurors learn from the competition entries they receive, rather than rely on a pre-existing rubric. But what these other studies have not revealed is how the discussion of the jury relates to the preceding process of competition. For what the jurors learn from the entries arrives as a *concept*, divorced from any particular object or image. This is to say that within a practice of *narrating* or *describing*, the jurors set the entries in relation to the competition as concepts, rather than as submission boards. But at the same time, we see the jurors producing their narratives with the help of particular technologies. What the jurors looked at were slide decks and their own notes. After presenting architects left the room, their slides remained saved on a laptop connected to the projector. The result was that the jury could move into the past: they could refer to their notes and memories of what was said during the presentations and during the students' answers to their questions. They could *return to* slides on the projector. Every now and then the school president would walk from the round table where the jury sat to the laptop, display a different file on the projection screen and return to the table where the jury talked about the scheme. Here the jury produced *new arrangements* of visual and verbal elements, COMPOSING a narrative that they could separate from any particular object. As we will see, the resulting BUILDING SCRIPT is rather different than the attention to COMMUNICATIVE ELEMENTS among students who choose images and text for their competition boards, referring to *schemes* rather than VISUAL ELEMENTS.

With the jury sat around their table and the audience gone, the school president John talked to other five members of the jury about the competition and their role within it. He reminded the others that the jury were looking for *interesting things*, not simply a 'winner':

I guess there's a number of things. In terms of an outcome it'd be good to have a kind of commentary on themes within the schemes, identifying which schemes we felt took us forwards in the most interesting way. I don't think we necessarily have to identify a winner, because I think there are certain things that are more feasible, I guess, but other things that are interesting.

(Recording of jury deliberation, 1 December 2014)

The exchange that followed brought up themes. For Kim, one theme was to say that a scheme would have multiple uses, but some schemes left this idea under-explored. Other schemes had a more defined idea of what 'multi-use' meant. Ravi said it was good that some schemes took into account the restaurant that bordered the square, using it after hours. Here John asked, 'did it have a 24 hour concept, then?' Simon, the development manager for FamCo elaborated:

We talked to them [the students] about it being more than just a breakout space for the office building and outside Monday to Friday, nine to five. A few of them did identify that we have got a restaurant next-door that would ideally be able to come out into there. The nightclub [which also bordered the square], probably a bit more of a stretch, but yeah, I thought it was quite good the way they kind of pulled in the surroundings. We wanted it to be an evening and weekend venue as well as office hours.

(Recording of jury deliberation, 1 December 2014)

Here Simon was talking about the theme of multiple uses within the square as something that had a lot to do with his own introduction of the project to the students the previous week. He had described FamCo's development of the site as one that anticipated multiple uses. But the theme had a downside.

Greg [the architect for FamCo]: With [one scheme], you could see that there was potential there for a lovely sculptural space where you want to go and relax, but then it didn't really seem to materialise in anything. [...] here was another one where the first girl that talked about pulling in more uses from the surrounding shops and the bookstore and things like that. Again, it didn't really materialise in anything other than 'this is an open use space where you can pull in books'. I think it needed a bit more thought into what it ended up like on site.

John: There's a tendency for multi-use space to end up with lots of flappy bits.

Kim: And it actually ends up not being used by anyone—

John: It's an ambiguous—

Ravi: It pushes the flexibility thing that we were thinking of, but not such a point where it's a flexible space—

Kim: It's too flexible.

Ravi: It's taking that to the extreme.

Simon: You just have people carrying fence panels around.

[laughter]

(Recording of jury deliberation, 1 December 2014)

What is key here is that the jury are thinking about the brief and the site in terms of the entries themselves. Talking about the restaurant would be consonant with Simon's introduction of the project, but bringing in 'flappy bits' for visitors to fold is not. Here the discussion would bring up a submission, then bring up a theme that the submission reflected, discussing the theme in terms of the FamCo project and *what the project would be doing in the future*.

While the focus of some exchanges is on groups of schemes ('multi-use'), others bring out qualities of a single scheme at a time. The way the jurors do this is, once again, by describing different elements as they exist, as they operate, within the courtyard. The jurors had this to say about one scheme that called for small, fully glazed cylindrical volumes and platforms at two levels:

Greg: I think the other one that worked for me as well was the [ViewPods], a 'futuristic space of fantasies'.

Kim: The Japanese House one?

Greg: I don't know whether he was tongue-in-cheek there at the end or not when he said he wanted it to be an iconic piece of architecture, but I quite liked his ambition there.

Kim: I think it's quite clever that he said that in a way. Because there's something about thinking about how you attract people to this space, and we don't necessarily have an iconic piece of architecture in [city of the university]. I thought, although he might have been joking [laughter], there's something in that. [...]

(Recording of jury deliberation, 1 December 2014)

Here two moves, bringing up an individual scheme and its qualities, connecting schemes to the FamCo project and its future possibilities, come together. Iconism is a quality of this particular scheme as jurors describe its operation, and that quality suggests a possible direction for FamCo's plans for the square: moving toward iconism.

The jurors thus take part in two kinds of description: about *themes* and whether those themes agree with the plans of the firm; and about *individual schemes* and what those schemes would *be like* to inhabit. Taken together and superficially, the two moves do not seem to guarantee a choice. It is possible to imagine the jurors elaborating on themes and projecting qualities into the future in a never-ending loop. Yet a selection does take place.

In one scheme is a Faraday cage that would block electronic signals. The discussion began when John brought up the fact that he likes a certain scheme. John said, 'A lot of the schemes have a griddy sort of thing. So there's about four of these schemes that are

kind of griddy ones'. And after a pause: 'I really like [Unplug] as a concept'. The jurors talked about the use of the Faraday cage:

Simon: It'd be an interesting social experiment to take people away from their mobile phone signal for an hour. [...]

John: As a space to get away and think about stuff —

Kim: I thought that was very clever.

Greg: You could combine that with coffee shops or [the neighbouring restaurant] or something like that. You get people actually sitting around talking to each other over a coffee [...].

(Recording of jury deliberation, 1 December 2014)

At this point, the discussion of this scheme takes place in a similar way to the discussion of the others: describing from the qualities of the scheme the possibilities of its life within the site. So far, the conversation takes place along the same lines as before. Elements of the schemes (rather than individual drawings) in effect set the rhythm for the conversation, the participants talking about things that they have identified from the presentations, their notes and the images they flick through on the projection screen.

It was when the conversation ebbed that John said, 'I guess in terms of wrapping this up, then, are there some sort of frontrunners in terms of themes that we particularly like?'

Greg listed three names. So did Simon. Here John listed the numbers of the schemes in his notebook, three per line. Thus Greg and Simon had set a precedent: The remaining jurors each told John the names of three schemes. John tallied the votes. 'Unplug' got the most votes, followed by a tie between 'AdaptoBox' and 'ViewPods', with 'Crèche' coming in fourth. But there was another decision to make.

John: Are we ready to go then?

Kim: What do we do, split the prize between —

John: Is there a prize?

Kim: Yeah.

John: Okay, we'd better decide then.

(Recording of jury deliberation, 1 December 2014)

Jurors proposed different divisions of the prize money. Simon reminded the jurors that they needed to choose an entry. And here comes another description for the life of the

courtyard within the FamCo office project. The jurors talked about reducing the high cost of the ViewPods scheme by using fewer glazed volumes while preserving the possibility of viewing visitors from neighbouring buildings.

Greg: If you guys want to use this for marketing, then I think that's—

Kim: I don't think we're going to use it, well—

Greg: That's got the most amount of marketability with it, because I think it's something that everybody would connect with straightaway.

Kim: The point for me was that we'd got some different ideas of how to use the space, and One and Four are quite similar to what we've been thinking, whereas number Nine is something we haven't thought about. We hadn't even considered that concept. So that's opened my eyes to something new, which is where the value is.

(Recording of jury deliberation, 1 December 2014)

This was the final exchange about the qualities of schemes. After a pause, Simon suggested naming one winner and giving a smaller prize to three other teams. The other jurors agreed on this and the audience were called in. What happened toward the end, then, were further proposals of an alternative future: using the schemes for marketing. Here Kim replied by referring to *another* possibility for use, one that was the intention all along, of using the schemes as resources for new thinking. With each moment of decision-making came a new need to describe the life of the courtyard, to move from the schemes themselves (as *schemes*, rather than *objects*) to the trajectories of FamCo and the site.

The configuration that we see in the deliberation takes place in parallel to other situations of competition that are prevalent within the UK and European construction industries (see Chapters 5 and 6 as well as the review of the management literature on competitions in Chapter 2): there is a separation of jurors and entrants for the final moment of selection. Criteria are not known at the outset but determined within the course of the deliberation as the client's representatives narrate the ambitions of the client in relation to qualities of the submissions. And here we see a moment of COMPARISON. In the case of the project file (Chapter 6), at some point the transformations of visual elements from tender to score sheet gave way to a *conversation*. Because of confidentiality, the conversation was not available to that strand of the research. But within this strand, in my observations of the jury, we might see COMPARISON of a similar sort. Here COMPARISON shares one quality with the COMPOSITION we see in the narratives of architects about competitions and competition entries (Chapter 5): elements are BOUNDED and retain their identities, avoiding

the 'black box', but nevertheless lend themselves to a description that takes them as an extension of something else. Since they are BOUNDED, images can move while, as we see in the case of the jury discussion, availing themselves to descriptions of wholes. At the same time, retaining their identities, the entries are *kept apart*. The jurors describe *themes*, but quickly revert to describing individual concepts that reflect these themes only differentially, suggesting qualities that set them apart: Faraday cages, iconicity and so on. That is, the schemes are narrated as an extension of a process of PARALLEL TRANSFORMATION.

7.6 Conclusion

As the students at Atelier Eco mull over the placement of images on submission boards, talk to instructors about their concepts and present in teams to an audience of jurors, they take part in architectural pedagogy as a process of assembly (Mewburn, 2012). Education here is not simply the content of a transmission from instructor to student. Instead, education exists as a set of relations: who interacts with whom, where that interaction unfolds, what is produced from it, what kinds of practices take place, what technologies are involved. Thus in the place of desk crits for individual architects where sketching sets the pace of conversation (as in Schön, 1987), at Atelier Eco we see presentations by groups, question-and-answer sessions around submission boards and architects fetching books and sitting with teams at their laptops. And toward the end of the year, these relations include a brief competition held with another university along with a local property developer. These practices take place in the course of the students' preparation for various architectural competitions.

Since the relations within the atelier could have unfolded in various ways but unfolded *as they did*, we can see within the atelier some conditions for the emergence of the competition as a *thing*. In both the supercrits and the preparation of competition entries we see architectural students working to produce COMMUNICATIVE ELEMENTS. That is, they prepare VISUAL ELEMENTS that can *act over a distance*. The images and blocks of text within the submission board become important to the architects in so far as they have particular aesthetic effects. During the supercrits, when students organised into a slideshow the images that they would later include in a booklet and submit to a competition, instructors commented on both the clarity of images and the approach to the scheme. Both can be taken together as *what had come through*, what was evoked. This could also be said of the two competitions I discuss above. As students and instructors

isolate texts and images in their comments, they pick out ways in which this sort of lighting affects the clarity of this render or that set of elevations complements the images surrounding it. The student architects anticipate the ways in which those visual elements, and thus the scheme itself, would *come through* to future jurors.

Thus before any COMPOSITION of submission boards takes place, practitioners must *prepare* the VISUAL ELEMENTS for travel as COMMUNICATIVE ELEMENTS, asking whether they communicate properly. Since VISUAL ELEMENTS can be detached and considered on their own, the students can consider renders *as* renders or technical drawings *as* technical drawings, rather than in relation to the total choreography of the board. But at the same time, the COMPOSITION of the board becomes an issue in itself. The students and instructors, like professional architects (Chapter 5), talk about the ways that a juror will move from one image to another as they look at the board. The board must hold up, and so must this or that image. VISUAL ELEMENTS that make SIMULTANEOUS MOVEMENTS do have a relationship to one another, and it is a task of the architects to ensure that it is the one they intend. This is a similar kind passage to that of moving documents (Chapter 6). A document might be split into its elements, or it might be judged as a whole or mounted within an exhibition (Chapter 9). Before any of this happens, *preparation* becomes a practice of its own, engaging with *the submission* as a distinct kind of *thing*.

This is to say that *images* exist differently within the practice of preparing a submission than they do in moments of producing concept designs (as in Yaneva, 2005; 2009a; Chapter 8). A COMMUNICATIVE ELEMENT is a block of text or an image *plus its effects* on unseen viewers. We see a similar sort of process in Houdart's (2008) analysis of rendering. The size of a tree within a render is a matter of *producing effects* on a viewer, rather than remaining 'true' to the world of the potential building. The competition board is unified as a choreography but not as a singular building that exists 'out there'. Students and instructors talk about the way that the board is organised, the use of main images and minor images, aspects of COMPOSITION. What is at issue is not *how the scheme will be* but *what the images will look like*, how they will affect their unseen future viewers.

Ultimately, COMPOSITION gives way to a kind of narration. In the presentations of the in-house competition, the students *bring their images together* into a description of the way their concept works, its relation to the site, what is interesting or unique about it. Unlike the DEPICTIONS OF PROCESS that sit *within* tenders, submission boards and so on (see Chapter 6), these presentations refer to multiple VISUAL ELEMENTS while describing a single reality

that incorporates all of them. Here is a process of SCRIPTING BUILDINGS. As with Akrich's (1992: 207 – 208) notion of the script, the architects are *defining actors*, narrating a world that exists under the premise that a technology will be received, and will operate, in a certain way. But here, unlike in the crit, the student architects are describing not COMMUNICATIVE ELEMENTS but the *concepts themselves* (that is, buildings, pavilions, physical structures...). Images and text are taken up in a narrative about the ways that rooms, folding panels and so on will work in the courtyard. What follows is a play of BUILDING SCRIPTS. The jurors go through the presentation slides again, as well as their notes and memories, and produce BUILDING SCRIPTS of their own. They describe the ways in which a building works on site, but in their own terms, in relation to the competition, the brief and the direction of the development company. At one moment, students discuss aspects of a concept, a yet-to-exist architectural intervention. At another, they focus on particular images and blocks of text, working on making them communicative, building a COMPOSITION. In a final moment, we go back to the concepts themselves, but in the course of a BUILDING SCRIPT that spans the brief, the site, the images and the trajectory of the client. Between the presentations of the architects and the deliberation of the jury is a meeting of two BUILDING SCRIPTS.

Thus if the atelier assembles as a set of relationships (as in Mewburn, 2012), it assembles *around* a pattern of relating that already exists in British architecture, one put into place through the actions of the client and echoed by many other clients as well (Chapters 5 and 6): requiring a *submission document* from the architects. Indeed, the submission document is not merely helpful or conducive to holding the competition, it becomes the very means through which the competition operates, through which the client and the entrants come to relate to one another in the first place (Chapters 10 – 11).

Chapter 8

Fourth journey: designing for competitions

8.1 Observing the practice of preparing an entry

In participating in a formal competition, architects (or contractors with architect-partners) confront an arrangement of relationships through things that enter from *outside* the studio (e.g. briefs) as well as things that *leave* the studio (tenders, drawings...). This pattern of submission does not necessarily depend on the procurement route. All projects must include some submission if they are to secure planning permission (Chapter 6). But at the same time, the competition requires a *particular sort* of removal to produce what I have called SIMULTANEOUS MOVEMENT and PARALLEL TRANSFORMATION. As competition entries to become comparable, they undergo a series of transformations, from the past, present and future of a firm's work into a document that follows a standard structure and, in the case of the school project (Chapter 6), numbers on a spreadsheet. In the course of the comparison there is a *separation* from the offices of the entrants. Competing teams encounter the selection team, but only to an extent (as in Chapter 7). What is more, that removal is integral to the process of competition, for it has a lot to do with the other elements we see at work: COMPOSITION, COMMUNICATIVE ELEMENTS and DEPICTIONS OF PROCESS. In the competition, architects work *over a distance*.

