arq (2014), **18.1**, 47–54. © Cambridge University Press 2014

Architecture gives form to self and society, but this is rarely acknowledged in the humanities and social sciences although architectural concepts are central to discourses of other disciplines.

Architecture and the humanities

Thomas Deckker

This study arose from the UK Arts and Humanities Research Council funded 'Connected Communities' project. It was apparent at the outset that the AHRC had not considered that architecture might be important, if not central, to discussions on communities, and it became obvious that this attitude was prevalent throughout the academic and media worlds. Despite evidence that the formal and conceptual structures of architecture permeated numerous disciplines, and that the built environment permeated our personal and social lives, other disciplines in the humanities and social sciences did not think architecture was relevant to the humanities in general.

This belief is represented within the institutional structure of the AHRC itself. The AHRC Joint Electronic Submissions funding application process organises research into a three-tiered system of research areas: there are seventy-eight primary research areas including Visual Arts with twelve subcategories, Dance with five, Drama with six, and Design with six, of which architecture is one. There is no other research classification for the spatial environment, built or unbuilt. On the other hand a search for 'architecture' gives six primary research areas, encompassing thirty-six third level subject areas. Except for the architecture subcategory under Design, the others have to do with information, computing and software.

'many architects would consider that architecture is one of the great humanist discourses through which we collectively observe and represent the human condition'

Many architects would consider that architecture is one of the great humanist discourses through which we collectively observe and represent the human condition. The Roman architect Vitruvius speculated that the origin of architecture followed the discovery of fire, around which men first gathered in 'deliberative assembly' and spoke in 'social intercourse'. To give this assembly permanence, Vitruvius speculated, men fashioned primitive huts from twigs and mud, and then, through observation and intelligence, 'gradually advanced from the construction of buildings to the other arts and sciences, and so passed from a rude and barbarous mode of life to civilisation and refinement'.[1] From that symbolic beginning we may extrapolate that architecture is the art that gives form to social groups. As Aldo Rossi said:

> *There is something in the nature of urban artefacts that renders them very similar – and not only metaphorically – to a work of art. They are material constructions, but not withstanding the material, something different: although they are conditioned, they also condition.*[2]

And yet, given its salient position as the form-giver and image-maker of our social environment, architecture is under-represented in debates about communities. While other disciplines within the humanities and social sciences survey and assess the architecture of our communities, architecture as a distinct discipline is rarely acknowledged.

This study describes the birth of architecture as one of the humanities during the Renaissance, how it became linked to emerging disciplines such as medicine, psychology and sociology during the nineteenth century, and how it has become lost as a distinctive discipline within the humanities in the late twentieth century.

Architecture and the humanities

The idea that architecture should be considered part of the humanities arose during the Renaissance and the rebirth of the humanities in general within European culture at the dawn

'the idea that Architecture should be considered part of the Humanities arose during the Renaissance and the rebirth of the humanities within European culture at the dawn of the fifteenth century'

doi: 10.1017/S1359135514000293

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press

of the fifteenth century. The Renaissance was not simply the rebirth of what was understood to be classical culture but an epistemological break or paradigmatic shift in the institution of knowledge that allowed new concepts of self and society and disciplines of study to take shape.[3] European civilisation became separated from the medieval societies which preceded and surrounded it and, via further shifts and revolutions, allowed it to define and epitomise the Modern world. Architecture passed from being implicitly ruled by religion and social custom, typical of vernacular societies, to being explicitly in interaction with discourses of sophisticated and abstract ideas, typical of modern societies. The polymath Leon Battista Alberti, in *De Re Aedificatoria*, stressed architecture as a rational discourse, and the book was, in any case, intended for patrons rather than practitioners.[4]

Alberti's description placed architecture as a *langue*, or formal system of abstract thought in both the semantic (as meaning) and syntactical (as grammar) senses, through which various political and social discourses of Renaissance society could be embodied and represented. The new civil society was represented equally by the urban plans of Pienza (1462) by Bernardo Rossellino or Ferrara (1492) by Biagio Rossetti as by books on civil behaviour and government such as *Il Cortegiano* (1528) by Baldassare Castiglione and the *Discorsi* (*c*. 1517) by Niccolò Machiavelli.[5] The new modes of thought and expression were embodied as much by the the invention of theatres, such as the Teatro, Sabbioneta (1588) by Vincenzo Scamozzi or the Globe Theatre, London (1599) as by the newly invented operas by Claudio Monteverdi and dramas by William Shakespeare which were performed in them.[6] In the same way that the discovery of perspective by the architect Filippo Brunelleschi in 1425 embodied and legitimised the subjective viewpoint of an individual, so depictions of ideal cities, such as that attributed to Luciano Laurana, architect of the Palazzo Ducale at Urbino (1466–72, later the setting for Castiglione's *Il Cortegiano*), depicted the public space in which these individuals were to operate as citizens.[7]

