Specifications: writing materials in architecture and philosophy

Katie Lloyd Thomas

DOI: 10.1017/S1359135504000296, Published online: 08 December 2005

Link to this article: http://journals.cambridge.org/abstract_S1359135504000296

How to cite this article:

Request Permissions : Click here
The language of the architectural specification raises questions for philosophical accounts of matter and highlights the cultural construction of building materials.

**Specifications: writing materials in architecture and philosophy**

*Katie Lloyd Thomas*

Since Robin Evans wrote his seminal piece on the architectural drawing (Evans, 1986) there have been countless theoretical enquiries into this aspect of architectural representation but, outside the literature of professional practice, almost nothing has been said about that other crucial description of the building – the specification. Not only is the specification apparently too mundane to be of interest but, as Jack Bowyer writes, it merely ‘supplements’ the drawing package (Bowyer, 1985: 9). Perhaps the secondary status of the specification is hardly surprising, since it is concerned with the procedures and materials of building while the drawing attends to more conceptual and high-minded questions of architectural form. One might say that, as in so many philosophical, scientific and poetic accounts of the world, architectural representation is split right along the form/matter distinction, and as in all hylomorphic accounts, the conceptual realm of form is privileged while matter remains secondary.

In part, the choice I take to look at the specification in its own right is a deconstructive tactic inasmuch as I attempt to bring to the fore what usually remains somewhat out of sight in architectural discourse. That the representation of materials is secondary may also reflect the importance given to form over materials within the architectural discipline. I am also interested in the specification because it is a text. Like the supplementary annotations on a working drawing, the specification describes materials in written language. Much has been said about the role of graphic representation in the making of buildings and of its limitations, but how does a text describe the parts of a building? Perhaps it can deal with temporality, with processes, and with materials in ways in which the drawing, limited to the geometric description of an object, fails.

**Specification: the differentiation of materials in language**

But my work with the specification is also part of a broader project exploring a number of texts which successfully differentiate one material from another. While architectural discourse opposes form with ‘materials’, philosophical discourse tends to oppose form with ‘matter’. In this definition, materials appear only as a subset of the more generic matter. Bronze, clay and wood are brought on as manifestations of matter which are treated as substitutable for one another and matter is simply that without form.

Gaston Bachelard is a rare example of a philosopher concerned with this problem. Not only is he aware of philosophy’s tendency to favour form over matter, he also raises the question of individuation:

> ‘I was immediately struck by the neglect of the material cause in aesthetic philosophy. In particular it seemed to me that the individualizing power of matter had been underestimated. Why does everyone always associate the notion of the individual with form’ (Bachelard, 1983: 2).

These points introduce Bachelard’s exploration of the particular attributes and symbolic imaginary of water as part of his long-term study of the four elements. It is interesting that Bachelard uses the term matière translated here both as ‘matter’ and ‘material’. Unlike English ‘material’, the French matière does not include the meaning ‘a material’ for which matériaux is used. French clearly distinguishes between these two concepts while in English, confusingly, it is easy to elide them. It might be argued that, since matter is singular, the individualising power he refers to belongs more properly to materials.

> For Bachelard, water, earth, air and fire are individuated even without form. In some ways, the orthographic drawing, which describes spatial extension, also treats material only as that which is not form. Give or take some practical assumptions, any material could infill the empty double lines which represent a wall, and indeed many architects treat materials as little more than interchangeable finishes. If materials are swallowed up in a concept of matter we may forget that, just as space operates on bodies and is productive of effects, so too do materials. This paper attempts to show how the architectural specification finds a place to pause at materials in the plural, and individuates between them without recourse to form.
Overlooking materials in philosophical accounts of matter

The account of hylomorphism which I refer to here is Aristotle's, where any 'substance' – that which is separable – is made up of a compound of form and matter. The term Aristotle uses for matter is *hyle* which also means wood (and is occasionally used for other materials) and is, as I understand it, a positive term which refers to an instance of the material. Aristotle uses a second term *hypokomenon*, which is usually translated as 'substrate' and refers to prime matter. This word literally means 'that which lies beneath' – it has the sense of something behind, something perhaps which can be deduced rather than touched.