While we have begun to see how architects develop the ability to participate in competitions, there have been few studies of professional architects in the course of preparing an entry. The one I have found, a study by Kreiner (2009, 2013), is more interested in strategy (what the architects say they will do) than the sort of material responsiveness we see in the ethnographic studies of studio work (see Chapter 2). Any further observations of architects in competition that take into account the developments of surfaces and objects as well as the roles of objects in *organising* the work of design will thus be of value in understanding the architectural competition.

I visited OMA in Rotterdam from 14 Oct through 17 Oct, spending roughly 28 hours observing the office. The length of the visit allowed me to conduct it within a multi-stranded programme of writing and research (see Chapter 4). What justifies the length of observation is a previous body of literature on design practice at OMA (see Yaneva, 2005, 2009a, 2009b). That is, since much has been written already on the same studio over the course of a private commission (Yaneva 2005, 2009a) and about the studio's regular

working practices (Yaneva 2009b), there is less of a need to produce a comprehensive account of OMA's practices to talk about the role of competitions within them. At the same time, I conducted the observation after holding regular interviews with members of the firm over the preceding year. The visit thus became a way of investigating the content of the interviews. Here was a short and intense period of observation that follows the objects and practices of one competition at a particular moment.

What I was allowed to observe was the MegaCon project, a conference centre that would occupy one phase of a masterplan. The masterplan itself was intended to rejuvenate a neighbourhood in a European city. The analysis focuses on seven architects who worked on MegaCon. I refer to the architects as 'the team', but they were not the only ones who contributed to the project; others gave feedback and instructions, whether as a passerby offering comments or as a partner at a meeting declaring the direction of the project. The team tended to sit around a table of computers but made regular trips to an adjacent table of models (as in the 'dance' of Yaneva, 2009b: 51 - 63). Eleni and Wei worked on CAD drawings of two test schemes while Jens produced drawings of the site when he was not walking around the table and giving advice. Lars interpreted the brief and occasionally shifted to another project. Dimitris prepared views in Photoshop. Richard moved between tasks, from preparing drawings to doing historical research and arranging a visit to the site. Louis, who was leading the project, went to meetings, prepared foam models and checked in on everyone.

As Louis said when I first visited the studio, the team were like 'Bambi walking on ice'. They were exploring, gathering information. In the previous week they had met with a partner at the firm and gone over a booklet and a series of models, each completely different from the next in terms of massing. The partner had selected the models she preferred. As Louis told me at the outset and told passers-by later on, what they were doing now was running two schemes alongside one other. One scheme was an 'extrusion' of the site, taking the boundaries and projecting them upward into a volume. The outer walls of the scheme would slant outward, giving the building a footprint smaller than a pure extrusion would allow, at the same time creating passageways between the building and its neighbours. The other scheme was what Louis called an 'inverted Guggenheim', a roughly circular plan that would add ramps along a central void. The team had a meeting with consultants on the Tuesday following my week at the office. Thus while I observed part of the 'testing phase of the project, then, it was also a particular phase *of* testing,

where to multiply possibilities was to do so *within* or *around* the two broad approaches to massing (circular, angular) that had come from the earlier meeting.

The competition itself is noteworthy for involving an architect-client arrangement that is not typical of OMA projects, though Louis had worked on one in the previous year. This is a Public-Private Partnership, where what compete are not *architectural firms* submitting *concept designs*, but architect-developer consortia submitting a book of detailed technical information to the government. Thus financial considerations weighed heavily. As Louis wrote to me in an email before my visit, the competition was a bit out of the ordinary: 'We are not working on a competition in the standard format. We are however in conceptual phase of a PPP and a Developer competition. Creative process is pretty similar, difference is financial proposal and operation weigh in equal or more than architecture' (Louis, personal communication, 1 Oct 2014). OMA's own client for the project was a developer, who paid the firm a steady fee. There were regular meetings with consultants and with representatives of the developer client, who visited the office every now and again. The team had begun working on the project shortly before I spoke to the Louis in September 2014. When I arrived the next month, the deadline for the final submission was in January 2015. With several months to prepare the submission until the final deadline, the project architect was placed in a position he does not usually enter, to become involved in the more technical, delivery-focused elements of the design, rather than those dealing with the concept. Thus rather than moving straight from testing blue foam (as in Yaneva, 2005) to producing A1 submission boards, as in a design competition (see also the boards in Chapter 7), this team would face a more gradual period of accumulating detail.

This chapter examines the relationship between the linearity described in narrations of architectural competitions and the *non*-linearity we see in architectural agency (as in Chapter 2). I begin by summarising excerpts from interviews with architects at OMA. Here I interpret three situations of practice within the firm, each of which gets a section of its own: working alone at a computer, visiting others' computers and meeting around the model table.

8.2 Outside the studio: describing routine

During interviews I conducted with two of the architects who worked in the Rotterdam office, the architects told me about the way they work on competitions. In the interviews they talked about the role of models and physical movement, but also gave a detailed

explanation of the way they deal with *time*, and how competitions take place as a set of tasks. When the architects I met with talk about the firm's work on competitions, they do so by naming *sequences* of activities. That is, in these narratives, competitions take place as a linear progression.

A competition entry at OMA begins with the testing of options. In doing so, the architects collect information and test possibilities. The two processes intertwine. Here the testing of options becomes a matter of *figuring out what seems right*. Patricia said in an interview,

And then probably that's done – it's then just gathering information, and that's probably done by a very small team you know two people max, and then you might grow the team a little bit, and then just make a model, model model model, and just test each and every one.

[...] But all you're doing is trying to figure out what seems right. So that's actually, that's really fun, that's when everything starts to be fun. But then you quickly then test a few of them, draw them in CAD, get to see what your areas are, see if you've got the right size, test it against the physical site. And I think probably if you have three months, you do that for two months. And if you have two weeks, you do that for a few days.

(Interview with 'Patricia', 19 July 2013)

Here Patricia both quantifies the time it takes to complete a competition entry and states that testing takes *most* of that quantified time. Not all schemes receive the same sort of testing. Some of them are drawn in CAD and tested against the 'physical site'. There is a further aspect, what Patricia here calls 'feeling right': there is some direction, perhaps a vague direction or an intuitive direction, that guides the cull. Here Patricia says that much of the work is a search for the 'key elements':

I'd say in general it doesn't matter if it's two weeks or over three months. I'd say generally less than a quarter of my time is research – so the rest of the time would be meeting the client, seeing how much research it will be, just gathering all the information that you can, and trying to then find out what the key elements are. (Interview with 'Patricia', 19 July 2013)

The early moments of testing seem to feature two sorts of practices: *accumulation* and *selection*. There is a sheer amassing of information, but at the same time, another process of designating from the trove some things that stand out, that are 'interesting' or 'key'.

But accumulation is not subservient to selection. As Louis tells me in an interview we held before my visit, accumulation is important on its own, a way toward *becoming an expert*.

Here accumulation is not only an intervention into the design of a building or the production of possible options, but a process of self-education:

In a way you always have to kind of, and a very short amount of time become an expert in the kind of building that you are doing, so, it's [necessary] that you understand as much as possible about the context from all possible perspectives and you know the way I really like to design is of course a very thorough understanding of the context, whether it be physical, political, historical—we like also to build up arguments which are multi-layered and multi-faceted. (Interview with 'Louis', 7 Aug 2014)

Louis is talking about his specialism, work on the conceptual phases of projects. Here what exploring different dimensions allows the architects do is both to 'become an expert' on what might be an unfamiliar site or project *and* to prepare products, arguments 'which are multi-layered and multi-faceted'. These are not just arguments in a linguistic sense but material products that the architects show to clients:

[Y]ou have a little bit amount of time, it's often two to three months. You're trying to spend first several weeks understanding the concept, trying to see what's possible, getting a grip on imagining, basically forming an opinion. Then we start to go through a trial and error process of making options. And along the way, you come up with ideas. [...] We often make booklets of those to communicate with the partners and the partners involved. [...] And then you produce diagrams and you start to build up the argument. (Interview with Louis, 7 Aug 2014)

Beside *accumulation* and *selection*, then, there is a third kind of practice. The architects *gather* information, finding and keeping things that stand out. They designate some of these things as particularly important. But at the same time, they are *producing* things, unitary *arguments*, that draw from what the team collect.

It is also worth noting that the testing tends to emphasise *physical models*. While some possibilities are worked up in CAD or tested against the building site, the architects single out the models they use as particularly important. Here is Patricia answering a question about whether models still feature within the work as they did when Yaneva conducted her ethnography at the firm (see Yaneva, 2005; 2009a, 2009b):

With competitions, typically we have a table full of models still. We start with the —even here our executives they have the new Photoshop, and we use a 3D printer which we've had for years. But still we look across here and we have all the models [...]. (Interview with 'Patricia', 19 July 2013):

The models are a mainstay, remaining at the office beside any new tools. And as Louis tells me, one reason for this is the materiality of the models, their uniqueness as a way of working. Here the models sit within an *informal* space where the architects can work with them:

We are very physical and very much more physical models. So you need a table that you can walk around with the team and discuss. And there should not be computers on this table. And the opposite, you can't walk around the table. I found it difficult. So I actually was very happy, because the second space in the office is the ground floor area that was occupied by the team that prepared. [...] It's very important to have informal space as we call it. Actually where you can nice and you can work together. And you can work with the physical models if you like. (Interview with 'Louis', 7 Aug 2014)

While parts of the interior had been refitted to include tables for computers, what delights Louis is that there are still tables without computers, tables that can hold models and become places to gather. Testing options becomes a process in which the team produces a collective understanding of a building.

The conceptual phase of a project at OMA, as Louis and Patricia told me, is thus a process of accumulating possibilities, testing those possibilities, selecting elements that stand out and building an argument. Central within this process is the production of models, but from that process come other products, such as booklets to show clients. From the work of testing possibilities comes a shift. It was too bad, Dimitris said one lunchtime during my visit, that I was not able to stay for the moment in which the team shifted from testing schemes to producing the materials they would send to the client as a final submission. Members of the team told me versions of this description during my time in the office. This is also something that Patricia said during the 19 July 2013 interview. After the team spend most of the allotted project time testing possibilities, 'And then whatever time you have left, you probably need a week of production. It doesn't matter what size it is. A week of making finished models, and finished drawings, and finished presentations. So it puts you back to the deadline' (Interview with 'Patricia', 19 July 2013). But while the team shift from testing possibilities to producing schemes, the process remains an *iterative* one, where the things that the architects produce *along the way* to the submission itself can change the direction of the work. One way this happens is by pinning up early versions of submission boards. This is clear in a conversation with Patricia:

And were the boards kind of hung up someplace, or how would you—

Hung up, hung up. We had boards everywhere and hung them up.

Yeah.

And also because some competitions we might have a book that's, this was only ten pages, so it wasn't—but some, there's no limit, so you might have, a hundred pages, and those are all, usually we do them half scale, so the team also knows what they're producing, and see all the ones that they're missing, so there's a gap in that image, that

image, that image, and they can work on that, so you can kind of — everyone knows what they've got to produce. [...]

And usually you're kind of sometimes either depending on who's working, you might just look behind the computer and say, you know, make that brighter, make that blue, make that, try this, try this, you might even go behind the computer and tell, where you're not constantly updating kind of printed out version, because sometimes the work is going too fast for that.

(Interview with 'Patricia', 9 July 2014)

As with the tables full of models, the pinned up submission boards allow the team to work spontaneously, reacting to *what is there* by producing something new. Nevertheless, this is not a work of accumulation; as the team select images to use, they might *build upon* what they have already. The time for *gathering* information has passed.

With such a central role for spontaneity, the rhythm of a project can be unpredictable. Members of the team talked one lunch break about a moment they said was a hallmark of the OMA experience. Working on a project, there is a sense of directionlessness and chaos, where days of testing options have produced what seems like not much at all. Work kicks into a frenzy and out of a fog comes a complete scheme. Two of the team members I sat with had been through their moment of chaos; one, just months into his job, had not. Some of this might be down to the duration of a project:

[One competition project] was three months, and of course in three months you put in a lot of energy, spend a lot of money, and you come to doubt yourself — times come to push everything — you end up with 35 schemes going in 16 different directions, doing it many times, whereas with 2 weeks you just have to go with your gut instinct in the beginning, it's much better actually. And it's fun! (Interview with Patricia, 19 July 2013).

Meanwhile, the work of tweaking the submission boards, of adding images and responding to what is already there, might in the case of a design competition see the team working through the night. The final hours in one submission took place this way:

[...] And then Sunday morning I went in because I went to bed sort of at two or three, and came back at seven or something and everyone else was asleep except for one amazing Korean intern who was still there, who spent two nights straight. I kept saying go home, go to sleep, for six hours, sleep for four hours, we'll call you, you know, you need some sleep. She said, 'No, I'm just fine'. [...]

The model was supposed to be finished at six p.m. and they didn't photograph it until midnight. He [Rem Koolhaas] didn't want small model photograph and the other one wasn't ready. He said, 'I'll come back at four in the morning'. So he came back at four in the morning. So as Rem arrives at nine the models are still being photographed. It's coming out like this. It's due at noon. And you know we just sat there, 'This one, this one, this is beautiful, this is beautiful'. So we killed the collage, so here's an image instead, Get rid of that collage, stop it. Put it in— But it was all sort of within the last hour.

(Interview with 'Patricia', 1 October 2013)

There is accumulation and selection here, but not the same kind as in the earlier stage of testing. What accumulate are photographs and plans, not 'key elements'. There is selection as well, but selection of *objects* rather than *referents*. This photo might be 'beautiful' while that one is not. This is not a judgment of *what is photographed* but of the photographs themselves. The difference between the 'testing' phase and the 'production' phase is not so much the presence of accumulation and selection but the relationship of these two processes to the third: *making an argument*. The shift between testing and production is that the argument becomes fixed.