The questioning of the unity of *caractère* or 'taste' at the end of the eighteenth century, in particular the development of the idea of the 'sublime' as acting directly on our senses rather than the 'beautiful' which we appreciated intellectually, brought a new independence to literature, the fine arts and music. Architecture was freed from the courtly discourses which had governed its codes of representation since the Renaissance, but this freedom opened the problem of how it could represent, as a *langue*, ideas of self and society. The idea that only language could express these ideas was expressed dramatically by Victor Hugo in *Notre-Dame de Paris* in 1831: '*celui tuera cela*' – 'this (the book) will kill that (the building)'.[8]

Marshall McLuhan, in *The Gutenberg Galaxy* in 1962, attributed the development of subjectivity and the entire change in Western culture since the Renaissance not to the discovery of perspective but to the invention of the printing press, implicitly excluding architecture from the definition of 'modern' (i.e. post-Renaissance) man.[9] He developed a theory of his teacher, Eric A. Havelock, that the shift to the Modern world had, in fact, occurred with the invention of written language in Ancient Greece, and that it had accelerated during the nineteenth century:

> *Written communication world-wide, as it is used to preserve and re-use information, is tending increasingly to be alphabetised. This can be viewed as an effect of the superior military and industrial power wielded by the alphabetic cultures. But I would argue that this power itself, as it originally emerged very slowly in antiquity, and as it has gained rapid momentum since the end of the eighteenth century of our era, is itself an alphabetic phenomenon. Power has been derived from the mechanisms of written communication. Communication is not merely the instrument of thought; it also creates thought. Alphabetic communication, which meant literate communication, brought into existence the kind of thinking which remodels the dynamic flow of daily experience into 'is statements,' of one sort or another. This permits a conceptual analysis of what happens in the environment and in ourselves and creates the power not merely to reason about what happens but to control it and to change what happens. This power is not available in oral cultures.* [10]

McLuhan later denied any discursive role of architecture in the 'modern' age, emphasising technology as its sole determinant, a view in keeping with much architectural theory at the time but contrary to the growing use of concepts of architecture in other disciplines. His 'housing as shelter is an extension of our bodily heat-control mechanisms' could easily have come from the American engineer Buckminster Fuller or the British architectural group Archigram.[11]

'McLuhan later denied any discursive role of architecture in the 'modern' age, emphasising technology as its sole determinant, a view in keeping with much architectural theory at the time but contrary to the growing use of concepts of architecture in other disciplines'

The view that language could be separated from the experiences it describes is controversial. John Onians attributed distinctive mental processes to thinking about buildings that predate written language, partly because Ancient Egyptian hieroglyphs expressed social concepts through symbols of architecture:

> *The making of buildings and the experiencing of buildings are both associated with distinctive mental operations and [...] this association is apparent in our use of language. To put it another way, we use metaphors from architecture to articulate our thoughts because the processes of design*

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press

and construction and the experience of using building relate to basic mental operations and basic psychological needs. In other words, when we derive from building design the metaphor 'plan', as in 'five-year plan', or from building construction the expression 'foundations', as in 'foundations of economic theory' or from the experience of a building once constructed the concept of 'pillars', as in 'pillars of society', we do so because there is a uniquely close relationship between building and thinking.[12]

It is striking how other disciplines within the humanities and social sciences freely and seemingly unconsciously use architecture to conceptualise and define their own fields. A recent study in cognitive science, *The Architecture of the Mind* by Peter Carruthers, refers to the construction of the brain almost as a small city made of distinct and functional buildings; in his view, these 'modules' only process information rather than containing any 'thoughts or beliefs' themselves.[13] Carruthers, ironically, uses a spatial metaphor – that of architecture – to articulate a non-spatial concept, which would seem to support Onian's thesis. Despite an axiomatic connection, in architecture, between forms and the concepts they embody, cognitive science is dominated by language: *The Language Instinct: The New Science of Language and Mind* by Steven Pinker, for example; relatively few authors articulate spatial experience and cognition – such as *Things and Places: How the Mind Connects with the World* by Zenon Pylyshyn.[14] Pylyshyn acknowledges that our understanding of space is universal and intuitive, but hypothesises that the mind constructs two-dimensional images from spatial experiences.

