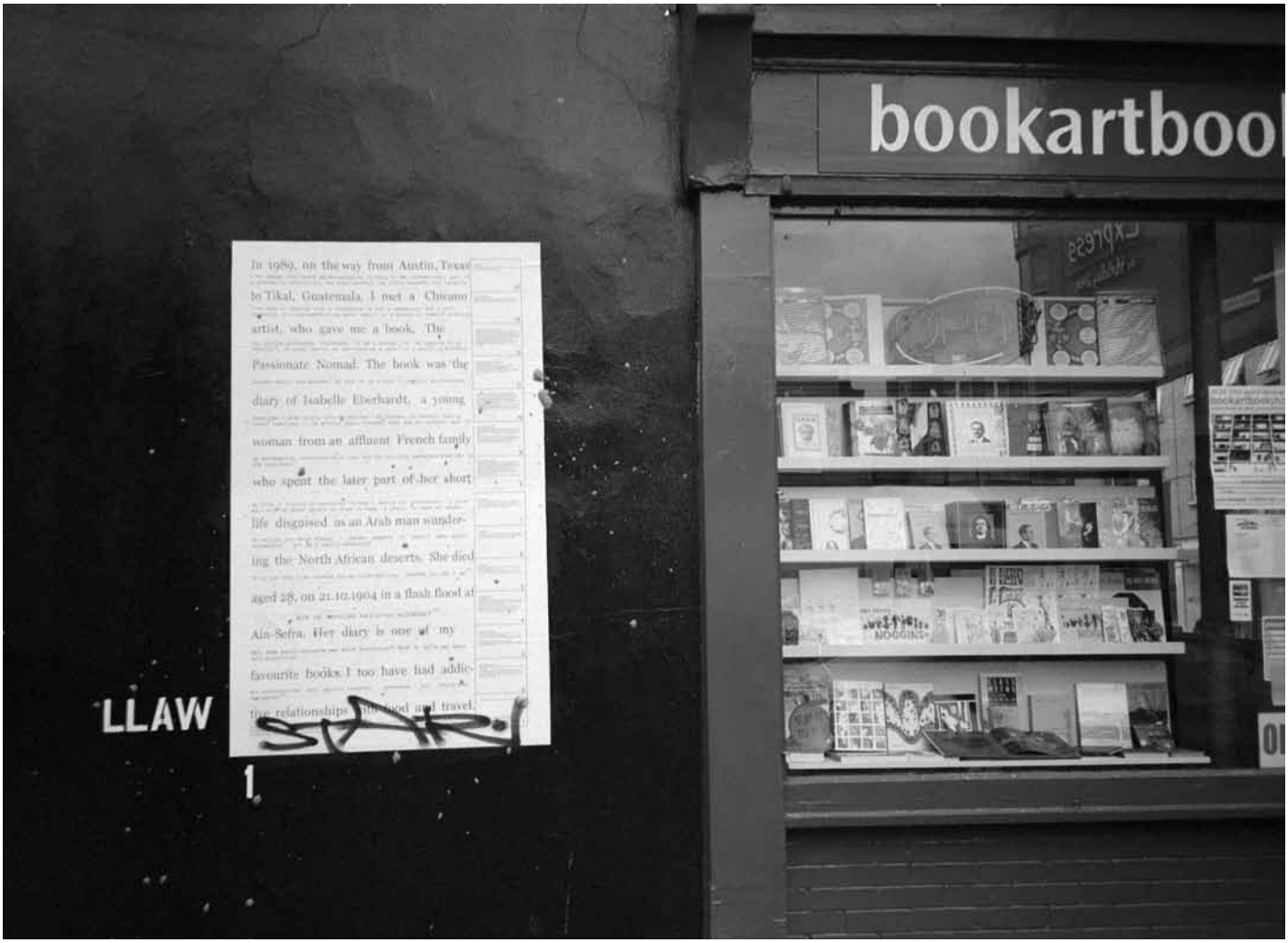


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1 Jane Rendell, *Confessional Constructions* (2002)

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The agency of specifications, contracts and technical literature

Specification increasingly produces standardisation

Regulating architecture

Mark Dorrian

The *Further Reading Required* event – subtitled *Building Specifications, Contracts and Technical Literature* – was focused on the role and status of the non-pictorial documents that establish the relations and responsibilities of those involved in building, and that describe the materials and processes to be used in construction. A one-day symposium, held on 17 February at the Bartlett School of Architecture, UCL, organised by Tilo Amhoff, Nick Beech and Katie Lloyd Thomas, it sought to examine the various regulatory documents and processes in relation to which architecture is historically constituted; to interpret how they distribute competencies and negotiate the various agencies and interests involved in building; and to explore the particular kinds of productivity that they make available or alternatively foreclose.