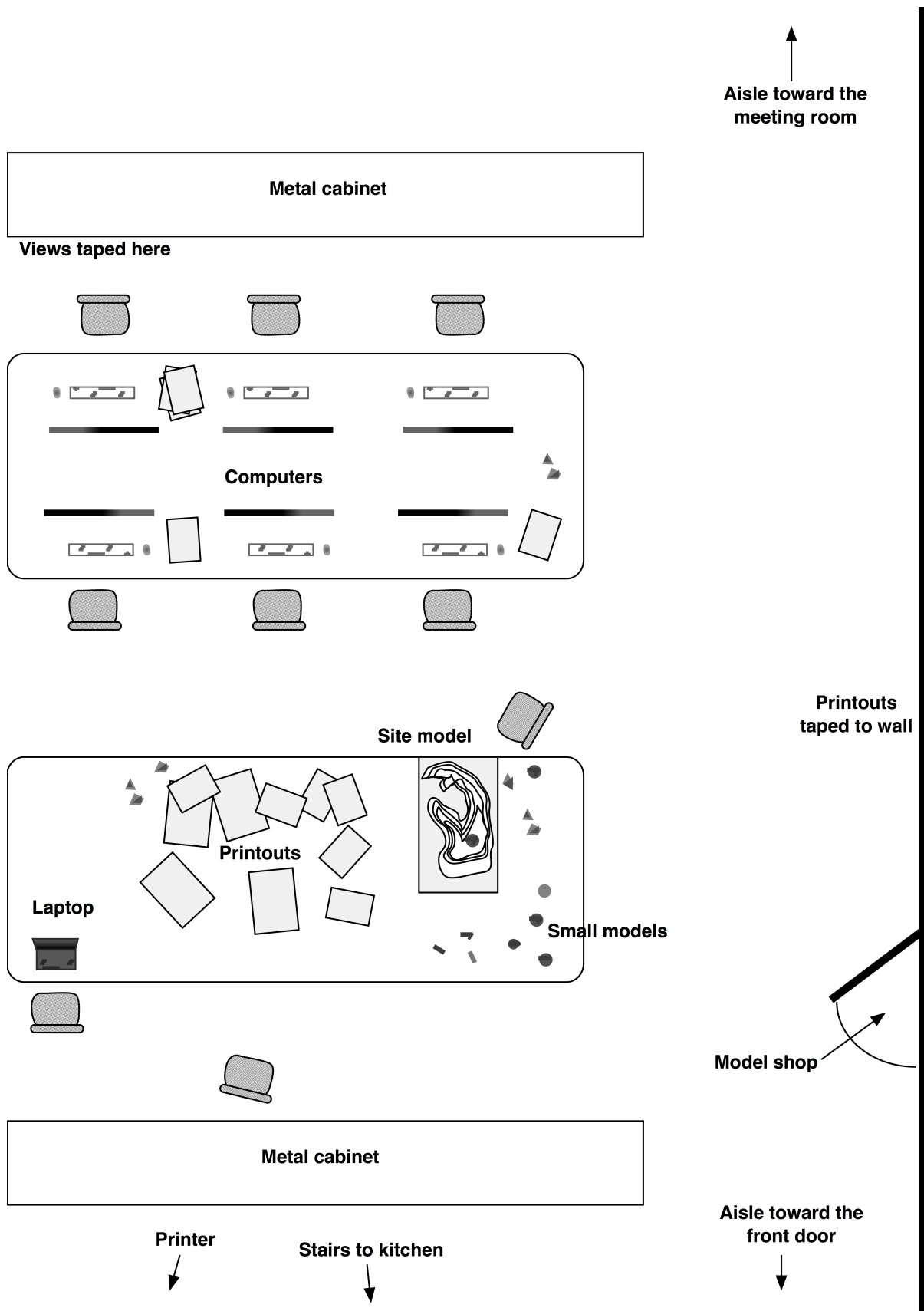


Figure 5: The region of the studio where the PPP team worked

8.3 In the studio: responding to surfaces

The narrative of testing, accumulation, argument building and production is well developed, but the specificity of the PPP competition demands an attention to practice. It becomes possible to wonder how the architects' understanding of practice as a sequence comes into contact with both the relative unfamiliarity of the PPP and the sort of object-focused responsiveness that we see as a hallmark of architectural agency (see Chapter 3). We might ask, then, how one kind of linearity, that of the OMA competitions narrative, interacts with another kind of linearity, that of the procurement route (see Chapter 1), and with the *non*-linearity of material engagement (see Chapter 2).

Opening the door from the lobby to the ground floor studio, the visitor looks down an aisle that spans half the length of the floor and stops at fogged glass wall with a sign across the door reading 'The Aquarium'. A walk down the aisle from the doorway passes on the left row after row of tables, and to the right, a wall clad in plywood, separating the studio from the model shop. After every two or so rows of tables is a metal shelving unit that divides the length of the room into segments, each for a different team, a different set of projects.

The tables for the MegaCon project are just beyond the stairwell. There are two of them, segmented from the remaining tables by shelving units, each stacked with objects. One table is strewn with models and printouts in various states of overlap. The other table is lined with computers, two rows of three team members facing one another. Louis sits at the model table at the end opposite the computer table, nearest to the exterior wall, working on a laptop. Most of the time, the team sit at their computers while Louis moves between his laptop, the model cutter, the Aquarium and any meetings he attends in the offices on the seventh floor. Along the edge of the model table that faces the aisle, blue foam models, some lined with Perspex, lie like toys. Moving further down the table toward the exterior wall is a site model of the masterplan that MegaCon belongs to, a wooden board stacked with cardboard sheets, each displaying a topographic layer, the whole dotted with white foam buildings covered in printed paper surfaces: rooftops and terrain. The site model sits across the segment of the table nearest the aisle. The rest is a cluster of small blue-foam tiles affixed to printouts of floor plans. These are individual rooms, represented as moveable models.

The result is almost a counterpositioning between model table and computer table, a kind of segmentation of surfaces. Architects can sit at their computers and work on AutoCAD

or they can examine the models on the model table. But depending on the position of an architect, he or she can bring both of the tables and the objects they contain into different pragmatic arrangements: sitting alone at a computer, perhaps with a collection of models and drawings; sitting or standing next to another architect's computer and talking about what that architect has on the screen; or standing between the tables and consulting both models and computers while meeting with other architects. I consider each situation in turn.

8.3.1 Working alone

The fact that the six constant members of the team work at a table of six computers has much to do with the rhythm and progression of the work, how it moves from one state to the next and from one moment to another. At one point Richard remarks generally how still everyone is as they sit at their desks. They might as well be stock traders, he said: from a distance either group would be sitting at their keyboards, facing one another or sitting shoulder to shoulder. There are some moments in which no one says a word. But during these moments, the project is alive, its transformations taking place on screen. But each screen contains a *different* image, different versions of the building. What is more, only two members of the team work on the same sort of representation at once, producing plans of the two test-schemes in AutoCAD. Each of the others does something different: pursuing research leads, elaborating on the brief, cobbling together views in Photoshop or assembling layers of visual data into a plan of the site. With each set of tasks comes a different relationship to the present and future of the project. If the project were to unfold in a linear way, it would be like an orchestra in which each player followed a different conductor. While each architect responds to iterations of a scheme, these are *different* iterations of *different* schemes, rather than a single form moving sequentially from intervention to intervention.

Two members of the team focus on producing drawings of the schemes in AutoCAD, each architect focusing on and only one of the test schemes. During my four days at the studio, Wei works on the angled-extrusion option while Eleni works on the shifted cylinder. The work is usually done in one projection at a time, plan or section. At times they would shift from the drawing they were working on to a three-dimensional model of the volume, which they could rotate with a drag of the mouse before moving back into two dimensions. The work itself features small acts of nudging within existing boundaries. Early in the week, Wei is working in plan, dragging elements of meeting rooms into another plan diagram for

one floor of the scheme. In front of him on the desk are paper cutouts showing meeting rooms, as well as the blue foam model of the volume he is working on, and a printout of a 3-D model in CAD. In one window is a plan view of several auditoria. Wei clicks on the screen and drags, producing a rectangular selection region that he pulls over the 'tiers' of the auditorium (rows of lines with 'aisles' in between, tapering toward the stage). He copied the tiers and places them elsewhere in the plan. He also works subtractively, placing lines perpendicular to the rows of tiers and removing any bit of line that extends beyond. With the removal of the guideline, an aisle is complete. Testing the programme requires placing auditoria, and within the plan diagram, images of auditoria include rows for seating. What is crucial is that the brief specifies auditoria by the number of seats as well as square metreage. In changing the shape of one auditorium in plan, Wei has to reconfigure the seating. The result is a movement of several lines at a time, a series of small tweaks.

The same day, Eleni is searching the plans for the round scheme, looking for a place to put a hotel. Next to her on the table is a foam model of the scheme. She tells me some parameters she is responding to. First, the massing has to change, as the scheme has begun to resemble a toilet. Second, she wants to test the possibility that the commission rooms would be better on one floor, rather than several. Not only would this give delegates more contact, but tenants tend to prefer leasing single floors. In addition, certain volumes have to touch. There are other conditions of the brief, she said, that she would get from Louis. Like Wei, Eleni responds to these considerations by dragging, placing and cutting within AutoCAD.

The two architects who are producing plans and sections of the test schemes in AutoCAD move one adjustment at a time, responding to the models that sit next to them and to the conversations they have had with colleagues. In one sense, then, the *course* of each tweak is unpredictable: while each adjustment takes place in response to a set of rather explicit conditions, the architect does not know whether that adjustment meets the conditions until it has already taken place. One sort of artefact makes this clear. Every now and then, Eleni and Wei would produce an A3 printout of a plan diagram. Here would be the plan, a list of programmatic elements (one from the brief, one from the architects' own categories), and one number with a prominent position: the *floor areas* of the spaces in square metres as specified by the client. The number, with larger, bolder text than the

rest, is the square metreage that remains after subtracting the floor area of the plan diagram from the total floor area given in the client's requirements.

What this amounts to is a temporality of small adjustments in which the future is both open ended and fixed. It is open ended because Wei and Eleni are *making design moves* and *reflecting on them*, such that the reflection does not take place until the move has been made. At the same time, certain elements are fixed. No matter what Eleni or Wei produce, one result would be a number, the floor area in relation to the client's schedule of accommodation. Further, these are always *movements* of pre-existing elements: an auditorium that begins at the edge of the plan and moves toward the centre; lifts and escalators that need to be separated; a hexagonal auditorium to be made round. Testing in this case is not a matter of determining *whether* there will be a cylindrical stack of floors or a sort of angled passageway surrounding a cluster of smaller volumes: the question would be how these will exist in the first place as instances of the client's programme. What Wei and Eleni are doing, then, is *accumulating moves* within the test schemes. While the measurement of the floor area indicates whether a given iteration meets one requirement of the brief, no status of any surface signals that the work is 'done'.

Other architects work in tandem with Wei and Eleni, responding to their iterations. At a given iteration of a test scheme, Dimitris imports a three-dimensional image—a white polyhedron—into Photoshop, adding it to an image of the site. There are no design decisions being made here, he says, and 'it is not the most important job, but someone has to do it'. The first time I visit him at his computer, he has AutoCAD open as well, alongside renders of the original masterplan. He tells me that the client had not supplied plans for the site itself, so he is producing both these and additional renders. During another visit, Dimitris is using the clone stamp tool to cover the lower edge of the model with a layer of trees from the image underneath. In the view, the model seems to emerge from a forest. Dimitris produces views *alongside* the work of Wei and Eleni: he would ask for the latest iterations from each of them and add a 3D model to images of the site. Thus Dimitris's work is not prone to the sorts of shifts that mark that of Wei and Eleni: he would produce views in step with their iterations. In this sense there is less uncertainty in what Dimitris is doing than in what Eleni and Wei are doing. Dimitris is working on the test schemes, and his work has implications for what the test schemes *look like*, but it also moves as a kind of background process, working up images in the otherwise absent perspectival view while alongside the CAD work of other architects.

Meanwhile, some architects produce images in response to aspects of the competition that do not include images of the two test schemes. Like Dimitris's work, these tasks *interact* with the work of Wei and Eleni. Lars, for example, is studying the brief. This is not simply a matter of 'reading': the brief has been written in two different languages, one copy is a translation of the other, and because the translated brief is in a different 'resolution' than the other (per Lars), the requirements are also slightly different. The product of the research is a set of plans. Lars has open in AutoCAD throughout my visit a plan diagram that depicts not a 'building' but a series of disconnected elements, each corresponding to categories from the client's programme: a 'foyer', 'auditoriums', 'gallery' space and so on. What he is doing is producing elements for other architects on the team to work with. He also wants to explore the question of whether certain elements can be combined in order to reduce the floor space they would take up. Since the floor area requirements in the brief depend on the client's own divisions of categories and rooms, it becomes possible to discover *new* arrangements of rooms that might lessen the required floor area. This work is similar to Wei and Eleni's in that it is fundamentally a work of drawing, making interventions within the two-dimensional surface of a plan within AutoCAD. But where Eleni and Wei can, in a sense, divide their work into several discrete *tests*, each ending in a printout that lies across the model table for all to see, what Lars is doing has no definite endpoint.

This is also the case with what Jens has on his screen: a plan of the site in AutoCAD. Here he would zoom in on a cluster of lines, add some lines and move others, zoom out to show nearby forms, then zoom out again to display the entire image. The images themselves contain different layers. One includes lines of topography, for example, while another depicts road and rail networks. Like Lars, Jens is elaborating on the information that the client has sent to competing teams. A number of works projects have been slated to take place, including a tunnel for a tram that would run near the site. But the client is not involved in these, and there are no images of them among the briefing documents. The topographic information has to come from elsewhere. What Jens is doing is bringing all of these layers of data together into a single plan.

What Lars and Jens work on can travel *into* Eleni and Wei's work in AutoCAD. From here comes the distance between the ground and the underlying metro line, new shapes for auditoria, and other pieces of information. Anything that Lars or Jens discover in the course of their diagramming can make a difference in the testing of the schemes. A similar

task, with no fixed endpoint, is research on the Web. Richard has started doing this after a more senior colleague visited the MegaCon tables and mentioned making one of the auditoria circular in plan. Here was a provocation to explore historical precedents. Richard suggests he would look for some old exemplars in the city of the site. After a Web search he finds one: a theatre that has served as a site for socialist organising in the late 19th century only to be dismantled to make way for a commercial tower. As he says to the team across the table, it may be possible to rebuild the theatre within the conference centre. Like the translation of the brief into moveable elements or the regular production of 'views', the Web research in this case anticipates a future use at an unspecific time. But unlike these other tasks, it is not something that 'has to be done'. And like the adjustments of existing volumes in plan projection, the Web search carries a degree of uncertainty: it is not inconceivable that both the web search and the adjustment of plans can carry on indefinitely, looking for a better way of getting to 'zero', or an even more suitable theatre.

If there is any linearity in the work of the six architects around the computer table, then, it is within the accumulation of elements. That is, we might imagine the *number* of elements over time as a curve pointed upward. What is not present is a clear finishing point. The two architects working on test schemes respond to a square metreage count, but only until they began the next iteration. Other architects have no such means of stopping: they perform web searches, add detail to the plan of the site, and explore possibilities for combining the client's required spaces.

8.3.2 Working together

The architects working on the MegaCon submission spend much of their time around the computer table. While each architect works on *something different*, their activities overlap. As the architects tend to work on their computers, what stands before each of them is a separate world of windows and images. At the same time, the architects themselves are available to one another at all times. Architects sitting next to one another swivel in their chairs to talk. Any colleague who speaks is heard by the others, and a tablemate can ask a question without looking from the screen. The result is that the accumulation of elements we see in the work of individual architects at their computers continues in new ways. Architects performing adjustments in AutoCAD respond to memories of conversations with colleagues. Ad hoc meetings between architects do something similar, but add a new kind of artefact to the situation, hand sketches, as well as a rhythm of conversation in which adjustments can take place.

One way this happens is when the architects simply talk about the scheme. On the third day, for instance, Jens and Dimitris walk over to the model table. Jens asks Dimitris about the angular, extruded scheme: where the hotel is in one of the models, an iteration covered at the top with a Perspex sheet. Also on the table is a foam block that represents the required floor area for the hotel. Dimitris places the 'hotel' upright at the centre of the model, where the Perspex has been cut out. He says it had used to be there, but now it has moved. He turns the hotel on its side and places it at the rear of the volume. Another such moment takes place on the last day of my visit. Jens visits Richard to look at drawings of an auditorium and its 'flight tower', where the airy mass of the room peeks from the top of the building. While they talk about the measurements and Richard makes adjustments in the CAD software, Dimitris turns from his seat next to Richard and asks if he can have some of the new drawings of the auditorium in order to understand it better. Exchanges like these are constant; while each of the architects is working on the same 'building', what each of them knows about it is entirely unique. The ad hoc meeting becomes an additional thing for the individual work of each participant to respond to.

Models often travel during visits between team members. One example takes place the morning of the second day. Louis is cutting discs in blue foam, pulling blocks into the wire of the foam cutter. I sit at my typical perch between the model table and the computer table. Louis arrives with his discs in a stack and places them on top of the site model of the masterplan within the boundaries of the site. This is an iteration of an earlier form, Louis says. They are dealing with the issue of exiting the building. Extending from one 'floor' of the stacked discs is a long, narrow piece of foam, a ramp. The team gathers around the site model as Louis flips the volume around, flips it again, and moves one floor, bulging from the rest, to different sides of the 'building'. The moves are both serious and comical. In one the bulge juts into an existing building as though ready to pulverise it. But in the movements are real possibilities for arranging the volume within the site, and the team go over the local fire regulations as they look at the model. The way a model can *move* in a demonstration thus becomes a way of pointing the work of individual architects in a particular direction once they return to their seats. New arrangements of existing elements give way to additional iterations.