It is quite clear that when these disciplines use the term 'architecture' they do not mean the canon of great buildings but mean an analogy for 'structure'. The ease with which concepts of architecture can be used to structure other disciplines might be taken to imply that architecture does not have its own unique and irreducible concepts relating to the built environment and thus is essentially redundant as a discipline within the humanities and social sciences. It is axiomatic, however, that architecture is the unique discipline that gives form to, but is also formed by, concepts of self and society, and that this discipline is irreducible to other disciplines. In *The Critical Historians of Art*, the art historian Michael Podro noted this dual aspect in relation to the fine arts:

One kind of question requires us to provide answers on diverse matters of fact, on sources, patronage, purposes, techniques, contemporaneous responses and ideals – the kind of question we can broadly describe as archaeological. The other kind of question requires us to see how the products of art sustain purposes and interests which are both irreducible to the conditions of their emergence as well as inextricable from them.[15]

The same could be said of architecture.

Architecture, self and society

The 'dual revolutions' of democracy (in France) and industrial capitalism (in Britain) at the dawn of the nineteenth century brought profound changes to architecture, not only in the new materials of iron and glass, building types, techniques and scale of construction with machines, organisation of labour in contracting firms, and the concept of an architectural profession, but in the underlying discourses of purpose, beauty and relations to society and self.[16] As Asa Briggs noted:

'the 'dual revolutions' of democracy (in France) and industrial capitalism (in Britain) at the dawn of the nineteenth century brought profound changes to architecture, not only in the new materials of iron and glass, building types, techniques and scale of construction with machines, organisation of labour in contracting firms, and the concept of an architectural profession, but in the underlying discourses of purpose, beauty and relations to society and self'

The industrial city was bound to be a place of problems. Economic individualism and common civic purpose were difficult to reconcile. The priority of industrial discipline in shaping all human relations was bound to make other aspects of life seem secondary.[17]

In response to this new concept of individualism, new concepts of the body and self emerged in the later nineteenth century: medicine, psychology and sociology became defined as distinct fields of study.[18] Some physical and mental pathologies were seen initially as environmental: John Snow's discovery of the waterborne transmission of cholera by mapping access to the Broad Street pump in London in 1855 was one of the most important documents of the emerging discipline of epidemiology. The identification of cholera as waterborne contradicted current medical wisdom that it was an airborne disease, and led to legislation to control the urban condition; Joseph Bazalgette's sewers were a direct response and brought cholera in London to an end.[19] Similarly, tuberculosis, a disease that spread in poor living conditions, was a major impulse to housing reform in the late nineteenth and early twentieth centuries.[20] Among mental pathologies, agoraphobia, identified by Carl Otto Westphal in 1871, and claustrophobia, identified by Benjamin Ball in 1879, were two of a range of topophobias originally attributed to metropolitan life, a theme expanded later by Georg Simmel, Siegfried Kracauer and Walter Benjamin (specifically related to Berlin and Vienna, both 'metropolitan' cities). The birth of Modernism in many fields of the arts and social sciences was linked to metropolitan life in *fin-de-siècle* Vienna.[21] Richard von Krafft-Ebing (who popularised the terms sadism and masochism) established the Purkersdorf Sanatorium near Vienna with buildings designed by the architect Josef Hoffmann in 1904.[22]

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press

The correlation between architecture and identity was not restricted to pathologies but was inherent in the discourses of both design professionals and domestic reformers. New ideas of domesticity and femininity began to be expressed in architectural terms: in the Progressive movement for domestic reform in the USA – run almost entirely, but not exclusively, by women – the *Ladies' Home Journal* was one of a number of popular publications that promoted designs for efficient and practical small houses, including one by Frank Lloyd Wright, who at the time was celebrated for his much larger houses in Chicago.[23]

Among architectural professionals, treatises on domestic design offered practical solutions for the planning of all types of residence.[24] These were not simply technical manuals but promoted new ideas of identity. William M. Taylor noted the idea of 'character' in the work of Robert Kerr's *The Gentleman's House*:

> *Kerr's characterization of the inhabitant – the occupant of the well-formed home and garden – as the key beneficiary of the designer's ministrations and the source for practical methods of effective planning. That is, by invoking the character of the inhabitant as a way of comprehending or communicating plans and spaces, Kerr portrayed design as a distinct form of creative practice, while the experience of space imagined through reference to this figure was, to a certain extent, universalized ... I suggest that the historic constitution of design as a unique form of creative practice and its incorporation of a rhetorical strategy involving the use of characterization, has served as a means for thinking about human identity as it is impacted upon by environmental – architectural and landscape – factors and planning. The inhabitant's accommodation to its surroundings served to articulate a moral condition through which a state of domesticity became a vehicle for the production of self-knowledge* [...] [27]

'at the end of the nineteenth century the connections between discourses of architecture and personal, family and social life could seem to be self-evident, but the twentieth century marked their catastrophic severance'

The international prestige of British architecture could be symbolised by the publication of *The English House* by Hermann Muthesius in 1904, or of American architecture by the Wasmuth edition of Frank Lloyd Wright.[25] Ebenezer Howard based social reform on urban design in his extraordinarily influential *To-morrow: A Peaceful Path to Real Reform*.[26]

At the end of the nineteenth century the connections between discourses of architecture and personal, family and social life could seem to be self-evident, but the twentieth century marked their catastrophic severance. As a result of the First World War, the Progressive movement faded away, partly because of Federal promotion of a crude 'American Way of Life'; the rise of new drugs and methods of treatment excluded the physical environment from medicine; and the institutionalisation of medicine, both educationally and legislatively, lent support to those fields of operation controlled by doctors.[28] Freud controversially rejected topophobias and placed the origin of mental pathologies within adolescent sexual life.[29]

'in the 'golden age' following the Second World War, the link between architecture and personal, family and social life seems to have vanished from sociology, psychology and geography'

In the 'golden age' following the Second World War the link between architecture and personal, family and social life seems to have vanished from social sciences such as sociology, psychology and geography.[30] Anne Buttimer & David Seamon, in *The Human Experience of Space and Place*, asserted that there was no evidence or consensus that physical design is linked to social behaviour.[31] Maria Lewicka made a very useful summary of contemporary theory and practice and stressed that, among practical psychologists, the conceptual basis and terms of place are not commonly shared among the wide variety of related disciplines:

> *All these findings seem to corroborate the claim made long ago by phenomenologists that sense of place is a natural condition of human existence (dwelling = being) (Buttimer, 1980; Heidegger, 1962; Norberg-Schulz, 1979; Seamon, 1980; Tuan, 1975, 1977), an invariant in a changing world. It is worth noting that this claim, for which there exists abundant empirical evidence, is at variance with a number of views, shared mostly by sociologists and philosophers who question the role of place in contemporary world* [...].

Lewicka also notes that when environmental psychologists talk about the physical characteristics of place they refer to amenities, not qualities that would be considered important by phenomenologists:

> [...] *there is a sad lack of theory that would connect people's emotional bonds with the physical side of places.*[32]

Architecture as the embodiment of social relationships has been erased from government policy. For example, in *Place and Placelessness*, Edward Relph pointed out that the Royal Commission on Local Government in England (the Redcliffe-Maud Report 1966–1969) stated that place was defined by relationships among people and not the physical environment. A recent UK government publication, *Safer Places*, attempted to give architecture an instrumental role in crime reduction.[33] Its good intentions were denied by actual government policies on urban privatisation, and in *Ground Control: Fear and Happiness in the Twenty-First-Century City,* Anna Minton plausibly depicted the environments used as examples of 'crime reduction'

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press

as degrading, and the underclass as the subjects of cynical state manipulation.[34]

It was not until the end of the 'golden age', symbolised for architecture by the demolition of the Pruitt-Igoe housing estate, St. Louis in 1972, that geographers began to place architectural descriptions at the centre of political and social discourses, in works such as *The Condition of Postmodernity* by David Harvey, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* by Edward Soja, *and Post-Modernism, or, The Cultural Logic of Late Capitalism* by Fredric Jameson.[35] It remains to be seen to what extent these ideas will become common currency, as the perception of architecture in the contemporary academic and media worlds would suggest little.

The perception of architecture in the contemporary academic and media worlds

A recent review of institutions within the public (rather than university) academic and media worlds and their literature shows readily that architecture is no longer seen as part of the humanities and social sciences. The British Academy, for example, in *Past Present and Future: The Public Value of the Humanities & Social Sciences* (2010), saw these disciplines as comprising the humanities:

> [...] *history, literature & languages, psychology, economics, law, medieval studies, archaeology, classics, geography, linguistics, sociology, African & Oriental studies, theology & religious studies, philosophy & ethics, history of art & music, anthropology, international relations and political studies.*[36]

Curiously one of the case studies within this publication was the exhibition *Recreating Renaissance Interiors at the V&A* which they considered a success because 'it established a new model of research-led exhibition, driven by an international group of university and museum-based scholars ranging from medieval archaeology and Islamic studies to the histories of food, music, furniture and science'. Significantly, there were no architects within this group nor was architecture mentioned as the subject matter.

