

Character

Character is a large word, full of significance; no metaphoric river can more than hint at its meaning.
Louis Sullivan, *Kindergarten Chats*, 33

Introduced into architectural discourse in the eighteenth century, the term 'character' has been central to efforts to demonstrate a relationship between built works of architecture and ulterior meaning. References to 'character' almost always raise issues of 'meaning', and this must be taken into account in analysis of the term. In particular it has been through the word 'character' that the successive debates over what has sometimes been called the 'crisis of representation' have been conducted. The multiple uses of 'character' within architecture over the last two and a half centuries are, to a large extent, the outcome of the uncertainty as to whether or not buildings carry 'meaning', and if they do, how it is to be discerned.

Although generally identified as a product of the classical tradition, which is where it was principally developed, 'character' is a term by no means restricted to classicism, and it has been used widely in the twentieth century. Despite the attempt by the critic Colin Rowe (in his essay 'Composition and Character' written in 1953–54) to expunge it from the modernist vocabulary, there is plenty of evidence for its unapologetic use throughout the modernist era. Examples range from the proto-modernist Otto Wagner, who directed his students to attend to 'a clear, easy, and immediately apprehensible expression of the building's character' (89); to David Medd, a British mid-century schools architect – 'colour is perhaps the single most important factor in determining the character of a building' (1949, 251); to the American late-modern urbanist, Kevin Lynch – 'If Boston districts could be given structural clarity as well as distinctive character, they would be greatly strengthened' (1960, 22); and to the British critic Robert Maxwell writing in 1988: 'There seems no doubt that the building [Mississauga City Hall] has communicated a character, and that it has

succeeded in this by means of a skilful rhetoric' (1993, 85). If Rowe's claims – that 'the present day has imposed critical taboos on characterization', and that the word was 'somewhat suspect' (62) – are not borne out by the evidence, his essay was nonetheless important in that it conformed to a particular, high modernist view, elaborated in his other writings, that the meaning of architecture lay solely in the immanence of its perception, and that architecture could represent nothing beyond its own immediate presence.

Over the last twenty years, interest in 'character' has increased. This is a symptom of the decline of semiotic theories of meaning, and the growing favour for phenomenologically based analyses of meaning. The present-day use of 'character' belongs very much within a view that meaning is to be understood as the outcome of the occupation of a particular physical place by an active human subject. The best-known instance of this kind of discussion occurs in the writings of Christian Norberg-Schulz who, following Heidegger, posited the two fundamentals of architecture as 'space' and 'character'. Space, or whatever is enclosed, is where man is; while character, denoted by adjectives, is what satisfies man's need 'to identify himself with the environment, to know how he is in a certain place' (1976, 7). 'Character' is both 'a general comprehending atmosphere, and on the other [hand] the concrete form and substance of the space-defining elements. Any real presence is intimately linked with a character' (5–6). According to Norberg-Schulz, 'we have to emphasize that all places have character, and that character is the basic mode in which the world is "given"' (6). A more comprehensive discussion of the problem of architecture's meaningfulness, also informed by phenomenology, occurs in an article by Dalibor Vesely, who sees the development of the concept of 'character' since the eighteenth century as a primary symptom of the collapse of a general system of transcendental meaning in architecture: 'The ambition to subsume the traditional



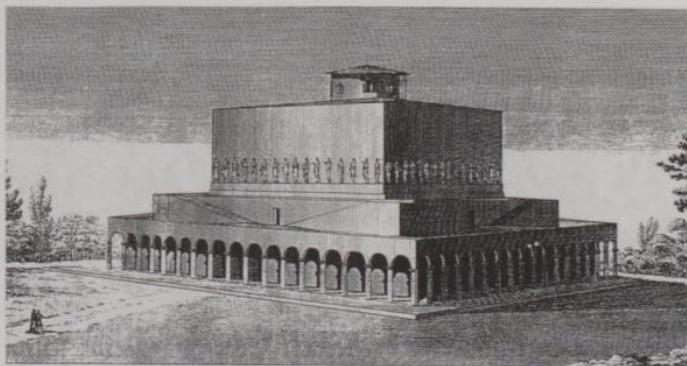
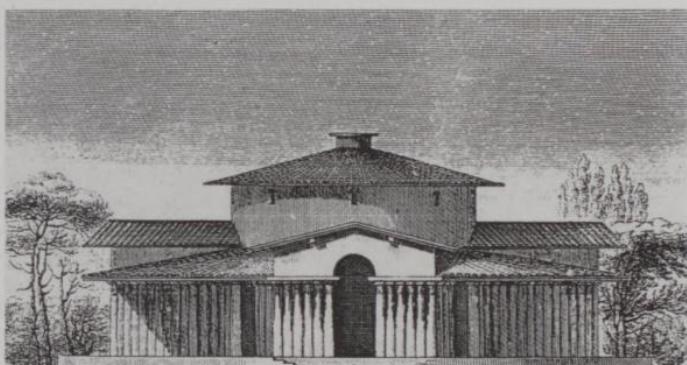
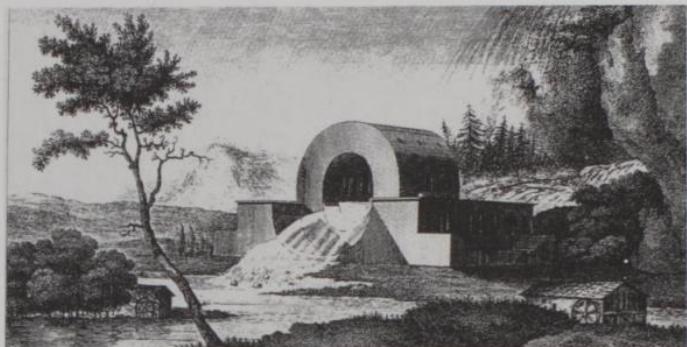
City Hall, Mississauga, Canada, E. Jones and M. Kirkland, 1982–86: 'no doubt that the building has communicated a character'. 'Character' has remained in constant use throughout the modern era, despite Colin Rowe's attempt to expunge it from the modernist vocabulary.