And when the architects meet, they often produce hand sketches. Sketching by hand is not usually something that takes place for an architect sitting alone. The architects sketch while speaking, their words giving way to forms on paper. The paper can be anything:

tracing paper, empty A4, an A3 printout of a diagram lying nearby. Some sketches add lines to other drawings. Others, even sketches taking place on printouts, disregard what has come before. The sketch does more than accompany a conversation or sit next to an architect alone at a computer. Since the sketch is set aside and then *picked up again*, and since it can travel around the two tables, it can incorporate multiple trajectories of work into a new one. That is, if two architects working alone talk about their work, and that conversation produces a sketch, the architects can respond to that conversation by responding to the sketch. In one case, for example, Jens sits next to Wei at Wei's desk and talks about circulation within the angular, extruded scheme. In front of them are printouts of plan diagrams. Wei is drawing lines in pen where he has placed ramps. In the margins of a diagram, Jens draws a small section of an auditorium and asks how the slope of the floor relates to the top balcony and temporary seating. Richard walks over and draws another small section, saying that the slope will be 'this way'. Here sketches come up in the course of conversation. Once a sketch emerges, it can travel to other meetings. On one occasion when Jens meets with Lars to talk about Lars's work interpreting the brief, for example, he brings a hand-sketch of a circulation pattern that he has produced previously. Sketches have two relations to the conversation: one that choreographs, another that records. If architects sketch during a conversation, preserving the sketch also preserves the conversation itself.

Ad hoc meetings offer new possibilities for organising elements that have already existed within the work of the individual architects. That is to say that in terms of the development of surfaces, ad hoc meetings differ little from individual computer work. Regardless of whether Eleni is responding to a painted foam model next to her keyboard or to a visit from the project leader, for example, she still incorporates her response into the adjustments she makes within AutoCAD. What this speaks to is a certain kind of nonlinearity, but also a kind of linearity. There is nonlinearity because new information can come from any of the architects, meeting with any of the others. Prompts to iterate are unexpected and constant. But at the same time, there is linearity: the result is always *an accumulation of detail*: new building regulations, new attempts to rotate volumes, new hand sketches on the table.

8.3.3 Meeting

The differences that *do* exist between affordances of things produced in meetings and things produced in solitary deskwork become clear at a long but ad hoc meeting that takes

place just after noon toward the end of the week. If any event during my brief time in the studio were to pause the accumulation of elements, this would be it: all the architects around the computer table leave their screens and stand around the table of models. Louis has been walking around the computer table and asking members of the team if they are okay with having a meeting. Architects make printouts of what they have been working on and bring them in stacks to the table of models. Everyone gathers at the edge of the table nearest the computers in the orbit of the topographic site model. Three features make this meeting distinct. The first is its duration: over an hour, it is the longest of any meeting among the team I see that week. The second is the fact that the meeting takes place away from the computer table, referring to the monitors at times but not attending to them as a work surface. This is an interplay of words, sketches, printouts and models. Finally, the beginning and end of the meeting are fairly definite. The meeting begins because Louis calls it. The meeting ends when everyone goes to lunch. After the meeting, deskwork and drawing resume. Once again, however, the relationship between design and linearity is complex.

During the meeting, each architect presents the results of the work that he or she has done over the course of the week. Each has brought printouts to the table. And when each presents, the others not only offer comments, they produce *sketches* that produce alternatives: they add to the accumulation of images. Early in the meeting, Wei explains his printouts to the group. Eventually the discussion shifts to the arrangement of elements in the plan. Louis says it could be like a Baroque *poche*. This he sketches in a margin of one of the printouts: what looks like four quadrants divided by a thick cross, the centre carved into a circle. Meanwhile, Richard has been sketching as the others speak. His sketch shows two images, each a set of shaded forms that he has placed arrows nearby. In one, the shapes sit in a rough 2x2 grid, the arrows intersecting at the centre. In the other, there is a single mass in the middle of the image and an arrow curves around it. He says that one possibility is the first image, while the other is the second. But Louis is not sure how the sketches relate to the plan, and they talk about where the auditoria touch down at the floor. Is it a single volume? Multiple? As they talk about the plan, Richard draws another sketch. He mentions another plan, the circular base of David Adjaye's Moscow School of Management. This sketch looks like a cell without a nucleus, little shapes spread out within a circle. Louis responds with yet another sketch, where rectangles cluster together tightly and are served from the perimeter. The plan can organise into these sorts of clusters, he says. Richard responds that one cluster can be a

stacked set of meeting rooms. Jens says that the clusters can correspond to a skylight. As Eleni presents her scheme, the meeting carries on in the same way: some architects talking and referring to the printouts and the models, others retreating briefly to a blank sheet or the margins of a printout before entering the conversation with a sketch.

I sit with Wei for a moment after lunch and talk about the meeting. My outsider's impression is that a lot has changed, that in each of the sketches is a radical new possibility for plans of the building. Wei tells me that the changes are mainly to the top floor. He holds up a foam model of his scheme, the part-extrusion of the site topped with Perspex. Then he points to the Perspex. All the changes would be happening there, he says. The changes he would be making would be to give order to the circulation. Later in the afternoon, Richard sits next to Wei with a printout of a plan. Here he is sketching shapes from the meeting: the clusters, the poche. The next day, Wei is viewing the scheme in 3-D, rotating and zooming. He explains that there would be a tight grouping of programme elements in the centre of a kind of fortress-like wall where circulation would take place. A sketch that emerged in the meeting has become a proposal that Wei is now interpreting within AutoCAD. Here the fact that the architects can propose sketches *beside* the printed plan does not make the printouts obsolete. If the team agrees that the programme needs clarity, and that to get there would require clusters of elements surrounded by foyer, Wei nevertheless has to reopen the old files and nudge the elements into place. The trajectories of individual work at computers continues while the artefacts of conversation, the sketches, became new points of reference. Though during the meeting the architects can sketch from a clean page, conjuring for an audience a poche or a pattern of circulation around a cluster of volumes, going forward with one of the sketches requires going back to AutoCAD. That is, the sketches have not transformed the scheme itself. While they present a revision, a rewrite, of an architect's work in AutoCAD, they do so as *another set of inputs* to incorporate into the digital diagrams.

Eleni and Wei resume working on their test schemes, adjusting lines once more in AutoCAD. What the meeting does in this case is add yet another batch of information to respond to. In that sense, the meeting is simply a larger version of the more ad hoc encounters that have taken place over the preceding days. But in another sense, Eleni and Wei are not *responding* to new information but *catching up with* the discussions of the meeting. When the architects hear about, for example, a fire regulation, it is not clear which configuration of the plan would incorporate that regulation without dropping below

the client's space requirements. Thus the way the architect approaches the task is by making interventions and reflecting on their consequences. But in this case, Eleni and Wei are left with *new versions of their plans*, rendered as hand sketches rather than lines in AutoCAD. What they do after the meeting is adjust their AutoCAD models to, in some way, *correspond to* the products of the meeting. The longer meeting acts within the same pattern of accumulation as the shorter ones, but does this by putting all the architects in a pragmatic position in which the comments and hand sketches that one colleague has produced in conversation can later become a point of reference as another colleague adjusts an earlier digital model.

What takes place during solitary computer work and ad hoc meetings between architects resembles what Cuff (1992: 57 - 63) has called *perpetual discovery*: there are always more inputs that designers can incorporate, and the work of incorporating those inputs can take place indefinitely. Architects respond to aspects of the brief that their colleagues tell them about as well as comments about their schemes. Since each of the six architects works on a separate image with a different relationship to a fixed reference point (some have one, some do not), at any point there is a possibility for one architect to encounter something that she has not yet incorporated. What the longer meeting does, then, is introduce *other versions* of the test schemes as even further inputs to incorporate.

8.4 Conclusion

From the formal definitions of procurement routes (Chapter 1) to the ability for architects to analyse types of competitions in terms of types of documents (Chapter 5), to the many forms that pass through either side of a competitive selection process (Chapter 6), and finally to the presence of a narrative about the way OMA work on competitions, it might be tempting to describe the architectural competition as a dichotomy between language and practice. On one side there is the formal vocabulary of the procurement route, and on the other there are productive processes; on one side the meeting minutes, on the other the stray remarks and fleeting gestures that take place in the gaps. And in the case of OMA, on one side the architects can describe their work on competitions in terms of linearity, yet on the other side, observations of certain moments within the design process also show a nonlinear process of incorporating inputs. If we take the competition as a dichotomy between language and practice, we might say that the language of competitions obscures the practice of architecture.

But this interpretation is hasty. In the case of Hutchins (1995), it would be wrong to say that among navigators aboard US Naval vessels, lists of instructions exist in some dichotomy with the practice of navigation. Instead, the list acts as a choreographic device. The question is not whether the list represents a practice accurately or not, but *how the list functions* in the working life of the navigator. We might say the same of the language of competitions. In the OMA case, perpetual discovery does not take place without notice. The team talk about what they were doing as part of a sequence. Developing two schemes alongside one another is taken as part of a testing phase, even if no explicit *stages* are visible within the many overlapping trajectories of the work itself. That is, while the team nudge lines one pixel at a time into the unknown, they are also aware that there will be a meeting with consultants in the next week.

The aftermath of the previous week, the anticipation of the next—these things become more noteworthy when we consider that the architects at OMA worked during my visit in a way that was similar to what Yaneva (2009a) describes: responding to images, multiplying options, making selections. Even in the architects' descriptions of working on competitions, the process is one of learning, responding and accumulating. This becomes curious when we note that in Yaneva (2009a), the architects were working on a *commission*: the client visited regularly with the architects, the architects presented to the client, and there was no process of comparing submissions from different firms. The upshot is that the competition *adds to* moments of 'architecture as usual'. We already see some of this process in the work of the students (Chapter 7) on competition entries: architects work on *concepts* first, then *shift* to COMPOSING submission boards. The pivot of the shift is the object of work: the COMMUNICATIVE ELEMENT, something that acts not as a representation of a building but an image that *produces effects*: it is the representation itself, not the building 'behind' the representation, that begins to concern the architects.

We might call this shift from buildings to images a process of PHASING. This is not only a shift from doing one thing to doing another, from task to task, but a shift in *ontology*. At one moment, one thing is subject to change, and certain things can change it. At another moment, *another* thing is subject to change, and *other things* can change it. Thus the week before my visit, the architects produced foam models of vastly different massing strategies, included these in a booklet and showed the booklet to a partner. During my visit, the old foam models remained on the table, but the architects did not refer to them. What they did refer to were transformations of these earlier foam models, two options the

architects would develop side-by-side. Unlike the earlier foam models, these options had new ontological capacities. First, each option could incorporate *multiple* foam models: there was no longer a one-to-one relation between a given foam model and the option it presented. No matter how many foam models expressed iterations of the cylindrical option, it was still *that option* (i.e. Eleni's option). This was also the case for the angular extrusion, Wei's option, which underwent many iterations but remained *a single option*. Second, the options, unlike the earlier foam models, could incorporate AutoCAD plans. Since there was no longer a one-to-one relation between a single foam model and a single approach to massing, each option could be *developed* through multiple iterations, images and models. And finally, these later options became *responsive to sketching* in a way that preserved the basic formal approach. As we saw in the meeting, a sketch could be cause to rethink the plan of one floor of the angular extrusion. But at the same time, it was still the scheme *Wei was working on*, still the angular extrusion. What is key here is that as we move from one PHASE to another, the architects work through the same kinds of objects: foam models, AutoCAD diagrams, the two tables, and so on. What change are *things* in the Latourian (2005b) sense, bound to the question of *what the architects are doing*.

What the competition seems to do, then, if we combine analysis from multiple strands of research, is take this ordinary process of PHASING and add to it *another* PHASE. At some point, the architects would produce a detailed book of technical information. As with the competitions that the architects at OMA described to me, this would be a moment of production that stands apart from the moments of accumulation and selection. If the process of COMPOSITION we see in other strands of research (Chapters 5 – 7) takes place at OMA, then we can reason that COMPOSITION becomes one more PHASE. And here would be another change in the ontology of the images and models that the architects work with. These become COMMUNICATION IMAGES, not buildings seen *through* the images but images that *evoke* buildings, where the process of evocation becomes an object of work and the process of COMPOSING these images becomes a task in itself.

Thus we might ask *what it is* that the technologies of competition add to the work of architecture that makes it possible for the competition to hold together. We can approach this question through one event that owes its existence entirely to the affordances of the design competition, an exhibition of entries (Chapter 9). Then we can come to a more

general theory about the way architectural competitions engage with architectural practice
(Chapters 10 – 11).

Chapter 9

Fifth journey: Exhibiting competitions

9.1 A situation specific to competitions

In various situations of practice in which the competition is present as a *thing*, we have seen at least four processes holding together the possibility of describing a competition as a competition. There is no transformation of the 'Invitation' into tenders and the tenders into numbers (Chapter 6) without the mobility of BOUNDED, clearly COMPOSED documents (VISUAL ELEMENTS). And the practice of evoking another reality, the existence of a building process, takes place in tandem with the preparation of COMMUNICATIVE ELEMENTS (Chapter 6, Chapter 7). At the same time, some of the more fundamental kinds of object-practice relations we see in competitions take place throughout architecture, with or without formally defined competitions (the categories we see in Chapter 1). Architects might identify the qualities, the COMPOSITION, of an opportunity (Chapter 5) and a corresponding submission (Chapter 6) no matter what procurement route is at play, or even when no formal procurement procedure exists at all. And a need to COMPOSE documents to submit a planning application (see Chapter 6) is something that any building project in the UK has to involve at some point. Travelling, evocative documents can be seen throughout architectural practice, whether or not a project involves a formal competition. We might wonder, then, how the competition emerges from the elements and arrangements I have named so far.

One way to approach this question is to examine an event that owes itself entirely to the architectural competition: the exhibition of competition entries. For no building project that does *not* involve a formal competition can include such an exhibition: either there is only one firm's work to exhibit *or* the competition is less formal (i.e. with no submissions of documents) and thus features nothing (at least nothing that purports to be a simultaneous presentation of a 'scheme') to put on display. Here I observe the way an exhibition of entries to a design competition is assembled from various objects and practices. From these observations, I describe the exhibition as an extension of the same kinds of processes we see in other situations of architectural competition (Chapters 5 – 8). Here I can produce a more general theory of architectural competitions and architectural practice.

One design competition that took place over the second half of 2013 included an exhibition as part of the selection process. This was the competition for a new academic building at the London School of Economics. Submissions for the second, shortlisted stage of the competition were displayed in the university library for two weeks. Visitors voted on the designs, and the votes became one criterion, alongside presentations from the architects and a deliberation of the jury, in selecting a firm. The exhibition, then, was an artefact of the competition, emerging from entries and contributing to the selection process. By looking at the way the exhibition relates to architectural agency, it may be possible to describe the uniqueness of the architectural competition.

The RIBA competition brief for the new LSE building includes the following provisions. What is worth noting is that guidelines for 'submission' and 'presentation' are set out in the same section of the brief, a list of events to take place in 'Stage two'. Here the brief specifies the size, type and number of the products for architects to submit, while leaving unspecified the sorts of things that will enter the exhibition itself.

8.0 Competition Format [...]

Stage two Submission and Presentation of Design Concepts [...]

d) A public exhibition of the shortlisted designs will be held at the LSE Campus; where the LSE community will have the opportunity to discuss the designs with the Architects and vote for their preferred scheme.

e) Final assessment will involve a presentation and interview with each shortlisted team to the judging panel comprising advisers and representatives from the School.

f) Design submissions will be on a maximum of six A1 boards and accompanied by an A3 report to augment the presentation boards together with a construction cost estimate and detailed fee proposals which includes all sub-consultants. The submission must also be provided in digital format suitable for uploading and viewing on the LSE web site. [...]

(LSE competition brief: 9)

Described here is a 'public exhibition of the shortlisted designs'. What is absent is a description of the sorts of objects the exhibition will include. While what is to be *submitted* includes six A1 boards and an A3 report, what is *exhibited* are 'the shortlisted designs'.

The route from the requirements for submission within the brief to the 'exhibition of shortlisted designs', then, is not self evident. By examining the movement of things *into* the exhibition, then, we can see how the technology of the competition lends itself to the exhibition of entries and thus clarify other aspects of the competition as it interacts with architectural agency.