The British Academy then noted that:

> *The UK has an outstandingly strong research base in the social sciences and humanities. Each day thousands of extraordinarily gifted economists, lawyers, historians, linguists, philosophers, critics, archaeologists, geographers, sociologists, anthropologists and psychologists make important contributions to our shared public life – analysing the human and ethical implications of scientific and medical advances, exploring the social and economic impact of global issues such as climate change or international security, influencing new kinds of business innovation, uncovering new perspectives on our cultural heritage or undertaking reviews and enquiries which often lead to the revising or refocusing of public policy. Their endeavours also extend beyond the immediate needs of the economy, underpinning the culture of open and informed debate essential to any civilised, democratic society.*[37]

Not only does this list limit the scope of the humanities to utilitarian aims (something that was hitherto never claimed to be its proper field of operation: rather the humanities have always been regarded as the guardians of our intellectual culture), but it is also arguable that architects make valuable contributions to, with reference to the quote above, 'the social and economic impact of global issues', 'new kinds of business innovation', 'new perspectives on our cultural heritage' and 'reviews and enquiries which often lead to the revising or refocusing of public policy'.

Similarly, an article in the *Guardian* listed its top 300 intellectuals in Britain today, which included academics (10), activists (2), authors (54), classicists (2), critics (33), economists (10), historians (42), journalists/editors (61), lawyers (9), media executives (1), museum directors (1), musicians (2), philosophers (11), playwrights (6), poets (12), policy advisers (4), political philosophers (3), political scientists (4), political theorists (2), politicians (7), psychotherapists (2), religious leaders (2), scientists (12), social scientists (4) and theatre directors (4).[38] There were no professional urban designers, architects or artists listed, and of the five who write directly about architecture, Charles Jencks (an ex-architectural historian and landscape designer), is listed as a critic; Roger Scruton (an occasional architectural historian), as a philosopher; Simon Jenkins (an occasional commentator on urban design and Chairman of the National Trust) as a journalist/editor; Richard Sennett (an architectural and urban theorist who teaches sociology at New York University and at the London School of Economics) as a philosopher; and Gavin Stamp (an architectural historian and journalist) as a historian. This may be seen as evidence, in the first place, of the astonishing insularity of the *Guardian* but also representative of a general perception of the low importance of architects to culture even among the chattering classes. There was no mention of architects formally recognised by the establishment, such as Baron Foster of Thames Bank, Baron Rogers of Riverside, Sir Michael Hopkins, Sir Nicholas Grimshaw, Sir David Chipperfield, Sir Terry Farrell or Sir Richard MacCormac, many of whom are vocal in discussions of the role of architecture in public life. Rogers, for example, gave the annual BBC Reith Lectures in 1995 and was an adviser on mayoral urban policy in London between 2001 and 2009 (resulting in the London Plan, regarded as a key instrument in improving housing standards), and Farrell is an author of several important studies of London.[39]

The Arts and Humanities Research Council recently published *Leading the World: The Economic Impact of UK Arts and Humanities Research*:

> *Early in 2008 the AHRC asked a number of arts and humanities researchers in the UK to write a 5000 word essay that set out the value in non-academic contexts of some area of arts and humanities research. The word 'value' was deliberately chosen in place of 'impact' because it is arguably closer to the instincts and interests of these researchers. There was a very positive reaction to this initiative and we accepted 33 essays. Professor Jonathan Bate FBA is editing them for publication.*[40]

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press

Out of the thirty-three accepted essays, there were contributions from three architects and related disciplines: Professor Iain Borden (architectural historian), University College London, on 'The Value of Arts and Humanities Research to Life in the UK: Architecture', Professor Deborah Howard (architectural historian), University of Cambridge, on 'The Value of Architectural History for the Wider Community' and Professor Alan Short (architect), University of Cambridge, on 'Geometry and Atmosphere: the Conundrum of Building for the Performing Arts'. In the completed publication, *The Public Value of the Humanities*, however, only the contributions from Borden and Howard were included.[41]

'in the 'golden age' following the Second World War, the link between architecture and personal, family and social life seems to have vanished from sociology, psychology and geography'