Before moving to the specification and, with Aristotle's account as a background, I will look firstly at a text which reverses the usual privileging of form over matter, and concentrates on the material. Jacques Derrida's *Glas* explores the form/matter distinction in relation to text, which is both the word as its signified, and the word as the materiality of the signifier – whether given substance through speech or through printing. Deconstructive theory understands matter as the negation of form. It is more like Aristotle's substrate than his 'matter'. Derrida calls it 'the remains' and I want to suggest that in this formulation the material can only be singular, there is no room for differentiation, and therefore, for the plurality of materials.

Both Aristotle and Derrida use a number of particular materials as examples in their texts. In book Zeta of Aristotle's *Metaphysics*, where the discussion of substance occurs, his preferred material is bronze. For example, he writes: 'In speaking here of matter I have in mind say, the bronze of a statue, while by the shape-form I mean the geometry of the object's appearance' (Aristotle, 1998: 174). Bronze could almost be the paradigmatic philosopher's material, brought on to demonstrate the form/matter distinction. It exemplifies a concept of matter beautifully – it can be made into any form, melted down to be transformed and is in itself formless. Descartes, in his skeptical account of matter, chooses a similar material, wax (Descartes, 1968: 108–112). For Roland Barthes, plastic is the quintessential material as matter which can take on the visual attributes of any other material (Barthes, 2000). But not all materials would do as well as these plastic materials. A statue made from charcoal would become black dust if you tried to transform its shape. When bronze stands in for matter, it is its particular properties which lend Aristotle's argument its force. But they remain in the background and we are happy to accept that bronze is just an instance of generic matter, a material that could be substituted in the argument by any other.

A similar use of specific materials standing in for matter occurs in Derrida's *Glas* in which part of his interest lies in making the overlooked materiality of the text visible. Derrida is not alone in his concerns with the matter of language. Julia Kristeva attends to the destabilising bodily semiotic rather than the symbolic – as the cadences and rhythms of the voice in poetry (Kristeva, 1984a and 1984b). Visual poetics has long been concerned with the materiality of text, for example Johanna Drucker makes the body of the white page and the black text active and apparent in

Katie Lloyd Thomas

*Specifications: writing materials in architecture and philosophy*
her works, insisting that the reader confronts the materiality of printed text (Drucker, 1998).

**Writing materials: the materiality of text in Derrida’s Glas**

In *Glas*, Derrida plays both with the text on the page and with the text as spoken or heard. His interest in the sounding of language appears throughout his work, most famously in his use of the double spelling of *différance* and *difference* which can only be discerned in its written form. *Glas*, which itself means the sounding of a bell, is peppered with assonances, *glas*, *glace*, *éclat*, *klang*, *cloche*, *gladius*, which connect the text through aural similarities rather than meaning. Assonance also suggests to Derrida that the eagle or *aigle* which appears soaring high above the earth in Hegel’s philosophical texts stands in for author.

In a tactic borrowed from Jean Genet, 3 Derrida’s text is divided into two columns side by side. One concerns Hegel’s philosophy, the other Genet’s literature 2. These two columns also relate to various ancient religious columns discussed by Hegel, which are recalled in *Glas* on the second page and again just six pages from the end. One column, an early Indian example, is notched and carved, covered with inscriptions and images of the gods. It ‘represents the art of the artist’ – the work of the artisan is visible and apparent (Derrida, 1986: 252). Another column, a later one from Greece or Egypt, the ‘kolossale Klang-statue’ – or colossal sounding statue – is a smooth polished column which ‘sounds’ with the voice of a god when the sun strikes it. According to Hegel, this column can only acquire such a resonance because it has lost its ornament and the traces of the artisan.

Derrida describes the decorated column thus, ‘in the stone of each column a variety of inlaid judas holes, crenels, Venetian shutters (jalousies), loopholes’ (Derrida, 1986: 2) and it resembles Derrida’s typographic columns which are also notched and incised with textual inserts. The reader cannot ignore the text as text, but must choose how to navigate through it. The reader cannot simply follow a linear thread of meaning and must confront the text’s construction, its status as an artifact that, like the carved Indian column, has been made.