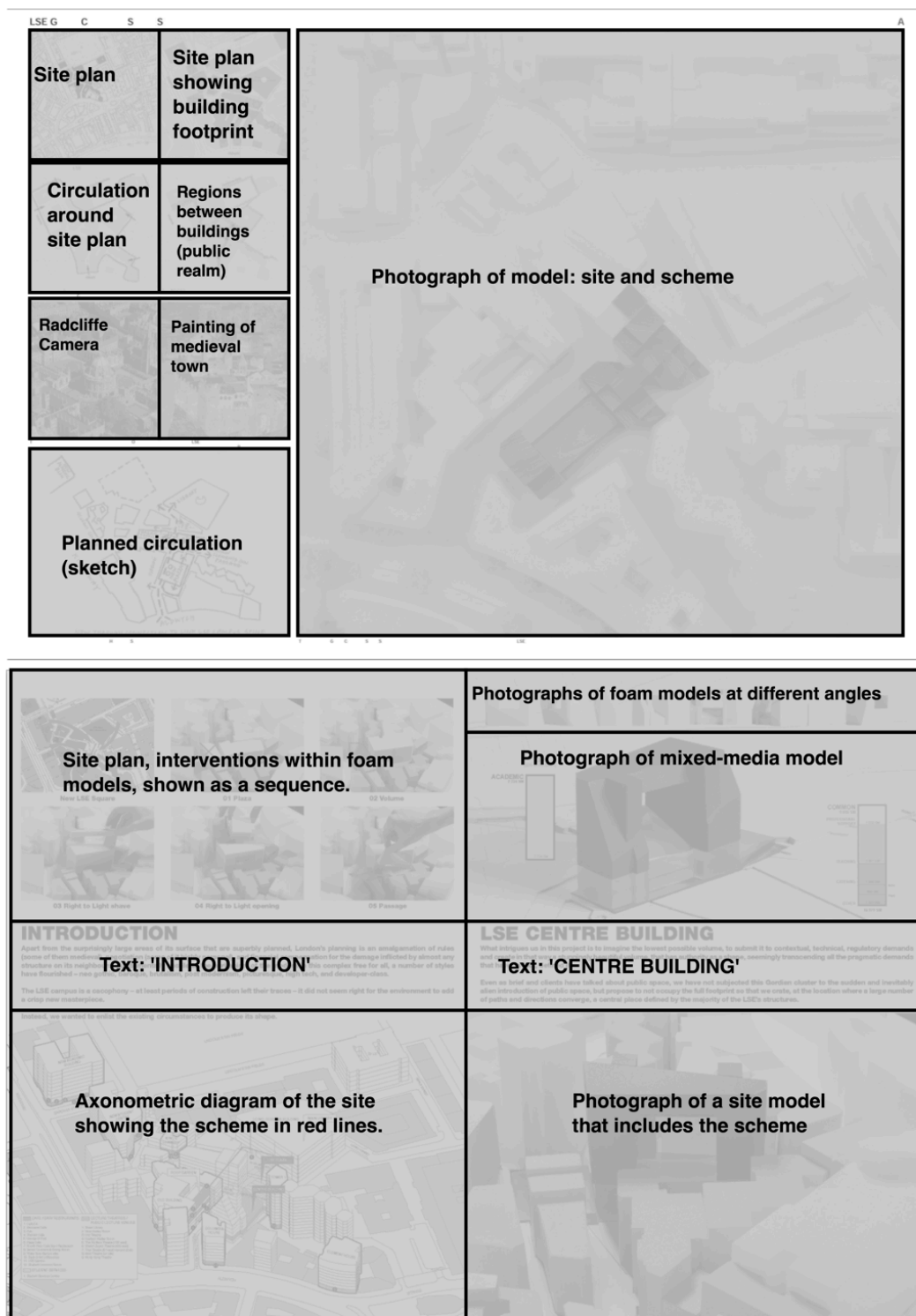


Figure 6 A comparison of the compositions of schemes A and B

9.2 The boards

The brief for the competition states that there would be '[a] public exhibition of the shortlisted designs [...]'. What is crucial here is what was exhibited: the submission boards themselves. Looking at the COMPOSITION of the boards, then, provides a lens into the mounted content of the exhibition. Shortlisted teams were anonymous during the exhibition. The Stage Two design submissions from each team were available to download from the competition website, which has since been taken offline¹ (see Figure 7). In place of a name, each team received a letter between A and E.

What is clear among the five shortlisted entries that made it into the exhibition is a COMPOSITIONALITY of the sort we see among student submission boards (Chapter 7), mini-competition submissions (Chapter 6) and submissions to other design competitions as discussed by architects (Chapter 5). Images and blocks of text have been *placed* in the board after architects produced them in a software package or gathered them from another source. That is, the submission boards resemble a collage in their use of such disparate elements, but differ in that no elements have been combined. Images and text are BOUNDED, offset from one another with white margins. While not all images within the boards necessarily retain their original dimensions (e.g. square images that have clearly been cropped), each image is rectangular and wholly visible.

Where the boards differ is in the ways that different *kinds* of images are arranged, in the relative size of images and in the approach to placing elements. This is clear from the first panels of two submissions (see Figure 6). Between the first panels of Submission A and Submission B, two differences are striking. First, in Submission B there is no visual priority: all images in the first panel are the same size. Second, there are two columns of text. The text occupies a white strip that bisects the length of the panel, about one-sixth the panel's height. There are two headings, each for a block of text that takes up half the centre strip: 'INTRODUCTION' and 'LSE CENTRE BUILDING'. The four images make up quadrants of the remaining space. Like Submission A, this panel of Submission B shows views of the scheme within its site. The upper left image shows a blue foam model within a white-and-grey foam model of the site. Over five images, two featureless volumes

¹ As of 22 September 2015 the website is archived at archive.org/web/. Insert the URL 'http://www.lse.ac.uk/intranet/LSEServices/estatesDivision/Home.aspx' and look for the October 2013 snapshots.

transform into the final scheme, each image a different adjustment. The upper-right image is a close-up of a foam model decorated at the top with a row of tiny images of the same model at different angles. The lower-left is an axonometric drawing of the site overlaid with red lines: like the site plan in Submission A, this indicates where demolition will take place. And finally, at the bottom right, is a single photograph of the scheme as a foam model within the site model. Both Submission A and Submission B depict the *whole* (outside) of a scheme, and do so within the site. But they use different images to do so, COMPOSE them at different sizes, and have different approaches to text.

Submission boards for design competitions point to one task that competitions present to architects: the COMPOSITION of images. It is not enough to produce a scheme in isometric drawings, depict it in renders and use various conceptual diagrams to bring out this or that aspect of the design. What also takes place is a process of choosing images and placing them at different sizes and positions.

9.3 From boards to exhibition

Submission boards assembled of complete, bounded images could then move, also complete, also bounded, into a new site: the exhibition. Much of what the exhibition afforded for the practice of visiting, of browsing among boards and talking to architects, owed itself to elements that existed prior to the exhibition itself.

The exhibition took place in a room designated as an 'Escape'. The entrance to the room is as wide as the room itself and adjoins the corridor to the front door of the library. At the left of the entrance is a room divider, the dimensions similar to those of the dividers holding the architects' posters. On the divider at the entryway is the same text as that of the exhibition's website. When the exhibition was assembled, the benches were removed. What remained were the PCs, built into a wall unit. During the exhibition, what the PCs displayed was an HTML-based poll, the same poll one could access through the GCSS website. The remaining walls are exterior walls, curved with large windows. Set away from this wall were the display boards. The result was that between the display boards and the angled wall unit was a relatively continuous surface. A visitor could stand in the centre of the room, pivot and see every aspect of the exhibition save for the explanatory board that stood in the doorway.

The surface produced by the display boards, in turn, was a result of a movement of the entries themselves, which with little transformation became the content of the exhibition.

One wall stood behind the row of quick-access PCs. Lining the remaining walls were five sets of folding room dividers, each taller than the entrants and visitors. In front of each divider was a pedestal on which sat a model of a scheme within the LSE campus. Each set of dividers was lined at the top with a red banner. Against the backdrop of the banner in white letters was the alias of a team, 'Architect A', 'Architect B' and so on. On one side of the banner was the LSE logo. On the pedestal was a large red letter, the letter of a given team. Aside from the lettering on the pedestal and the presence of the red banner, what was mounted on the dividers consisted entirely of each team's six A1 boards. On each fold of a given room divider, the A1 boards had been assembled into a pattern: a column of two boards for each fold. All A1 boards remained level with one another. Here the boards themselves, rather than images and text *within* the boards, became the fundamental elements in the arrangement of the exhibition. Against the repeated ground of this pattern, what differed was the content of the boards. To walk through the exhibition was to move from one set of boards to the next, observing what differed from one submission to another. But for the wall of voting stations, the submissions in a literal sense *made up* the stuff of the exhibition.

All displays included a model on a pedestal. Only one team also displayed on their pedestal something that was *not* a model. This was a stack of A1 sheets in glossy paper, displaying renderings of the scheme along with text. In the hand-out was a set of possible affordances different than the exhibition or website: the ability to be folded, turned over, drawn on and so on, affordances of having been printed on to paper and disseminated en masse. What the presence of handouts on only one pedestal speaks to is the open-endedness of the exhibition's materiality. Teams could have a say in the exact sensorimotor modalities by which they displayed their scheme, including something small and hand-held as well as something large and immobile.

Not only did the exhibition emerge from the affordances of competition documents (COMPOSITION, BOUNDEDNESS...), it also contributed to the running of the competition. I visited the exhibition in the mid-morning of the day that architects would stand by their presentation boards. I asked each architect to explain his or her scheme, then followed up with more specific questions. While the architects spoke, they pointed at their displays, indicating and demarcating some aspect of a diagram and bringing it into focus along with the objects of their explanations. An architect could gesture from a model of her proposal within a model of the LSE campus and continue pointing, moving her hand along a street.

These, some architects said, would be the new sightlines opened by demolishing the buildings that stood in the footprint of the scheme. An architect could then motion from the model to a rendering, showing the approach to the building, and from the rendering to a plan. When one sort of diagram expressed one aspect of the narration in a more appropriate way than another diagram would, the architect could redirect the focus of her audience. Each architect stood by his or her boards, and one architect from each team was present at any one time. The result was that my engagements with the architects unfolded as series of one-on-one discussions in which the display boards became an integral part. These discussions could not have occurred as they did *away from* the display boards, as much of the conversation relied on pointing and tracing, directing attention from diagram to diagram. Since each display board occupied one segment of a curve that lined the external wall of the room, so did each conversation. The distribution of the display boards, then, afforded a separation of the architects. If one architect joined a conversation with another architect around another board, that architect's own board would go unattended.

In the exhibition, then, was a separation of architects from one another, and in the course of this, an objectification of *building as a process* (the team's capacity to act, a designerly approach) and *a building as a thing* together within the presence of the architects and their entries. At the event, architects could bring their images into focus in the course of talking about their schemes, involving both their boards and other artefacts from their studios. When visitors voted, they voted on *teams*: whether this was a building or a process of producing a building was ambivalent. This separation of architects from one another, this objectification of product and process: both were possible because of the COMPOSITIONALITY of the submission boards. Submission boards were collections of BOUNDED images, and each board was thus BOUNDED from the next. Thus a digital file of an A1 document could be printed and mounted to a room divider, the boards arranged in columns of two. Since the specific *elements* COMPOSED within each board were BOUNDED and offset, architects presenting their displays to visitors could point from one image to another in their narrations of the scheme. That is, just as architects can talk about the way an absent *juror* will shift her focus from one image to another (Chapter 5; Chapter 7), the architects themselves can choreograph the attention of the audience to the elements, and do this on the basis of complete images that have been arranged with no overlaps.



Figure 8: The exhibition, including several boards, models and the voting station



Figure 9 One display in the exhibition included a site model and handouts

9.4 Conclusion

In the previous strands of research (Chapters 5 – 8), we see different processes involved in entering competitions. These include *terms* through which architects talk about what competitions are (Chapter 5), the documents that move throughout a competition process (Chapter 6) and moments of design in the production of a submission (Chapters 7 and 8). In these discussions, a competition is *the thing* that the various processes organise around, belong to, owe their existence to and so on. Competitions become things with qualities (Chapter 5), programmes to coordinate submissions to (Chapter 6), and jurors, briefs and sites to incorporate into products with specific requirements (Chapters 7 and 8). The elements and arrangements I describe allow the competition to come together as a set of events taking place among many firms working in separation, where one firm will be selected. While it is clear that all of these things *allow the competition to take place*, we might ask what it is that makes the competition a particular kind of architectural agency. That is, we can ask what it is about COMPOSITION, SIMULTANEOUS MOVEMENT, PARALLEL TRANSFORMATION and BUILDING SCRIPTS that comes together *as competition*, rather than as some other kind of *thing*.

We might say that the competition culminates in a moment of *deliberation*, as jurors meet in a closed room and select among the entries. This is the impression that comes from the management scholarship on competitions (see Chapter 2), but also one we can gather from the other research strands (Chapters 5 – 8): architects produce a submission (or contractor-led teams produce a tender), the submission arrives at the office of the client, there is perhaps a presentation and the jury select a team. But what is interesting about the LSE case is that it combines the arrangements and elements we have seen earlier but within a separate kind of assembly, the *exhibition*. This is a moment of COMPARISON that can take root within a side-room at the library of a university just as it can within the boardroom of the jury. This is to say that competitions *work over a distance*, with many firms submitting in separation from one another, in so far as certain elements can assemble in a way that can move from site to site. Here is a kind of practical logic of competition.

In the exhibition of the entries for the GCSS competition, we see processes of COMPOSITION, BOUNDEDNESS, SIMULTANEOUS MOVEMENT, PARALLEL TRANSFORMATION and BUILDING SCRIPTS. What allows for the movement of submission materials into the exhibition is the COMPOSITION of the boards into clearly defined VISUAL ELEMENTS. That is,

the boards themselves become units of COMPOSITION, divided from one another but set alongside each other on upright dividers. The whole entry moves into the exhibition SIMULTANEOUSLY. Here the moment of COMPOSITION concludes, the work of the architects no longer going into the individual elements within the boards. At the same time, the boards have, subtly, *transformed*. They are printouts, arranged in two vertical rows and secured to the upright dividers. This is not an exhibition of architectural images alone, scattered around the room or grouped as renders, plans, models and so on. The entries are *kept apart as entries*. This is to say that once they transform, they transform IN PARALLEL. They remain in the cluster into which they were COMPOSED. Standing by the boards, the architects described the way their submissions would exist in the future, moving from one image to another in response to questions. Here they talk again about the *building*, but refer to the images, incorporating them into their narrative. This becomes a BUILDING SCRIPT of the sort we see in presentations and the deliberation of the jury (Chapter 7). But at the same time, each concept remains separate from the others.

Here the objects and practices of the competition lend themselves to moments of COMPARISON in a great variety of surfaces and situations. There is a moment of jury deliberation, yes, but also a COMPARISON of *displays* within the exhibition and a COMPARISON of *radio buttons* and *team names* within the voting terminals. On the website of the competition, visitors can click *single images* of each entry, taking them to .pdf documents of the submissions. All of these things can be COMPARED. It is important here that *what is compared* is rather flexible. At the voting terminal, visitors vote on *teams*. But here are also buildings and ways of working as well as the submission boards themselves (see the discussion of objectification in Chapter 6). What are compared here are different kinds of objects: displays, architects' performances standing near the displays. What allow for this flexibility are the BOUNDED objects of the submissions, rearrangeable into various forms (an exhibition, a .pdf...) while retaining something of their initial effect. While whatever *is compared* may change, the *lines of the comparison* stay the same. One entry is always separate from another, even as all of them become exhibition displays.