It can hardly be argued that architecture and architectural landscapes are not in the public mind in the United Kingdom. The National Trust (of which Sir Simon Jenkins, one of the *Guardian*'s 300 intellectuals, is current Chairman), founded in 1895, is the largest non-commercial membership organisation in the United Kingdom, with a membership in 2011 of 4 million, compared with the combined membership of all political parties of 0.5 million. The current management strategy, in the light of rapidly increasing membership and visitor numbers, is to seek greater public involvement in their work:

> *The work of the Trust touches our lives in myriad different ways but we believe there are four issues – cultural heritage, our natural world, climate change and local food – which resonate most strongly with the daily lives of our visitors and supporters and the wider needs of society.*[42]

A substantial part of the holdings of the National Trust is architecture and architectural landscapes (that is, landscapes created intentionally in association with buildings, what the National Trust classify as 'gardens & parks' rather than 'coast & countryside', although these may indeed bear definite marks of human habitation):

> *In total we care for 28 castles, 707 miles (1,138 km) of coastline, 253,349 hectares (626,051 acres) of countryside, 66 nature reserves, 4,000 prehistoric monuments, all or part of 5 World Heritage sites, 215 houses and gardens, 149 registered museums, 127 factories, workshops and mines, 12 lighthouses, 2 gold mines, 78 mills, 57 historic villages, 43 pubs and much else besides.*[43]

The National Trust noted that visits in 2007 exceeded 100 million with the assistance of 49,000 volunteers.

Among the statutory and official bodies concerned with the practice of architecture – the Architects Registration Board (ARB), the Royal Institute of British Architects (RIBA) and the Commission for Architecture and the Built Environment (CABE) – only CABE addressed issues of the Humanities. CABE, founded in 1999 as an advisory body to the government on 'architecture, urban design and public space', was disbanded in 2011, which might be taken as a verdict by central government on the importance of architecture in the built environment.

CABE published numerous works, e.g. *Ordinary Places, People and Places: Public Attitudes to Beauty, Physical Capital: How Great Places Boost Public Value* and *Character and Identity: Townscape and Heritage Appraisals in Housing Market Renewal Areas*, intended to guide public and official opinion. In *Beauty: A Short History*, part of an Ipsos-MORI Social Research Institute study examining how people relate to the places where they live, Alan Powers believed that there seemed to be a greater understanding and appreciation of architecture in public life than portrayed in the public academic and media worlds:

> *The story of our thinking about beauty* [...] *reflects the growing complexity of the world and the loss of religious and philosophical conviction. Thomas Hardy described this in Before Life and After as 'the disease of thinking' which causes the loss of an inner conviction that, visual evidence tells us, existed 'before the birth of consciousness'... Here I suggest that there are some understandable pressures that led to our present reticence about beauty. At the same time, there is every reason to try to work with the idea again. As the MORI research* [...] *shows, the public values beauty and not only wants it in their homes, clothes and other personal belongings, but also in the great outdoors, the public realm and public life.*[44]

If the public does value and want beauty in their homes and the public realm, then the role of architecture as a subject of and for the humanities needs a substantial and positive reassessment.

Conclusion

Architecture may be defined as the art which embodies and represents social relations and ideas of self. At the end of the nineteenth century, the design of houses and cities was so central to political discourses around such issues as sanity, domesticity and femininity that it could be thought of as self-evident, but it seems to have been erased from current discussion of our communities. While architecture saturates the discourses of many disciplines of the human sciences, it is scarcely acknowledged; it is time that it was reasserted as a humanistic discourse in the academic world, in the public imagination, and in practice.