Divided into six sessions, the presentations were grouped under the headings of Contracts, Technical Literature, Specifications, and Practices, although the papers within these groupings were cross-cut with a number of interlinking themes that ran throughout the day. One of these, characterised by those presentations that reflected on the peculiar qualities and atmosphere of the quantitative, might be described as the 'aesthetics of technical literature'. Another, that we might call the 'limits of specification' – that is, the gap that inevitably opens between any object and our description of it, however complete it may appear – circled around the familiar problem of the relation between words and things. And, thirdly, a series of papers examined the historical emergence and transformation of contract and specification documents, reading them in the context of shifting relations between individuals and institutions and – more broadly – against larger socio-economic and ideological formations.

'... the "limits of specification" – that is, the gap that inevitably opens between any object and our description of it ...'

Antoine Picon's introductory talk exemplified the latter. Stressing the connection between the historical development of technical documents and the emergence and consolidation of professional competencies, he considered the appearance of 'detailed estimates' at the beginning of the Enlightenment in France. Describing these memoirs, which carried information about all aspects of the work, the quality of materials, etc., as systematic attempts at decomposing complex objects into components, he related them to the analytic predisposition of eighteenth-century French thought and indeed, beyond, to the empirical philosophy of John Locke, whereby complex ideas are traced back to their origins in elementary sensations. This analytical tendency in turn lay at the roots, Picon argued, of new ideas of 'programme' and composition, the latter as theorised by Étienne-Louis Boullée. Linking with his public lecture on ornamentation at UCL the previous evening, Picon reflected on the problems of quantification that ornament presented to the 'detailed estimates', speculating that the characteristic flatness of expression in facades by contemporary architects such as Ledoux might be understood in relation to this, the relief of mouldings 'thinning' under new demands for quantification.

Picon concluded his talk with reference to new building information models enabled by digital technologies, in which there is a shift from – as he put it – relations between elements to relations between parameters. The implications of building information modelling (BIM) techniques were taken up later in the day by John Gelder of the National Building Specification (NBS), which he situated within a long history of contracts and specifications. These included early Greek contracts and the remarkable medieval indentures (so called because of the tooth-like indented edge of the documents) which might be torn in half, each party to the contract retaining one piece and therefore being able to bring the fragments together in the event of dispute as proof of agreement to the same terms. The historical arc of Gelder's story was of ever-greater disintegration of the project description and its corresponding distribution across

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proliferating forms of documentation. The promise of BIM is – as Gelder put it – to come 'full circle' by reintegrating these scattered materials in a new complex whole of interrelated information, which can then be output in different forms for specific users.

Contracts and labour

Papers by Tilo Amhoff and Pinai Sirikiatikul considered nineteenth-century specifications in relation to the emergence of 'contracting in gross', in which costs were calculated in advance rather than being based on measurement after construction. Amhoff compared late eighteenth-century clauses from the contract for John Soane's Tendring Hall with those recommended in Alfred Bartholomew's *Specifications for Practical Architecture* of 1841. Sirikiatikul addressed the terracotta tiles of extinct animals in Alfred Waterhouse's Natural History Museum, interpreting them – and indeed his choice of material – as a tactical response by the architect to transformations in labour relations, Waterhouse's insistence on nominating a subcontractor for terracotta allowing the architect to retain a greater degree of control over critical and highly-visible elements of the building than would otherwise have been possible.

Nick Beech's talk, which focused on London County Council contracts for the decade following 1941, introduced us to two figures – the 'mattockman' and the 'topman' – both operatives of the demolition companies that were mobilised to provide rescue, recovery and clearance services from the start of the Blitz onward. While the mattockman, as the name suggests, worked from the ground, the skilled and highly-dangerous role of the topman – who had, as Beech described it, an ability to feel the stability of the building as he dismantled it – was to break the edifice down from top to bottom. Where the LCC contracts – and this echoed a similar point made by Picon regarding the eighteenth-century detailed estimates – had been silent on traditional knowhow and skills commanded by the topman, Beech suggested that, with the increasing use of mechanisation in demolition, mechanical terms began to shape the description of human roles which became increasingly expressed and defined in quantitative ways.