What is more, each moment of COMPARISON originates from the technologies of a single set of *submissions*, a single set of SIMULTANEOUS MOVEMENTS. The same BOUNDED VISUAL ELEMENTS provide a resource for COMPARISON in different situations. In the displays, boards are placed next to one another and mounted to room dividers. On the LSE Estates website, *individual images* (themselves BOUNDED and thus mobile) can be extracted from

the submissions and placed together on the page. And in the deliberation of the jury, individual images can be taken up in a narration, pointed to and described (see Chapter 7). The particular transformations afforded by BOUNDEDNESS, COMPOSITION, SIMULTANEOUS MOVEMENT and PARALLEL TRANSFORMATION also allow the entries to be COMPARED within an exhibition, a boardroom, a website and in countless other media.

Chapter 10

Bringing the journeys together

10.1 New dimensions of architectural practice

An architectural competition, like a building, is multiple. The competition exists in part through the design brief, but also through coverage in the architectural press; through presentations given before a selection committee, but also through the textbook definitions of a procurement route. I outline a number of *kinds* of procurement routes based on a parcelling of responsibility (Chapter 1). And in all of these routes are different kinds of competition: open or invited, based on interviews or based on submissions—the list goes on. But lingering on the definition of competitions leaves us with an empirical problem. In working in relation to the temporal stage of a project defined as a *competition*, architects have to do more than follow rules. In the course of architectural agency, in the attentiveness of architects to materials within a studio (see Chapter 2), we might expect architects to work in a way that is oriented somehow toward the selection process. Thus what raises questions for architectural research as an ethnographic project is what seems to separate the architectural competition, at first glance, from sport, video games, pub quizzes and so on: the process of *design*. As we see in the ethnographic literature on architecture (see Chapter 2), designing buildings is fundamentally stochastic, responding to unforeseen prompts, at risk of continuing without end. What is more, when we refer to architectural firms, more complex things come to the fore, and in the likes of Blau (1987) and Cuff (1992), the formal architectural competition takes place in relation to the trajectories of architects and firms. What this all suggests is something that is clear in other kinds competition (Chapter 3). The competition is complex, emerging from processes that seem to have little to do with opposition or rivalry.

Thus we move from the complexity of competitions to a multiplicity of research methods (Chapter 4). Competitions exist in (but not only in) narratives, documents and studio practices. As I followed different leads, the research took divergent paths, encountering things that have different affordances for interaction. But in asking how architectural competitions as things engage with architectural agency, it is also necessary to bring the different existences of competition back together. To move from my own encounters to a description of the architectural competition as a complex thing, a first step will be to make claims about what happens *between* the different research strands. Indeed, the

competition exists not only *in* documents or *in* practice or *in* language, but in movements between all of these. This is a matter of finding lines of commonality among the different empirical cases.

Earlier, (Chapter 3) I raise the hypothesis that competitions exist *as a particular set of objects in the studio*, such as the brief, and thus each competition exists *only* through these objects. This is to say that the *practices of architecture* do not change when put in contact with the competition, but incorporate the objects of competition as they would any other input from a client. As we have seen, this hypothesis is not entirely correct. While it is clear that architects work as they usually do at some moments during a competition (Chapter 8), the competition also adds new dimensions to architectural practice.

COMPOSING a submission board is a different task than designing a building (Chapter 7).

PARALLEL TRANSFORMATIONS and SIMULTANEOUS MOVEMENTS produce a separation between architect and client where otherwise there may be none. Both maintaining this separation and moving past it, into BUILDING SCRIPTS and thus COMPARISON, require a particular kind of technology.

10.2 COMPOSITION

One aspect of competition entries that stands out is their COMPOSITIONALITY: elements of submissions do not blend into one cohesive presence, but retain some pattern of assembly. As we see in the ethnographic literature on architectural practice (Chapter 2), buildings in architecture are multiple, existing differently in presentation models, experimental models, 3D renderings and onward. Moving from buildings to submissions, this multiplicity remains. But rather than delegate these multiples to one image that 'speaks' for all other images (see Yaneva 2009c as discussed in Chapter 2), submissions carry the heterogeneity of elements all the way through to selection. Elements remain visually separable while travelling together.

COMPOSITION is a running theme in the way architects talk about their firms' work within competitions (Chapter 5). Producing a response to a PQQ involves *assembling* entries from a library into responses to questions. And when architects talk about the makeup of their submission boards, they talk about the perception of jury members in terms of *choreographing elements*: looking at this image first, then this text, then these supporting images and so on. Architects talk about GENERIC CATEGORIES, all of which come together

to COMPOSE the firm's submission: a design, a PQQ, interviews and so on, separate tasks for separate events that are nevertheless parts of a single competition.

The practical logic of COMPOSITION is something that takes place not only within the competition, but also throughout a project, as long as the client, consultants, architects and contractors work in separate offices and come together at formally designated meetings (Chapter 6). The competition emerges from the same basic movements that propel the rest of the project. One clearly COMPOSED document is the planning application, which collates the drawings of an architectural firm along with a design statement and reports from consultants. Each document carries its own pagination, a separate set of logs, distinctive colouration and so on. Another clearly COMPOSED document is the 'Invitation to Mini-Competition', which might include a design brief, a statement of the competition rules and a sketch of what a plan of the building might look like, each a distinct document with different logos, letterhead and pagination. What moves through the project is not a single, developing scheme, but always a cloud of distinct elements.

Thus when architectural students learn how to produce competition entries (Chapter 7), they anticipate a situation in which their submission moves not as a single object but as a constellation of related *things*. When instructors and students make comments on a submission board, they do so in terms of *different possible effects*, each unrelated to the others, the group held together only by the board itself. Further, one task for architects producing a competition board is to COMPOSE the images in such a way that the viewer can *see them* in an appropriate order.

We might speculate that it is this practical logic of COMPOSITION that marks the shift that the architects of OMA told me about, a shift testing and production (Chapter 8). During my visit, the architects responded to conversations, requirements in the brief, the comments of passersby and the implications of moving this or that bit of foam in this or that direction. What they incorporated these responses into were aspects of a *building*. But in one architect's description of the process of producing a competition entry, the focus shifts from the *scheme* to the *submission*. The focus becomes the COMPOSITION of the boards: which images to include and where to include them.

This all suggests that the multiplicity of the competition entry is different from the multiplicity of buildings within the studio (as in the ethnographic literature on architecture I discuss in Chapter 2). In the studio, a building is multiple insofar as it is only partially

visible through any one technology. In the plan is still the same building as in a small foam model, but the plan cannot ‘speak’ (as in Yaneva 2009a) the same way a foam model can. The two cannot replace one another, and can only form a ‘design’ of the building as two separate artefacts gathered together. In competition entries, different images and blocks of text present different versions of a building (or operational capacity, as in Chapter 6) in the same way, but with an important difference: it is a submission board, PQQ response or presentation that the architects are producing, not a building. If the design of a building exists in hundreds of artefacts, the submission can only invoke dozens. COMPOSING the submission becomes a distinct architectural task.

10.3 BOUNDEDNESS

Architects produce submissions as constellations of VISUAL ELEMENTS, responding to a brief the VISUAL ELEMENTS of which are just as constellated. At the same time, the elements of a competition entry can be *separated* and *moved*. Within the competition is a practical logic in which elements detach and move separately.

As interviews with architects show us (Chapter 5), architects are able to *analyse* competitions by talking about them as different kinds of associations: extensions of a firm’s trajectory (divided into building type, market, tendency to collaborate and so on), particular documents or periods of work. When architects find notices of competition and talk about them with colleagues, what they do is discuss *aspects* of that competition. And in news stories, a regular focus is the organisation of new competitions and, at times, the *disorganisation* of abandoned procedures, as the occasional client cancels the selection process or tells the architects to go back to the drawing board. Competitions in this case are contingent in that they are both assembled and capable of disassembly. And what is key is that the lines along which the disassembly takes place are not necessarily the edges of the original components. What comes together as a complex whole can be analysed in speech as a collection of qualities.

This is the difference, then, between the COMPOSITION of competitions themselves (as architects analyse in Chapter 5) and the COMPOSITION of VISUAL ELEMENTS within design briefs, submission boards, PQQ responses and so on. In the latter, VISUAL ELEMENTS suggest the basis of their own separation: white margins, solid lines, sub-headings, pagination—all offer ways of separating one element from the others, of transforming the elements in parallel. The COMPOSITION of the competition itself can be described in a

number of ways, irrespective of particular documents. Where the two versions of COMPOSITION overlap, and the reason I denote both with the same concept of COMPOSITION, is in the tendency of the competition to *avoid being black-boxed* (see Chapter 5). Aspects of procurement routes can be mixed and matched. Competitions feature a regular set of categories (client, budget, when the brief appears, whether architects team with contractors and engineers...), but what each category entails changes for each contest. Architects are aware that the competition is a cluster of elements, and those elements move between sites *as a cluster*. In their studios they respond to one COMPOSITION with a COMPOSITION of their own, different elements of *their* COMPOSITIONS addressing different elements of the *client's*.

Constellated, COMPOSED object-collections move through the competition until they separate. This is especially clear in the analysis of documents within one project (Chapter 6). An 'Invitation to Mini-Competition' calls for the different contractor-architect teams to prepare a tender that is divided into subsections. Each subsection then transforms into a separate line within a spreadsheet. Another object moves as well, the presentation, inscribed in the notes of the meeting attendees and recalled as something to compare beside the spreadsheets. As with the practical logic of COMPOSITION, mobility takes place all throughout a formal competition, where events are defined in advance and the participants work in separate offices. We see this in the planning permission: the document arrives as a *numbered list* of conditions. The list is a COMPOSITION of BOUNDED elements. The management team isolate one condition from the list, then commission a report to change the wording of that condition (and that condition alone). Elements of the permission, like elements of the tenders, can be separated from the rest and considered on their own. BOUNDEDNESS becomes one way in which *things* move through the project, and the tenders move likewise.

In one sense, then, the mobility that takes place through the transformation of sections within a tender into rows within a spreadsheet has a similar pragmatic structure to the crits of submission boards that take place in Atelier Eco (Chapter 7). Within the spreadsheet, submissions split into answers to questions: how the team has chosen its members, what the impacts would be to the local community, how the team would alter the programme and so on. Just as the spreadsheet divides the tenders into items and scores each item separately, the audience at the Atelier Eco crits comment on separate images within the submission board: large renders, smaller exploded technical drawings, site plans and so

on, as well as qualities *of* those images. What this movement allows is for *further* COMPOSITION, putting elements into new arrangements without affecting the basic fact of *what those elements are*. The lines within the 'Evaluation Tool' look very different from the questions within the 'Invitation', but still *act as* the questions within the moment of evaluation. The ability to recombine the questions from the tender as lines within a spreadsheet owes itself to this BOUNDEDNESS of elements, as does the ability for jurors to recall different elements of entries and recombine them as narratives about the future (see Chapter 7).

Throughout the competitions I encountered, then, elements that circulate from entrants to clients and from clients to entrants are COMPOSED of parts that remain identifiable as parts, and readily divisible. Some visual elements are divided along the same lines as they had come together: responses to individual questions within the tenders; complete images within the submission board; conditions of planning permission. Other things are separated along other lines, as we see when student architects talk about things like *typeface* and *lighting* (Chapter 7) or when architects I interviewed talk about dividing competitions into hours of work (Chapter 5). The implication in all of these cases is that things in the competition can *move* insofar as they can *split from the whole*.

10.4 SIMULTANEOUS MOVEMENT

While the relations between VISUAL ELEMENTS, as movement and COMPOSITION, features centrally within the competition, also important are qualities of the elements *themselves*. There are moments in which the circulating elements include what we might call DEPICTIONS OF PROCESS. That is, actors do not simply prepare elements to release into a broader set of movements. At the same time they produce things that *convince*.

The presence of DEPICTIONS OF PROCESS is clearest within the discussion of competition boards among the students of Atelier Eco (Chapter 7). Student teams do COMPOSE the boards out of complete, bounded, identifiable images, but they appear to choose these images out of a concern for the effects those images have on a viewer. It is not enough to include a plan, a render, and a series of elevations showing the path of the sun. Each image, each *arrangement* of images, has to be compelling. And what it means to be compelled can only be talked about: there are no jurors on whom to test theories. Even when the architectural school holds its own competition and invites the jurors along, the deliberation takes place away from the student teams. We might say, then, that the sort of

expressiveness that appears within the artefacts of competition emerges from a similar set of conditions as patterns of COMPOSITION and mobility: conditions of separation between the participants, who relate to one another by sending documents.

And with DEPICTIONS OF PROCESS comes SIMULTANEITY. Before the contractor-architect teams send their tenders to the selection team (Chapter 6), *all* the information for all the responses is brought together: there is a complete tender document to send. The fact that the tender document would be complete seems plain but for another tendency of the project: before big submissions are pooled together, things seem to circulate in overlaps. Minutes of meetings have participants waiting two unforeseen weeks for one document while talking about another they have just received. But by the time the planning application or the 'Invitation to Tender' goes out, everything that had once moved document by document into the possession of the client team moves as a whole, simultaneously, to another office.

The act of convincing, then, takes root in other aspects of the architectural competition. Again, it is a matter of separation. The students in Atelier Eco speculate as to the effects of adjusting shadows and blurs out of a situation of removal from the jury. And when one set of actors in the school project (Chapter 6) *submit* to another set of actors, whether to enter the competition or to apply to change the wording of the planning permission, they subject what they send to another agency's procedures and techniques. Thus the 'Invitation to Mini-Competition' encounters the contractor-architect team's technique for putting together a tender; a planning application falls into a council's way of working; and the client's application for funding follows the Education Funding Agency's application process for Studio Schools. These moments of expressiveness are thus moments in which one set of agencies gives way to another.

10.5 PARALLEL TRANSFORMATION

Jurors for design competitions choose between submissions in a moment of deliberation (Svensson, 2009; Van Wezemael et al, 2011a; Volker, 2012). As we see in the management literature (Chapter 2), it is possible to describe the deliberation of jurors without referring to the objects they compare. As we see in the selection of an entry for a small competition among architectural students from two universities (Chapter 7), the seeming immateriality of the deliberation can follow the practices of the jurors. For the jurors talk about concepts, give the concepts categories, summarise *new* themes and

make *new* connections between a given scheme and the intentions of the client. To get to the point where jurors seem to be choosing among *schemes* as they discuss submission boards, score sheets or notes on presentations, there has to be a series of transformations. What an architectural firm *submits* may not be the same thing as what a jury evaluate or what visitors to an exhibition look at (even though, all throughout, these things are called ‘submissions’). At the same time, the *things* that transform are kept apart. This is the case of both *submissions* and the *elements* of submissions. Both tenders for the Studio School project are translated into spreadsheet rows (Chapter 6), but in separate worksheet tabs within the Excel file of the ‘Evaluation Tool’. And within the LSE exhibition, separately submitted entries are kept apart as freestanding displays, radio buttons within an online survey and web-based .pdf documents (Chapter 7). And finally, separately submitted boards gives way to a separate narration of BUILDING SCRIPTS (Chapter 7) by both jurors and presenting (student) architects. To ready a board for travel is to anticipate one process of transformation in parallel with others.

10.6 PHASING: from COMPOSITIONS to BUILDING SCRIPTS

One striking feature of the procurement route as a formal definition (see Chapter 1) is the absence of *buildings*. Instead, we get descriptions of the sorts of relationships out of which a building emerges. One party produces the briefing information, another, perhaps the same party, produces the concept, the technical information and so on. The division of duties can be narrated regardless of the building. For the definitions of procurement routes of the sort we get in Clamp et al (2012) can refer to building projects that have not yet taken place. The question of architectural competition as a part of procurement, then, contends with this issue: actual architectural processes meet potential architectural products (as in Chupin et al, 2004). There is a complex relationship to the buildings themselves. And as we see in the discussions of (student) architects preparing submissions in the studio (Chapters 7 and 8), what the images (and perhaps blocks of text) that designers engage with *are* has to do with *what the architects are preparing*. Thus architects may proceed with their usual design practices for much of a project, even when that project is a specific kind of competition (see Chapter 8). There may well be questions about whether a ‘concept’ is clear enough for a jury while architects work on a *building* (as in Kreiner, 2013), but there are plenty more questions about circulation, massing or location within the site. Later, architects worry about whether this render or that one is more convincing. Architects produce a *building* at one moment, a *submission document* at another. I call this PHASING.