There is no typographic equivalent to the smooth polished column in *Glas* – this presumably refers to the typical column of text on a page and in this case to the philosophical text of Hegel, which is intended to speak directly to the reader, so that the medium of language appears as no more than a transparent conduit for the truth, and even its author and authoring disappear. Of course, for Derrida, the medium and the author inevitably appear – there are always ‘remains’.

Derrida’s crenellated columns draw the reader’s attention to the materiality of the text and to its part in the production of meaning. In the sections I have described they are particularly powerful because they relate also to the content of the text: a writing as carved column as well as a writing about. But the stone column is only one of the many figures for text in *Glas*. For example, the tightrope walker’s wire also makes an appearance, in relation to Genet’s beautiful text *The Funambulists* (Genet, 1964) [2]. Genet describes first how the wire is dead, until the tightrope walker...
appears and ‘it will live and speak’. Like the wire, the lines of a text only come to life when the reader animates them. But a few lines later, speaking directly to the wire walker (and therefore also to the reader) Genet reverses this, ‘It is not you who will be dancing, but the wire [...] then where will you be?’ (Genet, 1964; Derrida, 1986: 100).

To what extent do you, the reader, breathe life into the text and to what extent is it a wire that dances you into life? Derrida’s interest here is in the way that Genet has shifted into the second person to raise this question. Again Derrida examines how the text itself intervenes in the production of meaning, and this time the wire suggests the linear thread we trace through a text. There is a change of material (from stone to wire) which supports a nuanced shift in the particular issues he raises about language, but the textual strategy of the two columns remains constant. Despite the glorious range of material examples put to work in Glas, the text is only ever understood as having a singular materiality, it is text as matter rather than text as materials.

Glas attempts to bring to the fore the materiality of text and succeeds in doing this. It might also be possible to do this for the fine line of the orthographic drawing whose own materiality disappears as we look beyond it to the building being represented. In alerting us to the columnar nature of the text, which can be smooth and polished, or notched and incised, Derrida opens up the possibility that the text itself can reflect differences in what it writes about. Although Glas does not change as the material objects Derrida refers to change, it does suggest a way of writing about materials which is able to articulate their differences – or treat them as ‘individual’ to use Bachelard’s term – rather than as one of many instances of matter. Derrida’s Glas suggests a way of looking at the language of the architectural specification to see how it is able to pause at materials and write of them in their own right.

Writing materials: defining materials in the architectural specification

The specification is a practical document which sets out materials, construction methods and standards of work. Because it forms part of the contract and is legally binding, the specification has become increasingly detailed, and most architects in the UK use a standardised form of the document – the National Building Specification commonly referred to as the NBS – which allows the specifier to select clauses from a vast range and fill-in numbers and products according to the project. In almost scriptural fashion, each section is titled with a letter of the alphabet and relates to a particular trade; foundations, framework, linings, renderings and so on. What has interested me about the specification is that each material not only has a different definition but that the form of classification – how the material is described and what is omitted – changes for each material. The examples of clauses I have selected are taken mostly from the NBS and in some cases from Bowyer’s book Practical Specification Writing (Bowyer, 1985).

Given most architects’ preoccupations with the aesthetics and finishes of a building, one might expect to find materials defined through how they are to look but such descriptions are in fact extremely rare. My own searches through the sections of the NBS threw up only a couple of instances; one where timber boarding is specified to be free from knots and imperfections:

**K20 TIMBER BOARD FLOORING/ SARKING/ LININGS/CASINGS**

<table>
<thead>
<tr>
<th>Clause</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>BATTENED TIMBER BOARD FLOATING FLOOR</td>
</tr>
<tr>
<td>- Substrate:</td>
<td>______.</td>
</tr>
<tr>
<td>- Preparation:</td>
<td>______.</td>
</tr>
<tr>
<td>- Resilient layer:</td>
<td>______.</td>
</tr>
<tr>
<td>- Loose laid battens:</td>
<td>______.</td>
</tr>
<tr>
<td>- Thermal insulation between battens:</td>
<td>______.</td>
</tr>
<tr>
<td>- Vapour check:</td>
<td>______.</td>
</tr>
<tr>
<td>- Installation: Lay as clause 340.</td>
<td></td>
</tr>
<tr>
<td>- Boards: To BS 1297 except that blue stain, fissures, knot holes and loose or unsound knots will not be permitted on the face side of flooring.</td>
<td></td>
</tr>
</tbody>
</table>