Speaking in the same session, Linda Clarke charted shifts in employment contracts of building labour from the Second World War to the present. While labour in the construction industry had been time-based before the war, with wages set at a standard national level and with a fixed differential between labour and craft work, the early 1940s saw the introduction of a guaranteed working week and of payment by result. But major organisational and contractual changes were soon to follow, most obviously the ascendancy of large construction firms wielding directly-employed labour. The bonus schemes that appeared in this period, however, became problematic when non-traditional building methods were used (Clarke cited the Barbican development as an important example of this) and were thus at odds with the UK government's promotion of high-rise prefabricated construction at the time. Clarke's talk concluded with the rise of self-employment in the 1980s, which remains the major form of employment in the industry, and with a reflection on the consistently low productivity rates that continue to mark building labour in Britain.

'… a "dialectics of design and build"'

Reviewing the rise of 'design and build', Sarah Wigglesworth noted the ambiguities that arose from more traditional forms in which the architect is required at one stage to play the role of the agent of the client and then, at another, to act as impartial administrator of the contract. Design and build dissolves this tension by positioning the architect as an employee of the contractor. The implications of the corresponding shift of control over the design, with its increased vulnerability to cost-engineering procedures etc., were well-illustrated by three case studies drawn from Wigglesworth's own practice. Successful realisation of an architectural project under design and build is, she suggested, ultimately less to do with the precise terms of the contract than with what she called its 'softer' aspects (the interpersonal relations between architect, contractor and client, shared priorities, values, etc.). However, the tensions Wigglesworth outlined so well, particularly with regard to the painful progress of two of the projects, made one feel that it might be possible to describe something like a 'dialectics of design and build'. This would be the opposition between – on one hand – the pressure to design and detail 'realistically', that is to fully inscribe the alienated and antagonistic social relations within the design in advance (i.e. to produce a design that is already 'reduced' as a strategic response to what is likely to be able to be won from the design and build environment); and – on the other – to dream that one can transcend this situation through a design that can transform and go beyond the aridity of the set-up (by stimulating a new intensity of commitment, by soliciting the contractor as craftsman, etc.).

The aesthetics of technical literature

David Cunningham opened the question of the aesthetics of technical literature with a richly suggestive presentation on J. G. Ballard's use in his novels of material drawn from what Ballard called the 'invisible literatures' of scientific journals, technical handbooks, etc. Referring these to Hegel's notion of a specifically modern 'prose of the world', an epochal prosaic ordering of reality already announced in the rise of the novel as literary form, Cunningham argued that the technical document exemplified a certain abstraction of the language of the everyday. This is reflected in the characteristic 'coldness' and loss of affect of Ballard's writing, which thus might be understood as a kind of austere shadowing of Pop's more euphoric response to the commercial-technical culture of the mid-twentieth century.

This particular quality of technical literature – that is, to appear to be without quality – was reflected in Jane Rendell's *Confessional Construction* (2002) [1], one of two projects that she described in her talk. A text-based installation set alongside – and captioning – the 'transitional space' of a window, it counterposed the 'exterior' and supposedly objective mode of enunciation of technical specification (in the installation, text was drawn from specifications related to windows and doors) with the 'interior/subjective' discourse of autobiographical narration.[1] Her other ongoing project, *May Mo(u)rn* traces three mass housing projects – and by implication the vicissitudes of utopic aspiration –

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through their specifications, toward a prospective performance that stages three voices which slip from Russian (Moisei Ginzburg and Ignatii Milinis' Narkomfin Communal House in Moscow, [1928-29]), to French (Le Corbusier's Unité d'Habitation in Marseilles [1947-52]), to English (London County Council Architects Department's Alton East Estate in Roehampton [1952-55]).

Adam Sharr spoke on 'the epistemology of CI/SfB', the constructional indexing system adopted as standard in the UK in the late 1960s, arguing that it was symptomatic of the dominant technocratic orientation of British architectural culture in the 1960s, a tendency that found its major academic manifestation in the work of Leslie Martin and the Centre for Land Use and Built Form Studies that he established at the University of Cambridge in 1967.