In the studio, the reality of the building seems to depend on whether the *thing* a team is producing is an *object of submission* or the *scheme itself*. When student architects evaluate the submission boards of their peers and hear comments from instructors (Chapter 7), they talk about the effects of images, rather than the qualities of their schemes. That is, they take the scheme itself as a given and take as problematic the visual and textual techniques they will use to *convey* the scheme to an unseen jury. When I visited OMA (Chapter 8), the team had a different focus, the scheme itself. There was no questioning the way a jury would react to this or that render. Instead, they talked about the most space-effective way to accommodate thousands of conference-goers or whether to arrange small auditoria as a sort of village within a larger volume. Architects working within a competition worry about how a *building* will be, but at some point they shift focus and discuss the effects of a *submission*.

This issue of what a building *is* within the architectural competition may be the most fundamental to the question of how competition and architecture engage with one another. This is a question I pose at the start (Chapter 1): How do architects design competitively? What is it to follow a client's requirements but also anticipate the indeterminacy of selection? What seems to be the case is that *building design* as a process differs entirely from one configuration of competition to another. In one situation, an architect-contractor team may piece together evidence of their working methods. In another, a team of architects may speculate as to whether a jury will see a floor-mounted mirror as 'dangerous'. Or they may spend days not talking at all about what will go in the final submission. The upshot is that *the ontological quality of buildings* responds to the *configuration of the competition* as a set of documents and relationships.

10.7 COMPARISON

In their analysis of *calculation*, Callon and Muniesa (2005; see Chapter 6) describe comparison as the end of a process of movement and transformation. Things are objectified and removed from one set of relations, the world of a seller, and placed within a new set, those of the buyer, where they sit together within a site of calculation. The buyer compares the objects within the site and makes a choice. As we have seen in the discussion of the documents within one mini-competition (Chapter 6), architectural competitions work through a process that is similar to calculation and that has much to do with the BOUNDEDNESS and COMPOSITION of different documents and their VISUAL

ELEMENTS. And like calculation in Callon and Muniesa's model, the documents within the mini-competition give way to a moment of comparison: a selection meeting.

As we see in the analysis of the LSE competition's exhibition (Chapter 9), comparison can produce movements and allow for the same competition to shift between sites. Within a single design competition there can be comparison at an exhibition, comparison within a website and comparison within a boardroom. This is to say that detachment not only *precedes* comparison, it can take place *alongside it* as well. Once objects have been positioned together, they can be *transformed together* as well, brought into new sites and new sets of relations. This is not to refute Callon and Muniesa (2005); their analysis already presupposes that the elements of a calculation can transform alongside one another. What this notion of calculation makes clear is that comparison is not only something people do, but something that is *put into place* through a set of relationships between objects and practices.

What we find in architectural competitions are not only moments of COMPARISON but also relations of COMPARABILITY. And COMPARABILITY, as a set of PARALLEL TRANSFORMATIONS sustained by COMPOSITIONS of BOUNDED elements, shifting from one set of relations to another through SIMULTANEOUS MOVEMENT. The comparison itself takes place through a kind of BUILDING SCRIPT, but that is not the end of COMPARISON. So long as submissions undergo new PARALLEL TRANSFORMATIONS and move together into new sites, there can be new BUILDING SCRIPTS: as presentations, jury deliberations and explanations of exhibition displays.

10.8 Conclusion: Objectification, detachment, COMPARISON

As long as a client has solicited multiple submissions from firms and a *selection* takes place between them, we can expect to find architectural agency unfolding in certain ways. For one, there is usually a separation between clients and competitors. The act of *submitting* detaches the submission from the architect and puts it in the hands of a selection committee, who can then choose *between* submissions. This is the case whether the submission involves a design or statements about capacity. And the selection of a submission renders some questions about the reality of the submission irrelevant: are we selecting a firm or a building? Is this a claim about the future, the past or the present? Who are the firm, exactly? All of this is objectified within the submission. But as the

submission is also a complex *thing*, the building multiple, it remains as a constellation of parts.

And as we see in the discussion of COMPOSITIONALITY, the parts that come together within the submission join a pattern of movements where what move are clusters of elements. The elements of submission boards, tenders, prequalification questionnaires, like the elements of planning applications, can be split, the elements treated solitarily, or they can be rearranged and recombined, into an exhibition (Chapter 9), a spreadsheet (Chapter 6) or the deliberation of a jury (Chapter 7). What is key is that the elements move from one situation into another, but also that they *resist unification*: while they travel together, they do not converge into a single thing.

Adding to the constellated quality of the submission is a particular kind of mobility. In the first process, images and documents are BOUNDED and COMPOSABLE. The images themselves are bounded and self-contained, even if a viewer takes them to represent a single thing. A plan can work in concert with a render and an elevation to evoke or represent a building, but it is also possible to view the plan alone. Thus submissions are *gathered* or *corralled* (the word architects use is 'collated') rather than *merged* or *combined*. Documents in a planning application retain the letterhead of their producers, creating a menagerie of logos (Chapter 6); criticism of a submission board can point to individual elements or the COMPOSITION of the whole surface (Chapters 5 and 7); a tender treats each question from the brief as a separate section (Chapter 6). While these things travel together, individual elements exist in visual separation.

At some moments, constellations of elements, their movements staggered or delayed, reach a moment of simultaneity. They move all at once from one set of relations into another. During the process, they lose one capacity to change and gain a new one. The architects who submit an A1 board can no longer alter the images, but the jurors can discuss them in a new order (Chapter 7) or place them in an exhibition (Chapter 9). Receiving the elements, one agent becomes equipped to act on another: the award of a contract; permission for planning; a grant for the procurement procedure. The production of the elements anticipates both the changing of hands and the agency of the receiver.

And in working on the submission as something that eventually changes hands, architects treat the submission as distinct from a *building*. A submission pools everything the firm has produced so far into a single movement between offices. No submission will *include*

everything, of course (there is only so much space in an A1 board), but nothing outside the submission will make the journey. A building, even a potential building, can sustain what often seem to be infinite partial views, new tests, another kind of drawing, photographs in all weather conditions. A submission, requiring finitude, becomes its own kind of complex, collective *thing* (as in Latour, 2005b).

What is unique about architecture in competition, then, is a combination of objectification and detachment, anticipating a moment of COMPARISON. The world of architects and building projects is filled with submissions. Clients submit planning applications, architects submit drawings, consultants submit various reports, and as long as there are firms hiring one another to perform different duties within a construction project, there will be finished documents moving from one site to another. Similarly, the objectification of architectural process and architectural product as simply 'a building' is a starting point for architectural theory, and what ethnographers of architecture have self-consciously moved away from (see Chapter 2). Where the architectural competition as a formal event is unique is where objectification and detachment *combine in a particular way*: the objectification of a team (and a building) in an entry and the movement of the entry outside the studio, within a place arranged by the client, *in parallel with other such detachments*. In a sense, then, we have returned to the sort of process that Callon and Muniesa (2005) describe as *calculative agency*: things *detach* from one situation and enter another, enabling a COMPARISON to take place. It is this moment of COMPARISON that sets the competition apart. But to arrive at a COMPARISON requires a particular process of objectification and travel. And this process of *preparing objects for transport* is what we might call *collation*. This is the junction between architectural agency and architectural competition, where the process of designing a building contends with the pragmatic possibilities of distance between sites. While the architects themselves do not perform what Callon and Muniesa describe as *calculation*, they *do* participate in a process of making things calculable, producing objects that are COMPOSED and *separable* and thus subject to transformation within the offices of clients.

Chapter 11

When architects submit

In examining the architectural competition, I position this research at the intersection of formal definitions and everyday practices in order to address a gap within recent STS-inspired, ethnographic research on architectural practice. The architectural competition becomes a problem for research only when we look at ethnographic studies that reveal architectural work to be steeped in the 'materials of a situation' (Schön, 1995[1983]: 78). Of the *specifications* of what a competition will be like and how it fits into the procurement route as a whole (Chapter 1), these exist alongside a kind of architectural work that is attentive to the unexpected. The research that does exist on architectural competitions comes mainly from management studies and emphasises discourse and categories for seemingly immaterial processes like strategy and judgment. This study of competition, then, contributes to the recent tradition of STS-inspired anthropological work on architecture while pointing to some overlooked areas within the management literature on architectural competitions.

We come away with three contributions to recent studies of architecture and competitions in the ethnographic, STS-inspired corpus. First, competitions have implications for an understanding of architecture as something *relational*. It is already clear from the recent ethnographic literature (see Chapter 2) how architecture unfolds as a set of relations. As research focusing on the objects and practices of architecture demonstrates, any vision of a master designer has to contend with a gauntlet of situations, objects and practices, where of carving models, talking about diagrams, meeting with clients, consulting archives and so on, each has its own potential for organising practice. Thus while 'vision', 'style' and so on finds its *limits* at these points, it also unfolds *through* them, becomes impossible without them. What the competition reveals is another dimension to this relational process. It is not only the case that *buildings* are distributed partially across many situations. Also distributed is a more fundamental question of *what the architect is doing*. Architects objectify their work in various different ways. In the competition is one: a submission that can detach from one firm and travel to another. In the competition it is not just the building that is objectified, but a team's way of working. Architects must select from hundreds of objects those that will make it into a submission, coming up with a board or a document that can be taken to say, 'This is the firm'. This objectifying aspect of

competition, as a basis for the comparative aspect (this entry or that one), has received little if any discussion in recent ethnographic work on architecture.

The second contribution has to do with the relationship between language and practice. In the ethnographic literature on architecture we see a horizon moving forward in increments, the question of what comes next for a building revealing new answers as architects encounter new possibilities for their models and diagrams. The architectural competition adds to this picture. While architects still work in iterations, moving along the contours of the unexpected, they are also aware of *categories for process*. In the case of the competition, we see categories for a sequence of events that begins with a client's requirements and ends with the selection of a firm, a design and a building process. These categories do not just exist *outside* of practice (as post-hoc abstractions) but operate *within it*, becoming a constant reference point. Even while competitions are not always present within the studio, they nevertheless become an important *thing* within the working lives of architects. Thus a focus on competitions offers to expand the scope of the STS-inspired research from opening up the 'big thing' of the building to include another 'big thing', the competition, with its associated claims about how a not-yet-begun architectural project will unfold.

The third contribution is methodological. For ethnography, competitions are elusive. They take place across many sites at once, and might end after three months (versus the year or more it can take to develop a design outside of competition). In drawing inspiration from the ethnographic literature on architectural practice, then, I encounter a range of technologies, surfaces and scales, encounters I have called *ethnographic journeys* to distinguish them from conventional ethnography. Here we can keep the competition in sight even as it exists as a complex, ontologically uncertain *thing* (Latour 2004, 2005b): existing in documents, speech, submission boards and studio practices. Thus for certain 'big things' within a given construction industry, 'big things' that are absent or fleeting within the studio but present in the industry discourse, it may be more revealing to adopt this multi-stranded approach within a variety of sites than to remain within a single architectural firm. This approach can introduce other kinds of objects as research problems within the STS-inspired literature, such as the 2013 edition of the RIBA Plan of Work, which is both a 'small' diagram and a 'big' categorisation system and exists at various different sites. Thus this third contribution has a distinct role alongside and independent of the other two: acknowledging the observation that some 'things' in

architecture exist between as well as within studios, and responding by adopting a number of research methods to engage observationally with multiple sites and surfaces.

Architectural agency thus takes on a complex relationship with architectural competition. In one sense, architects must *give themselves over* to another set of agential relations. What the architects design, how much detail this involves, how things come to exist on the page—this all depends on the client’s specifications within briefs and briefing meetings, structuring the time of design as well as the way the multiple, partial, distributed building comes together. In another sense, the competition *adds to* a set of architectural practices that would exist otherwise. And after the moment of objectification and detachment, when the jurors have selected a firm or a design by *narrating* it, it becomes possible to say that the competition entry was a ‘concept’ all along, divorced from any particular documents or materials, the mental image of one architect compared to five other mental images. The competition thus equips a certain kind of agency while also concealing it, replacing it with an apparently immaterial process.

11.1 First contribution: architects and relationality

Much of the present research takes its cues from STS-inspired ethnographic fieldwork with architects (Chapter 2). What the ethnographers have described is something we might call *architectural agency*: what architects do, the course of design, unfolds as a set of practical relationships with their environments. Following this body of research, I set out to explore architectural competitions as technologies (Chapter 3), where the elements that make up a competition present different affordances for engagement. Since competitions in descriptions of procurement routes (Chapter 1) seem to be such *immaterial* processes, the question of how competitions engage with architectural practice offers to reveal new dimensions of each.

One implication for this literature is to question the assumption that architects design buildings. It is already clear that to ‘design a building’ is to produce a range of objects, each of which requires a distinct set of practices (see the diversity of practices and situations in Yaneva, 2009a and Houdart and Chihiro, 2009). Architects work differently when feeding a block of foam through a heated wire than they do when hand-making a model using the lines of a plan as a source of measurement. We might say from the ethnographic literature that what architects *design* are buildings but what they *produce* are drawings, models, sketches, reports and so on.

But the empirical figure of the competition adds a layer of complexity. One conclusion from ethnography with architects is that buildings are necessarily incomplete. Each object offers only a partial view, and a building only emerges somewhere within a great horde of objects. But at the same time, there are moments in which we get a *total view*, or something that others *take as* a total view: the submission. For a jury will decide a competition based on specific objects and events. Thus architects prepare submissions *as final products*. This is particularly clear when architects talk about submission boards (Chapters 5 and 7). To COMPOSE a submission board is to anticipate a situation in which *the architect has nothing more to add*. Everything there is to be said has to be said within the elements, or within a movement *between* elements. The building remains a multiple object within the submission board, but for the jurors, the submission *is* the building.

For the STS-inspired ethnographic research, one implication of the notion of the deliverable among architects is a more contingent picture of the architect as a participant in collectives. In the likes of Cuff (1992) is an interest in the figure of *the architect* as a designer of buildings. This is a role with roots in the Renaissance separation of drawing from building and the Beaux Arts separation of architecture from entanglements with clients. These texts trace a lineage of the *architect* as a stable category. What the figure of the deliverable speaks to, though, is a more relational picture. Even if architects are fundamentally draughtspeople and owe this role to certain historical transformations, from project to project the architect becomes a different kind of actor, defined in terms of particular relationships with objects: meeting with a client once a month to talk about a brief; working in a project office within the headquarters of the client while encountering project managers regularly in corridors; a contractor who has purchased a site and wants an architect to take the scheme from concept stage to planning. This is a contribution to an emerging theme within the STS-inspired literature on architectural practice: the roles of project participants, including what it is to be an ‘architect’, shift with configurations of technology. This appears to be the case in the diversity of human-object relations that unfold within a project (as in Houdart and Chihiro, 2009) or the new job titles that emerge with computer simulation (as in Loukissas, 2012). The present research thus further demonstrates within the STS tradition that not only is the *product* of the architect relational, so is *the very fact of what the architect is doing*.

This is to make a claim about what architectural competitions are competitions *between*. What compete may be single architects; architectural firms; interdisciplinary teams of

architects, contractors, engineers and local partners; developers who have hired architects; many configurations. What the competitors submit is subject to just as much variation, from cost plans and concept designs to technical designs and PQQs. Thus architectural competitions are not competitions between *architectures* if architecture is taken as simply *a building or the design for a building*, the kind of monolith Yaneva (2012) wants to dismantle. Instead, competitions take place between *architectural configurations*, where architecture is a kind of relational process that pulls in a slew of objects (diagrams, drawings, emails, reports...) and practices (meeting, modelling) where throughout the process the building is both partial and multiple. The competition produces a series of objectifications of architectural relations. Of the consultants, software packages, managerial routines and so on that make up the life of firms who work alone or together on competitions, the competition makes these things capable of travel and of communication. In the end, the competition makes it possible to choose between *submissions*. In the submission is an inscription of a firm's relationality. It is not, 'What is the most suitable building?' but 'What is the most suitable convergence of design practices, correspondence with consultants, and so on?'