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press

Notes

1. Vitruvius, 'The Origin of the Dwelling House' in *The Ten Books on Architecture* (New York: Dover, 1960; first pub. *de Architectura c.* 25BC) Book II, Ch. 1. pp. 38–40.
2. Aldo Rossi, *The Architecture of the City* (Cambridge, MA: MIT Press), 1966, p. 32.
3. *Epistème:* 'the strategic apparatus which permits of separating out from among all the statements which are possible those that will be acceptable within ... a field of scientificity'. See: Michel Foucault, *The Archaeology of Knowledge* (London: Tavistock, 1972; first pub. 1969). Paradigm: 'a cultural constellation of related ideas'. See: Thomas Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1962).
4. Leon Battista Alberti, *Ten Books of Architecture* (New York: Dover, 1986; first pub. *De Re Aedificatoria* 1452). Book VI, Chapter 2, p. 113.
5. Both Pienza and Ferrara have been listed as World Heritage Sites by UNESCO in recognition of their place in the application of humanist principles of urban design.
6. For the evolution of theatre design see Leonardo Benevolo, 'The Crisis of Sensibility' in *The Architecture of the Renaissance,* vol. 2, pp. 669–87. Benevolo believed that the ambiguity of public and theatrical space in Elizabethan theatres 'helped to produce the specific tone of Shakespearean drama, poised between reality and illusion'.
7. Luciano Laurana, *Ideal City* (*c.* 1470), Galleria Nazionale delle Marche, Urbino.
8. Victor Hugo, *The Hunchback of Notre Dame* (1st pub. *Notre-Dame de Paris* Paris, 1831).
9. By Johannes Gutenberg in Mainz around 1439. Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (University of Toronto Press, 1962).
10. Eric A. Havelock, 'The Alphabetic Mind: A Gift of Greece to the Modern World' (*Oral Tradition*, vol. 1, no. 1, January 1986).
11. Marshall McLuhan, 'Housing' in *Understanding Media: The Extensions of Man* (New York: McGraw Hill, 1964).
12. John Onians, 'Architecture, Metaphor and the Mind' in *Architectural History* 35 (1992), p. 192.
13. Peter Carruthers, *The Architecture of the Mind: Massive Modularity and the Flexibility of Thought* (Oxford University Press, 2006).
14. Steven Pinker, *The Language Instinct: The New Science of Language and Mind* (New York: William Morrow, 1994); Zenon W. Pylyshyn, *Things and Places: How the Mind Connects with the World* (Cambridge, MA: MIT, 2007).
15. Michael Podro, *The Critical Historians of Art* (Yale University Press, 1982), p. xviii.
16. Eric Hobsbawm, *The Age of Revolution: 1789–1848* (London: Weidenfeld & Nicolson, 1962).
17. Asa Briggs, *Victorian Cities* (Harmondsworth: Penguin, 1968), p. 18.
18. Part of another epistemological break in the structure of knowledge, which included *The Principles of Geology* (1830) by Charles Lyell, *A Contribution to the Critique of Political Economy* (1859) by Karl Marx, and *On the Origin of Species* (1859) by Charles Darwin. See Stephen Toulmin and June Goodfield: *The Discovery of Time* (Harmondsworth: Penguin, 1965) pp. 283–301.
19. This debate was amusingly portrayed by J. G. Farrell in *The Siege of Krishnapur* (London: Weidenfeld & Nicolson, 1973), set during the Indian Mutiny of 1857.
20. See, for example, Margaret Campbell, 'What Tuberculosis did for Modernism: The Influence of a Curative Environment on Modernist Design and Architecture' in *Medical History* (Cambridge University Press), 2005, October 1; 49(4): 463–88.
21. Allan Janik and Stephen Toulmin, *Wittgenstein's Vienna* (New York: Simon and Schuster, 1973); Carl E. Schorske: *Fin-De-Siècle Vienna: Politics and Culture* (New York: Knopf, 1979); Gemma Blackshaw & Leslie Topp (eds), *Madness and Modernity: Mental Illness and the Visual Arts in Vienna 1900* (London: Lund Humphries, 2009).
22. Leslie Topp, 'An Architecture for Modern Nerves: Josef Hoffmann's Purkersdorf Sanatorium' in the *Journal of the Society of Architectural Historians,* vol. 56, no. 4 (Dec 1997), pp. 414–37.
23. See, for example, Dolores Hayden, *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods and Cities* (Cambridge, MA: MIT, 1982). Publications included *The American Woman's Home* (1869) by Catharine Beecher with Harriet Beecher Stowe, *The New Housekeeping: Efficiency Studies in Home Management* (1912), *Household Engineering: Scientific Management in the Home* (1915) by Christine Frederick and *The Principles of Domestic Engineering* (1915) by Mary Pattison.
24. Such as *The Gentleman's House; Or, How to Plan English Residences, from the Parsonage to the Palace* (1864) by Robert Kerr, *The Englishman's House: A Practical Guide for Selecting or Building a House* (1874) by C. J. Richardson or *House Architecture* (1880) by J. J. Stevenson.
25. Hermann Muthesius, *The English House* (first pub. *Das englische Haus*, Berlin: Wasmuth 1904). 'British' rather than 'English' as Charles Rennie Mackintosh was regarded as one of the great architects of the period, perhaps more so in Vienna than in his native Glasgow. Frank Lloyd Wright: *Ausgeführte Bauten und Entwürfe* [*Studies and Executed Buildings*] (Berlin: Wasmuth, 1910).
26. Ebenezer Howard, *To-morrow: A Peaceful Path to Real Reform* (1898).
27. William M. Taylor, 'Characterizing the Inhabitant in Robert Kerr's "The Gentleman's House, 1864"' in *Design Issues,* vol. 18, no. 3 (Summer, 2002), pp. 39-40.
28. See, for example, W. F. Bynum, 'The Rise of Science in Medicine, 1850–1913' in W. F. Bynum, Anne Hardy, Stephen Jacyna, Christopher Lawrence and E. M. Tansey, *The Western Medical Tradition: 1800 to 2000* (Cambridge: Cambridge University Press 2006).
29. Such as in Sigmund Freud, *Three Essays on the Theory of Sexuality* (New York: Basic, 2000; first pub. *Drei Abhandlungen zur Sexualtheorie,* Vienna 1905).
30. The 'golden age': 'Productive capacity [in the U.S.] grew dramatically across the Depression years (1929–1941) and ... this advance provided the foundation for the economic and military success of the United States during the Second World War as well as for the golden age (1948–1973) that followed.' Alexander J. Field, *A Great Leap Forward: 1930s Depression and U.S. Economic Growth* (New Haven, CT: Yale, 2011). The cover showed Futurama, a popular exhibit of a future city, from the New York World's Fair 1939.
31. Anne Buttimer & David Seamon (eds), *The Human Experience of Space and Place* (New York: St. Martin's Press, 1980).
32. Maria Lewicka, 'Place Attachment: How Far Have we Come in the Last 40 Years?', *Journal of Environmental Psychology,* vol. 31, issue 3, September 2011, pp. 207–30.
33. Office of the Deputy Prime Minister, *Safer Places: The Planning System and Crime Prevention* (London: HMSO, 2004).
34. Anna Minton, *Ground Control: Fear and Happiness in the Twenty-First-Century City* (London: Penguin, 2009).
35. David Harvey, *The Condition of Postmodernity* (Cambridge, MA &