The generative possibilities of regulation

Finally, three presentations at the end of the day, respectively by Liam Ross, by David Knight and Finn Williams, and by Tatjana Schneider, specifically addressed the operative, productive possibilities of regulative documents that are opened either by fastening onto their silences or by taking them at their word, exploiting – inevitably in a maximal way – the zones that lie between the boundaries the regulations institute. In Schneider's presentation, this was put forward in the context of a more general appeal to reconceptualise architectural practice in terms of an expansive notion of spatial agency. Ross discussed his research project Compliant Architecture, which emerged from a studio that he led at the University of Edinburgh, examining building regulations as drivers of design. Here he showed work produced in response to *British Standard 8213: Design for Safe Cleaning of Windows*, which, as he put it, attempted 'to draw the regulation', exploring the spatial envelopes implied by its application.

'... the zones that lie between the boundaries the regulations institute'

Recent changes to Permitted Development rights were the focus of Knight's and William's project, which – to polemical effect – seized on Poundbury, where PD is expressly forbidden, to envision a scenario of maximum development that transforms it 'from below' into a kind of house-extension wonderland. The project neatly elucidated the absurdity that is brought to the surface by the literal application of the letter of the law, bringing to mind an argument regarding subversion-through-identification that Slavoj Žižek has made via the Czech author Jaroslav Hašek's novel *The Good Soldier Schweik*, in which the 'hero wreaks total havoc by simply executing the orders of his superiors in an overzealous and all-too-literal way'.[2]

Words and things

Issues of the relation between words and things were raised most prominently in the presentations by Anne Bottomley and Nathan Moore, Katie Lloyd Thomas, Mhairi McVicar and Adrian Forty. Bottomley and Moore, who both lecture in law, approached their discussion of the complex status of the building as 'both representation and thing' by way of Deleuze and Guattari's understanding of the diagram, although their account of, in their words, 'how a building functions as a network point, or node, for a range of activities, practices and uses' seemed if anything closer to the relationist ontology of actor-network theory. Their interesting discussion of the building as a locus and material instantiation of legal rights and obligations focused upon two case studies from Cambridge in order to draw out the fabricated and constructed character of the legal and its ongoing negotiation through and with the fabric of the building.

Katie Lloyd Thomas examined the way that materials are described in specifications, raising questions of what kind of conceptualisations of them such descriptions point to. Here she concentrated upon two kinds of clause: what she called the 'process-based clause' (that specifies the preparation and working of materials during construction) whose use, she noted, peaked in the 1960s (presumably fading thereafter due to ever-increasing prefabrication and off-site industrial production of building components); and the 'performance clause', which emerges from procedures of quantification and testing and which defines the performance (the strength, endurance, resistance, etc.) of materials with regard to specified parameters. She pointed out how the performance scenarios – such as the resistance to a rifle shot of high-performance glass – arise from actual or imagined social relations that are then, as it were, 'engineered into' the material.

'... the building as a locus and material instantiation of legal rights and obligations ...'

The presentation given by Mhairi McVicar raised usefully sceptical questions regarding the ability of language, however intricate and elaborate the description becomes, to adequately delineate the future object (the detail, etc.) that it is the task of specification and its associated documents to determine. Basing her discussion around the specification of a mortar joint on the facade of Caruso St John's entrance to the Museum of Childhood (2006), she developed an argument for an alternative practice of specification that might have recourse to non-quantitative modes of description.

Speaking in the session before McVicar, Adrian Forty had approached the same issue by reflecting on an extended quotation taken from evidence given, at the beginning of the second decade of the nineteenth century, to the Commissioners of Inquiry into the Conduct of Business in the Office of Works. 'No specification for a contract in the gross', it began, 'however long, has ever yet been found sufficient to ensure a due execution of what is requisite'. If this is a longstanding anxiety regarding specification, it was intensified in the context of the specification of in-situ concrete in the twentieth century, a material whose intrinsic variability – Forty argued – posed particular problems for specification. Because it was a 'new' material for which standards and conventions had not yet developed, specification effloresced into veritable treatises on concrete construction, with definitions of acceptable quality reaching extreme lengths: thus, a draft clause relating to the construction of the Queen Elizabeth Hall and Hayward Gallery on London's South Bank specified that 'Pinholes, honeycombing or other blemishes not exceeding $\frac{1}{2}$% in each square foot considered separately will be accepted'.

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'... the "test wall" or sample – "a monument to the insufficiency of language" ...'