We can thus describe the break that formal architectural competitions pose from, for example, a client commissioning a firm directly, through the question of *what the architects are doing*. For in different situations of architecture are fundamentally different kinds of products. With each product is a particular set of relations to a building as a configuration of multiple, partial objects. The building is not the *product* of architecture, but something that is present throughout the process, the aim and the motive. In terms of what the architects are *doing*, though, we also attend to what leaves the office and what enters, as well as the channels through which this circulation takes place.

We might say that what distinguishes the competition is not only the presence of *potential* architecture (as in Chupin et al, 2004) but particular kinds of products, relations and circulations. That is, what distinguishes the competition is the submission, a product that *objectifies* the multiplicity of architecture into a set of documents and, through the affordances of those documents, *detaches*. This product moves from a situation in which it responds to the work of the architects to one in which it no longer does, where instead it comes to represent them. While detachment and reattachment have been discussed in relation to actor-network theory and in the context of competition before (see Callon and Muniesa, 2005; Callon, Méadel and Rabeharisoa, 2002; Le Velly and Goulet, 2015), there

has not yet been an analysis of this process within architectural competition or among ethnographic accounts of architectural practice.

Just as prominent as the comparative aspect of competitions, then, is this aspect of objectification. One prevailing concern with the competition as an outgrowth of architectural practice is the fact that one submission will be selected while others will not. Lipstadt (2009) talks about competitions as an 'experimental tradition' in so far as competitions allow otherwise obscure architectural forms to gain publicity and perhaps a place on the ground. The notion of 'potential' architecture (Chupin et al, 2004) brings out the competition's association with presenting alternative states of reality, as though we could ease a scalpel through some collective architectural mind and fold back the skin to reveal all the best options that the practice of building design has available. Here the focus is on the architecture as a result. Competitions compare designs for buildings. What my research has shown, however, is that what distinguishes competitions is also a process of objectification. The possibility for a client to decide between options does not exist without the production of the option as something that captures the totality of a firm's operations while moving out of reach of its agency.

Thus as long as architectural firms enter competitions, competitions enter architectural firms. The competition is not simply a matter of designing a building 'as usual', sending off the drawings and crossing one's fingers. The competition presents its own tasks *in addition to* the tasks involved in producing models and drawings: a task of objectifying the firm. As we have seen (Chapter 8), architects in competition take part in some of the same practices as they would for a commission. But in addition to these are the practices that come with *the submission itself*: COMPOSING images and text into a board, a tender and so on. Architects work on a building (multiple, partial...), then they work on the objectification of that building, the objectification of their own design practices. The competition thus suggests the extent to which architects objectify their work differently in different situations.

11.2 Second contribution: language and practice

One contribution of this research is to give more prominence to competition formats and procurement routes within STS-inspired studies of architectural practice. What seem like abstractions, descriptions before or after the fact, become active within practice. Competitions exist not *outside* of architectural practice but *through* it. This is to say that

among the things that populate the lives of architects, things they work on and care about, one such thing is the competition. As categories for procedures, architectural competitions have fraught relationship to architectural practice. Architects respond to competitions or follow competitions, yet the competition only *appears within the studio* at certain fleeting moments. A project team might be testing different arrangements of plan diagrams against foam massing models as they usually do, yet on one computer is a copy of a competition brief, as an architect works on converting the schedule of accommodation into further diagrams (Chapter 8). That is, the competition becomes present, but in parts and at the periphery. But while the competition is not ubiquitous as an actor within a studio, within other sites it predominates. In a project programme, the competition defines a period of months, subsuming other activities. In the architectural press, the competition mobilises debate. And at certain moments within architectural practice, the competition itself takes precedence over the building, bringing with it particular tasks, particular documents, that must be completed. The architectural competition thus points to the presence of seemingly transcendent concepts (selection processes, procurement routes...) that, even when they are absent within the studio, circulate through the press, architectural education, RIBA guidebooks and the documents through which a project moves.

The management literature on architectural competitions is notable for taking the competition as an explicit object of research. It is also notable for emphasising speech, writing and categories that can describe both actions and programmes of action: 'strategy', 'judgment' and so on. This approach seems opposed to that of the STS-inspired ethnographers of architectural studios, where architectural agency (Chapter 2) takes root in the affordances of specific, singular objects. But what an investigation of competitions through a variety of encounters (as in Chapter 4) has shown us is that the architectural competition as a set of technologies gives us something more complex than a 'materialist version' of the management scholarship. For we still see DEPICTIONS OF PROCESS within the documents, practices, images and so on that circulate throughout the competition. In moments of submission, what acquire efficacy are the elements themselves, images and blocks of text, depicting futures or evoking capacities (Chapter 6). There is still a role for images and texts as representations (as in Tostrup, 2009) within the architectural competition.

But what is critical is that in the competition, any text is *circulating* text. And more broadly, much of the *speech* that takes place during the formal architectural competition takes place in situations that owe themselves to a particular kind of separation. That is, material qualities like *distance* and *place* make a difference. What is more, the process of *collation* does not flow deterministically from the work of design. For any scheme can include many different COMPOSITIONS. Thus while jury deliberation is a central element of the competition, it is *only* central as an outgrowth of other processes: an awareness among architects of BOUNDED, COMPOSABLE documents (Chapter 5); a visual-material structure of certain documents that lend those documents to travel, translation and commensurability (Chapter 6); and a process of COMPOSING a submission board where *questioning the board* takes place *in addition to* questioning the scheme itself (Chapter 7). A competition, then, is more than a process of strategic deliberation. In the management literature we see deliberation at various points in the process. Architects deliberate over how to read a brief and which concept to organise their design around (Kreiner 2009, 2013). Consultants deliberate over how to word the brief (Silberberger 2011). In none of these situations do we see particular documents: what documents do is carry out the result of the deliberation. But what we see from an examination of competitions that privileges the material is the importance of what takes place *between* these moments of deliberation: the circulation of documents, and the technologies that allow them to circulate.

The moment of the jury deliberation, the production of the jury report, the expressiveness of the entry—all these might appear as *discursive* processes but are possible only within a set of processes that are also *material* and *pragmatic*. What my research points to, however, is not a ready division between the material and the immaterial, discourse and practice. While the competitions scholars do emphasise immaterial processes in their writing, there is a case to be made that the very technology through which the competition emerges lends itself to a suppressed attention to objects and surfaces. Participants in formal competitions encounter narratives about *how the competition will proceed* even before any work has been done (Chapter 1), and when work does take place, it is often to put the activities of architects, contractors and managers in contact with a project programme (Chapter 6). And when architects make submissions, these are often textual by requirement. PQQs are usually writing assignments (Chapters 5 and 6). And even when the submission is a set of images, the images become anchors for conversation. For fifth-year architectural students, conversation take visual elements of submission boards as both a prompt and the object of comment, while deliberating jurors talk about

schemes or *concepts* without reference to particular images (Chapter 7). Even when we *do* consider objects, then, the practices that make up the architectural competition often point the actors away from them, giving prominence to conversation and narrative. It could be that in the technologies of competition, architectural agency becomes describable within a linear, immaterial process. Thus while recent ethnographies of architectural practice have unpacked one 'big thing', the building, in order to investigate the objects that move and transform in the process of building design, other 'big things', such as competitions, are interesting in themselves.

We have seen how competitions *do* take place alongside narratives of linear progression (Chapter 1), what in the discourse of the construction industry is called a *procurement route*. In practice, this means that architects work on *deliverables*. When architects choose which images will go in a submission board, what they do *not* talk about is the scheme itself (Chapter 7), just as when architects talk about a scheme, what they do *not* talk about are the submission boards (Chapter 8; the ethnographic corpus as described in Chapter 2). The submission, as a deliverable, gives the architects entry into an ensemble that makes it possible to say 'this project is linear'.

11.3 Third contribution: methodological journeys

While the research that led me to raise the question of the architectural competition (Chapters 1 and 2) is ethnographic, the methods with which I conduct the research are mixed. Inspired by one, I proceeded with the other. The use of a multi-stranded approach to study a complex *thing* might thus be taken as a contribution of my research for studies of architecture and architectural competition. I began the research with the figure of the architectural competition, a *thing* that makes regular appearances within the architectural press and that has mobilised a dedicated branch of management studies in journals and academic conferences. My goal was to take this seeming phenomenon of language and investigate it in architectural practice: how something that appears to exist *outside* of practice comes to matter within the studio. What came to bear upon my research was one basis for the appearance of the competition as something transcendent and abstract: its multiple existence. To follow the competition would be to follow it through its various sites and arrangements: documents, spoken statements, studio classrooms and professional offices. A possible lesson from this research is that as long as a researcher begins with a *concept*, *category* or *thing* and investigates the practices that mobilise around that thing, they can expect an indefinite range of surfaces, modalities and sites to present

themselves. Thus if the scope of the STS-inspired research on architectural practice is to expand to include 'big things' beyond buildings, this scholarship can benefit from the flexibility of multi-stranded research.

This open approach offers competition research an opportunity to expand its engagements with architectural practice. For both the ethnographic literature on architectural work and the managerial literature tend not to discuss moments in which architectural firms prepare for competitions within their studios (see Chapter 2). One reason for this seems to be that competitions are ephemeral. It is difficult for a researcher who wants to conduct a long, traditional ethnography to gain ethical clearance and plan months of participant observation around the possibility that a firm will identify a competition announcement and produce a submission. For such a possibility can take place suddenly after months spent developing designs for current commissions. The scope of ethnographic research on competition would thus benefit from a more flexible definition that can accommodate multiple firms and venues.

One advantage of the multi-stranded approach is in describing a complex, site-spanning *thing* like the architectural competition. Competitions do exist in some way within the life of the architectural studio, but in ethnographies of studios, we do not tend to see moments of competition. For much of what takes place in the leadup to a submission seems to be *the usual business of architecture*, or what would take place if the firm were preparing for a private commission by a repeat client. In my short visit to OMA, for instance (Chapter 8), what goes on within the studio is the same sort of accumulation and continuous learning that had taken place when another team at the same firm were commissioned to produce a museum extension ten years prior (see Yaneva, 2009a). It is only in the moments when architects are producing *the submissions themselves* do we see the competition become explicit as a matter of concern (see Chapter 7 for an empirical example and Chapter 10 for a general discussion of the process of collation as a distinct architectural task). And since the production of the board might take several weeks within a months-long process, and firms may not participate in competitions more than several times per year, the moment in which a firm produces a submission board might be very difficult to coordinate with a period of research. That is, the competition poses difficulties for any would-be ethnographer.

Where the multi-stranded approach shows its usefulness is in revealing processes that take place *between* sites. Indeed, it could be said that the architectural competition

emerges from technology that puts multiple sites in contact with one another, allowing work within an architectural studio to respond to statements written by a committee at a client's headquarters hundreds of miles away. First, in speaking with architects around the UK, it became clear even in semi-structured interviews that architects respond to a broadcast discourse of competitions and can anticipate the competition as a configuration of documents (Chapter 5). Competitions *involve* so many architects in part because so many architects become aware of them in the same way. Second, by analysing documents that travel between sites, rather than remaining within the sites themselves, it becomes possible to see how the competition incorporates the sorts of images that architects and architect-contractor teams produce into a situation of comparison (Chapter 6). After examining processes that take place between studios and other sites, a view of the way in which young architects *accommodate* these processes allows me to describe the particular sorts of architectural agency that competitions afford (Chapter 7). As the competition is *trans*-sited as well as multi-sited, moving between sites allowed for a view of movement that is particularly helpful for my research.

Thus it appears possible to adopt a multi-sited research programme to investigate other 'big things' within a particular construction industry. Researching competitions, I came across other things that offer opportunities for further research within the STS tradition, things that lend themselves to a multi-sited approach: the RIBA Plan of Work, the UK government's procurement objectives, sets of claims about design and construction practice such as 'Soft Landings' and so on. 'Things' such as these are 'big' or complex, exist across sites and can be described in advance of a particular building project. That is, they pose many of the same challenges for research as architectural competitions do. The RIBA Plan of Work 2013, for instance, can be taken as a single artefact, a diagram, stored within a hard drive or consulted on the Web, that is, something existing within the activity of a single team. But it is also something that is subject to discussion or debate across the architectural news media. More than that, the Plan of Work is a way of speaking, with all the architects I interviewed having memorised the stages of the pre-2013 Plan of Work and begun to memorise those of the newest. A study of the Plan of Work, assuming of the model of multiple ethnographic journeys, could include interviews about the stages, observations of architects writing end-of-stage reports for clients, document analysis of Plan of Work-related publications and so on. This is not an approach without precedent. STS-inspired architecture researchers have written monographs organised around a single *thing*, such as Cardoso Llach (2015) on CAD systems and Loukissas (2012) on

simulation. These studies follow their objects through multiple sites and engagements, investigating a technology, rather than a particular site. What the present research on competitions has done is demonstrate that other objects can be subject to these sorts of methods, objects that would otherwise appear commonplace and mundane. A 'follow the technology' approach can thus examine both the latest developments in computing and the seemingly abstract minutiae of project management, in both cases revealing new aspects of what it is to design buildings. The methodological contribution is thus valuable on its own.

The multi-stranded approach does have its disadvantages. Perhaps the most prominent is that this sort of approach gathers detail in less *depth* than a more sustained ethnography. Given a year of observing and understanding routine practices, an ethnographer can situate particular events in a deeper bed of context. For any event will either come across as an extension of a routine or a deviation. Only by observing routines with a variety of periodicities, whether daily, weekly, monthly, season-to-season or year-to-year will the ethnographer be able to grasp the uniqueness of the event. My own research demonstrates the value of a long engagement. While I was able to describe practices and objects involved in competition, there was often a slippage between the general and the particular. A more sustained, single-site ethnography could indicate, for example, how architects' narratives of competition emerge from routines while contending with more singular events (Chapter 5); how the general model of 'Design and Build' accommodates the uniqueness of site and timeline (Chapter 6); how architectural skills develop with regard to competition over the course of a whole year (Chapter 7) and how various trajectories of designerly objects shift between accumulation and production (Chapter 8). To observe all of these strands through a sustained ethnography would require either a team of researchers or a number of studies, pointing to opportunities for further research.

11.4 To submit and relate

Architectural competitions as a matter of architectural agency reveal the way that, within architectural practice, seemingly abstract, formal definitions can exist alongside nondeterministic processes of action and response. For in one sense, architectural competitions *incorporate* the agency of architects. The tasks of producing submission boards, responding to a brief, understanding distant clients and so on are, we might say, the results of a process in which clients and consultants organise events and draw up documents. But all the same, architectural competitions simply *add to* architectural agency

without subsuming it. Filling in forms and COMPOSING submission boards: these take place *before* or *after* moments of learning about a building-to-be, of producing models and diagrams with the premise that these things *affect the reality of a building* (rather than the evocativeness of an image). What competitions do within architectural agency, then, is allow architectural practice to *move into* another set of relations.

Architectural competitions thus combine two stories about agency. The first is the formal definition of a competition format and the procurement route it belongs to. The second is a story about architectural creation, that architects have styles, working methods, ideas or other qualities that exist without constraint from the outside. The two stories seem to exclude one another. One takes place regardless of specific buildings and architects: it is the procurement process that gives way to the building. The other ascribes authorship to the architect, where the competition is a merely a means of accessing what already exists. What is interesting about competitions is that they make room for both stories. In the project programme, it is the competition that yields a crop of choices. In the BUILDING SCRIPT of jury deliberation and the sampled images of coverage in the press, the architectural practitioners themselves seem to burst through any restrictions of documents and formats. The competition becomes simply a *venue*: firms placed beside one another, exposed and comparable in their fullness. What allow for such a story are the affordances of objects and practices in which the competition exists as a thing.

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