Another clause sets out the various decorative textures which are possible with intumescent paint – hardly a major aesthetic issue for architecture:

**M61 INTUMESCENT COATINGS FOR FIRE PROTECTION OF STEELWORK**

<table>
<thead>
<tr>
<th>Clause</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>440</td>
<td>BASIC FINISH</td>
</tr>
<tr>
<td>- Definition:</td>
<td>Reasonably smooth and even. Orange peel, other texture, minor runs and similar minor defects are acceptable.</td>
</tr>
<tr>
<td>450</td>
<td>NORMAL DECORATIVE FINISH</td>
</tr>
<tr>
<td>- Definition:</td>
<td>Good standard of cosmetic finish generally, when viewed from a distance of 5m or more. Minor orange peel or other texture is acceptable.</td>
</tr>
<tr>
<td>460</td>
<td>HIGH DECORATIVE FINISH</td>
</tr>
<tr>
<td>- Definition:</td>
<td>High standard of evenness, smoothness and gloss when viewed from a distance of 2m or more.</td>
</tr>
<tr>
<td>490</td>
<td>TOP SEALER COAT</td>
</tr>
<tr>
<td>- Application: To achieve dft recommended by manufacturer and to give an even, solid, opaque appearance, free from runs, sags and other visual defects.</td>
<td></td>
</tr>
</tbody>
</table>

The aesthetic aspect of a material turns out to be almost irrelevant for the specification and, moreover, the properties referred to in each definition vary from material to material.

For example, hardcore is defined through its gauge: ‘Make up to required levels under concrete beds and pavings with approved brick hardcore broken to pass a 75mm gauge’ (Bowyer, 1985: 55). Putty, however, is defined relationally, through what it is able to attach itself to: ‘Putty is to be linseed oil to BS54: 1969 for glazing to wood and approved best quality metal-glazing compound for glazing to metal’ (Bowyer, 1985: 24).

Hardcore is defined through its dimensions. In a sense then, its form is most important (although of course it must be hard and resistant to change, it matters little which particular material it is). Putty is
more like the philosopher's 'matter' here – it can change its shape and is formless in its own right and little interest is paid to its own properties, except how it adheres to other materials. These two definitions map out the spectrum of the form/matter distinction – but they also show that the definition of an architectural material must draw from a broad range of properties such as adhesion and size.

Concrete, one of the plastic materials (and one perhaps for the modern philosopher to use in a form/matter discussion) is usually made up on site perhaps for the modern philosopher to use in a form/matter discussion) is usually made up on site and its specifications read like recipes, defining the proportions of the mix and even its 'workability':

Mix A – one part cement to seven parts all-in aggregate to pass a 38mm sieve.
Mix B – one part cement to seven parts all-in aggregate to pass a 19mm sieve. The concrete shall be prepared in an approved mixer, or delivered to site ready mixed to BS 5328: 1981, with only enough water added to give a good workable mix (Bowyer, 1985: 57).

In these clauses, concrete is described through how it is made and its constituent parts. We see how different materials require quite different forms of definition, and each clause concerns itself with quite distinctive issues. Unlike Derrida's typographic columns which have a constant structure whatever object is under discussion, change occurs at the level of the linguistic structure of the definition. The various sections and clauses of the specification do not simply repeat with minor alterations and substitutions, but their language completely reconfigures in order to distinguish particular materials.