Against this background, Forty noted the emergence of the 'test wall' or sample – 'a monument to the insufficiency of language', as he put it – in order to establish a standard. Yet at the same time it was apparent that this could only hold in as far as the conformance of work and specimen was agreed, and that as soon as this came into dispute one inevitably re-encountered the same problem given that it then became necessary to produce a description or quantification of the quality of the specimen. Forty's discussion importantly brought out the point at which, to close its gaps and ensure its coherence and operability, specification must appeal to some broader substrate beyond itself – that is to something like judgement, or convention, or tradition, or reasonableness, or 'common sense'.

Learning outcomes

This was a deeply informative and interesting symposium and a significant attempt to bring together humanities-oriented approaches to this important topic. Much was covered and it is less a complaint than testimony to the richness of the subject that one came away wanting to hear still more. Given that all the speakers, with the possible exception of one, are directly involved in higher education, it was perhaps a little surprising that there was no attempt – especially in our time of 'learning outcomes' – to connect practices of specification and contract in architectural practice to regimes of specification in architectural education (that is, how we 'specify' our students, how we determine what they must learn and how they evidence that they have done so). In Tom Stoppard's play *Arcadia*, the precocious Thomasina at one point half-jokingly asks her tutor Septimus Hodge 'What is the difference between a ruined child and a ruined castle?'[3] We might ask – again only half-jokingly – what connects the specification of the architecture student with that of the construction detail? Certainly it was one of the virtues of this event to show that this has to involve more than technical education.

Equally, I would have been interested to have heard attempts to historicise 'specification' in a more wide-ranging way, and even to think of it as a particular rhetorical mode, not least because this has the possibility of resituating practices and forms otherwise thought opposed to one another. If we consider 'specification' to be a discourse that aims to be attentive to things, to get close to them, and to actualise them in language, then we might become newly interested in and see relations with, say, poetry's efforts to specify the emotions or with *ekphrasis*, the ancient literary form which attempted, through the palpability of its description, to bring its objects into view for the listener.

In this vein, one of the things that struck me repeatedly throughout the day is the degree to which what continues to be called specification in architecture ever more describes its opposite, which is to say loss of specificity. This is largely the long story of standardisation as the triangulation of administration, industry and the market. Against this though, a well-established and trenchant theme in twentieth-century philosophical thinking has been the claim of the radically specific in the face of two distinct but closely-related phenomena: on one hand, processes of categorisation and conceptualisation that first misrecognise and then come to dominate what is singular (hence, for example, Theodor Adorno's dictum that 'objects do not go into their concepts without leaving a remainder'[4]); and – on the other – the reduction of things to

'... what continues to be called specification in architecture ever more describes its opposite, which is to say loss of specificity'

commodities and hence to a common measure (against which Georges Bataille mobilised his notion of heterogeneity). Certainly this protest goes back to Nietzsche (and still further), who in a famous passage used the example of leaves to illustrate how the concept fails the multiple singularities of what is. Every leaf that exists may be different, but they all become subject to the category, which is 'formed through an arbitrary abstraction from these individual differences, through forgetting the distinctions; and now it gives rise to the idea that in nature there might be something besides the leaves which would be "leaf" [...]'.[5] From this Nietzschean perspective, standardisation would then be the ensuing practical domination of the concept over its objects – its reconfiguration of them on its terms – and that in turn leaves specification as something very different to what the word seems to promise.

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Notes

1. See Jane Rendell, 'Confessional Construction', in *Site-Writing: The Architecture of Art Criticism*, (London: IB Tauris, 2010), pp. 52–7. This piece of work was originally installed as Jane Rendell, *Confessional Constructions* (2002) LLAW, curated by Brigid McLeer, BookArtBookShop, London and performed at The Foundry, London in 2003.
2. Slavoj Žižek, *The Plague of Fantasies* (London and New York: Verso, 2002), p. 22.
3. Septimus drily notes that one is picturesque and the other is not. Tom Stoppard, *Arcadia* (London: Faber and Faber, 1993), p. 11.
4. Theodor W. Adorno, *Negative Dialectics* (London: Routledge, 1990), p. 5.
5. Friedrich Nietszche, 'On Truth and Lie in an Extra-Moral Sense', in *The Portable Nietszche*, ed. by Walter Kaufmann (Harmondsworth: Penguin, 1976), pp. 42–47, p. 46.

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