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press

Oxford: Blackwell, 1990); Edward W. Soja: *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (New York & London: Verso, 1989); Frederic Jameson: *Post-Modernism, or, The Cultural Logic of Late Capitalism* (New York and London: Verso, 1991).

36. 'Recognising Cultural Value' in British Academy, *Past Present and Future: The Public Value of the Humanities & Social Sciences* (London: British Academy, 2010).
37. British Academy, *Past Present and Future,* p. 3.
38. <http://www.guardian.co.uk/culture/2011/may/08/top-300-british-intellectuals> [accessed on 17 March 2014]. This article appeared on p. 13 of the New Review section of the *Observer* on Sunday 8 May 2011. It was published on guardian.co.uk at 00.05 BST on Sunday 8 May 2011. It was last modified at 11.56 BST on Monday 16 May 2011.
39. Richard Rogers, *Cities for a Small Planet* (London: Faber, 1997); *The London Plan: Spatial Development Strategy for Greater London* (Greater London Authority, 2011); Terry Farrell, *Shaping London: The Patterns and Forms that Make the Metropolis* (London: Wiley 2009).
40. The Arts and Humanities Research Council, *Leading the World: The Economic Impact of UK Arts and Humanities Research* (2009).
41. A video 'Geometry and Atmosphere: the Conundrum of Building for the Arts' is available for download from the University of Cambridge <http://www.sms.cam.ac.uk/media/1095045> [accessed on 17 March 2014]. Short was highly critical of the Arts Council funding regime for arts buildings.
42. National Trust, *Our Future – Join In, Our Strategy to 2010 and Beyond* (National Trust, 2007), p. 5.
43. National Trust, *Our Future – Join In,* p. 3.
44. CABE, *Beauty: A Short History* (CABE 2010).

Acknowledgements
This paper would not have been possible without the support of Dr. Lorens Holm, Charles Rattray and Dr. Neil Burford of the School of Architecture at the University of Dundee, to whom I owe my thanks.

Author's biography
Thomas Deckker is an architect in practice, a Fellow of the Geddes Institute for Urban Research at the University of Dundee and a Visiting Researcher at King's College London. He has a special interest in urban design, and was editor of *The Modern City Revisited* (Routledge, 2000).

Author's address
Thomas Deckker
t.deckker@dundee.ac.uk

https://doi.org/10.1017/S1359135514000293 Published online by Cambridge University Press