This variety of definition depends on a number of practical factors. Specifications are rarely written from first principles but are based on existing texts, repeated verbatim from project to project or adapted and amended for a new purpose. For the working group who produced the standardised NBS in the late 1960s and early 1970s, this cumulative aspect of the documents produced by most practices left them unreadable and full of extraneous information and handed down errors (Carter, 1969: 759). The specification has grown in time as a patchwork retaining a variety of clauses relevant to certain materials or to particular developments in building practice, even in the standardised version which has been tidied up and rationalised. Bowyer explains, for example, that it became increasingly important to specify the quality of materials in building documentation with the rise of gross tendering in the eighteenth century (Bowyer, 1983: 238–9). Contractors were tempted to use substandard materials because they were otherwise only able to make money for their labour and quality clauses could protect the client from this. The form of definition for a particular material is shaped by its social and economic context among other factors.

In the following example the definitions of two kinds of stone ashlar wallings/dressings are significantly different because of the manner of their production.

F21 NATURAL STONE ASHLAR WALLING/DRESSINGS

To be read with Preliminaries/General conditions.

TYPES OF WALLING/DRESSINGS

110 ASHLAR ______ .
- Stone:
  - Name (traditional): ______ .
  - Petrological family: ______ .
  - Colour: ______ .
  - Origin: ______ .
  - Finish: ______ .
  - Supplier: ______ .
  - Quality: Free from vents, cracks, fissures, discolouration, or other defects adversely affecting strength, durability or appearance. Before delivery to site, season thoroughly, dress and work in accordance with shop drawings prepared by supplier.
- Mortar: As section Z21.
  - Mix: ______ .
  - Sand: ______ .
  - Other requirements: ______ .
  - Bond: ______ .
  - Joints: Flush.
  - Width: ______ mm.
  - Pointing: ______ .
  - Features: ______ . [...] F22 CAST STONE ASHLAR WALLING/DRESSINGS

To be read with Preliminaries/General conditions.

TYPES OF WALLING/DRESSINGS

110 CAST STONE ______ .
- Cast Stone Units:
  - Manufacturer: ______ .
  - Product Reference: ______ .
  - Absorption: As clause ______ .
  - Compressive strength: To BS 1217.
  - Cube strength:
    - Average (minimum): ______ .
    - Single (minimum): Not less than ______ .
  - Finish: ______ .
  - Colour: ______ .
- Mortar: As section Z21.
  - Mix: ______ .
  - Sand: ______ .
  - Bond: ______ .
  - Joints: Flush.
  - Width: ______ .
  - Pointing: ______ .
  - Other requirements: ______ .' (NBS, 2004: F21, F22)

The clause for natural stone specifies its source. It is identified by geographic origin and its geological classification. The cast stone however, which is produced not simply extracted, is identified by a manufacturer and reference. The materials which make up the cast stone also have a source of course, and if this was a 'green' specification, this information might have relevance and need to be included. All materials have sources, but they are rarely a defining characteristic.

Perhaps more significantly, the cast stone is specified for its absorption and strength. The emphasis on the material’s performance is common throughout the specification document. Other
materials, such as timber, will be defined through their structural performance, or through their fire-rating (how long they can withstand fire) such as plasterboard (NBS, 2004: K10, 115), and precast concrete floors and decks are defined in relation to both (NBS, 2004: E60, 100). A whole range of performance factors such as thermal and acoustic transmittance, solar and light control or resistance to thermal stress, may be important for a material such as glass:

**H10 PATENT GLAZING**

- Average thermal transmittance (U-value) of patent glazing: ____.

**391 SOLAR AND LIGHT CONTROL**

- Glazing panes/units: Must have:
  - Total solar energy transmission of normal incident solar radiation (maximum): ____.
  - Total light transmission (minimum): ____.

**401 THERMAL SAFETY**

- Glazing panes/units: Must have adequate resistance to thermal stress generated by orientation, shading, solar control and construction.

**411 ACOUSTIC PROPERTIES**

- Sound transmittance: Minimum weighted sound reduction index (Rw) within 100 to 3150 Hz frequency range to BS 5821-3:
  - Location: ____.

It is only relevant to specify performance in relation to materials which are produced on a large scale whose properties can be tested. The idea was first put forward in the UK in 1930 and performance clauses only began to be used as the mass production of building materials and components developed (Atkinson, 1972: 115). In terms of this discussion, the emphasis on material performance makes clear that many of the materials in building are not in fact chosen for their aesthetic properties and are rarely interchangeable. This performative aspect of materials is not really taken into account in Aristotle's discussion. When he discusses the sphere, he wonders how it can remain a sphere whether made from bronze or stone or wood. In considering only the form, the materials are easily substituted for each other. But if he were to consider another substance, a ping pong ball for example, the specific properties of the material would become significant.

If most architectural discussion of materials concerns them in relation to aesthetics or expressive integrity, the specification reveals how most materials in building are in fact used for their performance, and differentiates them more clearly in terms of their individual properties.

**Writing materials: differentiating materials in language**

An early report recommending the production of the NBS noted three types of specification:

1. **By unique identification**
2. **By standard description**
3. **By performance**

And just three characteristics of materials which can be specified:

- **a) Sizes of constituent parts**
- **b) Treatment of a material**

As has been seen in this brief survey, these categories acknowledge some, but not all, of the wonderful variety of material definitions the specification yields. The factors that distinguish one material from another shift depending on how the material is made, how it will be used on site and in relation to what other materials. Size or texture may be important in one instance, porosity or acoustic performance in another, and workability in another.

To differentiate materials in language the specification must do more than directly compare like properties with like, it must configure anew the kinds of properties under consideration, and what constitutes a material – that which looks a certain way, that which is made a certain way or allows a certain manipulation, that which impedes or resists, that which makes certain connections possible, that which absorbs and that which can be permeated.

The differentiation of materials is achieved in the specification without recourse to their future form. They may have some kind of form in themselves as panels or lengths or components, or arrive on site quite ‘formless’ as pre-mixed concrete or cavity insulation do, but their attributes are, as specified, independent of the form of the building. The specification provides an example that might appeal to Bachelard. Here the notion of the individual is not only associated with form. The specification gives an alternative means of defining ‘materiality’ – not as that which is opposed to form and is therefore singular, but one which needs many definitions in order to articulate different materials. Derrida’s work, to make the ‘materiality’ of language visible, is limited by defining material as matter. The architectural drawing, in its concentration on form, consigns materiality to its singular other. But the shifting definitions of the specification are able to engage with the multiplicity of individual materials which do much more than simply give material presence to form.

The specification preserves the complexity of materials’ relationships to the business of building. It is a document which has built-up through additions, incorporations and amendments. Even the NBS, its most standardised and seamless version, was put together from a vast range of documentation from different areas of the building industry and shows its complex background in the variety of clauses and definitions which are included. Where the geometric lines of the drawing unify the parts of the building as if they are seamless and the product of a single hand, the sections of the specification with their very different language retain the traces and identities of the trades who authored them. Unlike the ideal language of the orthographic drawing, the language of the specification, however tidied up and systematised, cannot erase its context in social, historical and economic practices. It reveals that the materials of building are themselves cultural constructs, produced through their place in the building.
process not existing prior to it. It emphasises their production, the ways they are worked, their uses and in particular their effects, and pays almost no attention to their appearance.

The specification contains no photographs, drawings, or diagrams. Indeed, John Carter, an executive member of a committee who prepared an early feasibility study for the NBS, considered it was essential ‘to trace a boundary between drawings, quantities and specification’ and that certain information is ‘better expressed in words than graphically’ (Carter, 1969: 760). For Derrida, text renders its own materiality invisible, but a study of the specification suggests that language is also a medium in which materials can appear in their own right not simply as instances of matter which are substitutable for one another. Although the materials of fabrication are put to use in a philosophical account of matter such as Aristotle’s, hydromorphic models do not appear to encompass an architectural understanding of materials. Perhaps the mundane language of the specification, derived as it is from practices through the centuries, offers greater possibilities for articulating and exploring the individual differences between materials. With its poetry of putty, hardcore, concrete, stone, glass, timber boards and intumescent paint, the specification enlists a plurality of definitions, which use written language to exceed any one definition of material.

Notes
1. The four elements may not be commonly understood as ‘materials’ but here I use the term to distinguish individuated or plural instances of matter as opposed to a singular matter.
2. This account is based primarily on the discussion in Book Zeta of Aristotle’s Multiphysics.
4. The bipartite structure is multifaceted. Hegel is a philosopher, Genet a novelist. Hegel is concerned with family values, Genet is a homosexual. Philosophy is supposedly rational, literature is poetic and so on.
5. The specification acquires importance, then, as the power of the building trades diminishes. This is also the case for the rise of the architectural drawing, which becomes dominant with the architectural understanding of materials. Perhaps philosophical account of matter such as Aristotle’s, right not simply as instances of matter which are substitutable for one another. Although the materials of fabrication are put to use in a philosophical account of matter such as Aristotle’s, hydromorphic models do not appear to encompass an architectural understanding of materials. Perhaps the mundane language of the specification, derived as it is from practices through the centuries, offers greater possibilities for articulating and exploring the individual differences between materials. With its poetry of putty, hardcore, concrete, stone, glass, timber boards and intumescent paint, the specification enlists a plurality of definitions, which use written language to exceed any one definition of material.

References

Illustration credit
ARQ gratefully acknowledges: University of Nebraska Press for permission to use the author’s photographs of Glas.

Biography
Katie Lloyd Thomas is Senior Lecturer in Architecture at the University of East London. She is editor of Material Matters, to be published by Routledge in May 2006 and is working on a PhD about materiality and language. She is a founder of ‘taking place’, an interdisciplinary group involved with questions of feminism and space, documented in Scope 14. She collaborates with artist Bridget McMeek on ‘In Place of the Page’, a project exploring text, graphics and architectural drawing. Katie has published on feminism and representation in Visual Culture in Britain and Geography Research Journal and given papers in Australia, France, Germany, Iceland, Slovakia, and the UK.

Author’s address
Katie Lloyd Thomas
AVA
University of East London
4-6 University Way
London, E16 2RD
United Kingdom
k.lloyd-thomas@uel.ac.uk


Specifications: writing materials in architecture and philosophy
Katie Lloyd Thomas
OUTSTANDING SCHOLARSHIP FROM CAMBRIDGE

Before the Bauhaus
Architecture, Politics and the German State, 1890-1920
John V. Maciuka
$75.00: Hardcover: 0-521-79004-2:
400pp: 129 halftones

The Parthenon
and its Sculptures
Edited by Michael B. Cosmopoulos
$75.00: Hardcover: 0-521-83673-5:
232pp: 109 halftones/30 line diagrams

Gottfried Semper
and the Problem of Historicism
Mari Hvattum
$85.00: Hardcover: 0-521-82163-0:
288pp: 10 halftones/40 line diagrams

Byzantine Monuments of Istanbul
John Freely and Ahmet S. Çakmak
$80.00: Hardcover: 0-521-77257-5:
342pp: 51 color plates/106 halftones/53 line diagrams

The Architecture of Roman Temples
The Republic to the Middle Empire
John W. Stampler
$85.00: Hardcover: 0-521-81068-X:
304pp: 59 halftones/103 line diagrams/7 tables

Florentine Villas in the Fifteenth Century
An Architectural and Social History
Amanda Lillie
$90.00: Hardcover: 0-521-77047-5:
370pp: 184 halftones/16 line diagrams/8 tables

Architecture and Truth in Fin-de-Siècle Vienna
Leslie Topp
$85.00: Hardcover: 0-521-82275-0:
248pp: 65 halftones/16 line diagrams

Design and Construction in Romanesque Architecture
First Romanesque Architecture and the Pointed Arch in Burgundy and Northern Italy
C. Edson Armi
$85.00: Hardcover: 0-521-83033-8:
234pp: 124 halftones/7 line diagrams

Giovanni Pietro Bellori
The Lives of the Modern Painters, Sculptors and Architects
A New Translation and Critical Edition
Translated by Alice Sedgwick Wohl and Hellmut Wohl
Introduction by Tomaso Montanari
$130.00: Hardcover: 0-521-78187-6:
v. 496pp: 42 halftones

Prices subject to change.

For more information, please visit us at
www.cambridge.org/us or call us at 1-800-872-7423

CAMBRIDGE UNIVERSITY PRESS