metaphysics and poetics of architecture into the aesthetics of *character* created a temporary illusion of order, but in the long run proved to be a basis of relativism, arbitrariness and confusion' (1987, 26). Vesely's argument is that 'character' allowed architecture to become perceived as 'representational', as a cypher for the thing represented, producing a duplication of reality. 'The belief that the building before us is representing by referring to something not present disregards the simple fact that the only possible way that we can experience the reference is through the situation of which not only the building but also we ourselves are part' (24–25). As developed in architectural discourse, Vesely's contention is that 'character' encouraged people to take for granted a distinction between the work as built and a symbolic meaning. 'Character', a product of the eighteenth-century separation of aesthetic and scientific knowledge of the world, induced 'a tendency to move towards the surface of a building, an interior or a garden, towards the experience of appearances' (26). Yet, if as Vesely suggests, 'character' has been partially responsible for depriving architecture of meaningfulness, it is nonetheless 'the prime, if not the only, link still preserved with the more authentic tradition of representation' (25) that allegedly

existed before the eighteenth century. Therefore, while Vesely sees 'character' as unsatisfactory and harmful in its effects upon architecture, he nonetheless believes it to be worth holding on to.

Vesely's critique of 'character' should be borne in mind when we turn to the history and various uses of the term. It is generally agreed that 'character' was introduced into architecture by the French architect and writer Germain Boffrand, in his *Livre d'Architecture* (1745).¹ Drawing an analogy from Horace's *Ars Poetica* he wrote:

Although architecture may seem only to be concerned with what is material, it is capable of different genres, which make up, so to say, its forms of speech, and which are animated by the different characters that it can make felt. Just as on a stage set a Temple or a Palace indicates whether the scene is pastoral or tragic, so a building by its composition expresses that it is for a particular use, or that it is a private house. Different buildings, by their arrangement, by their construction, and by the way they are decorated, should tell the spectator their purpose; and if they do not, they offend against the rules of expression and are not as they ought to be. (16)



'Character' according to Blondel 'announces the building to be what it is'. For Ledoux, in common with other eighteenth-century French architects, the task was to give each genre an appropriate character. From top to bottom: Superintendents' house, Source de la Loue; Woodcutter's Workshop; Panaréthéon (House of Good Conduct), from Ledoux, *L'architecture*, 1804.

Summarizing his argument, Boffrand wrote:

A man who does not know these different characters, and who cannot make them felt in his work is not an architect ... A banqueting hall and a ballroom must not be made in the same way as a church ... in every one of the modes, or orders, of architecture one can find the signifying characters which are most particularly suited to each sort of building. (26)

Boffrand's idea of character was, as he made clear, borrowed from poetry and drama – yet this translation to architecture was not without difficulties, for the characteristic genres of poetry and drama – epic, pastoral, comedy, tragedy – did not readily fit architecture, and much of the subsequent discussion of the topic in the eighteenth century was taken up with attempts to find characters more appropriate to architecture. It was of course precisely this dependence of 'character' upon a critical vocabulary developed in other art practices that made it so unattractive to Colin Rowe and other modernist critics.

The most systematic development of Boffrand's idea was by J.-F. Blondel. In an essay of 1766, reprinted in the *Cours d'Architecture*, he wrote:

All the different sorts of architectural production should bear the imprint of the particular purpose of each building, all should have a character determining their general form, and announcing the building to be what it is. It is not enough for the distinctive character to be indicated only by the attributes of the sculpture ... It is the fine arrangement [*disposition*] of the general masses, the choice of forms, and an underlying style which gives to each building a bearing which suits only those of its sort. (vol. 2, 229–30)

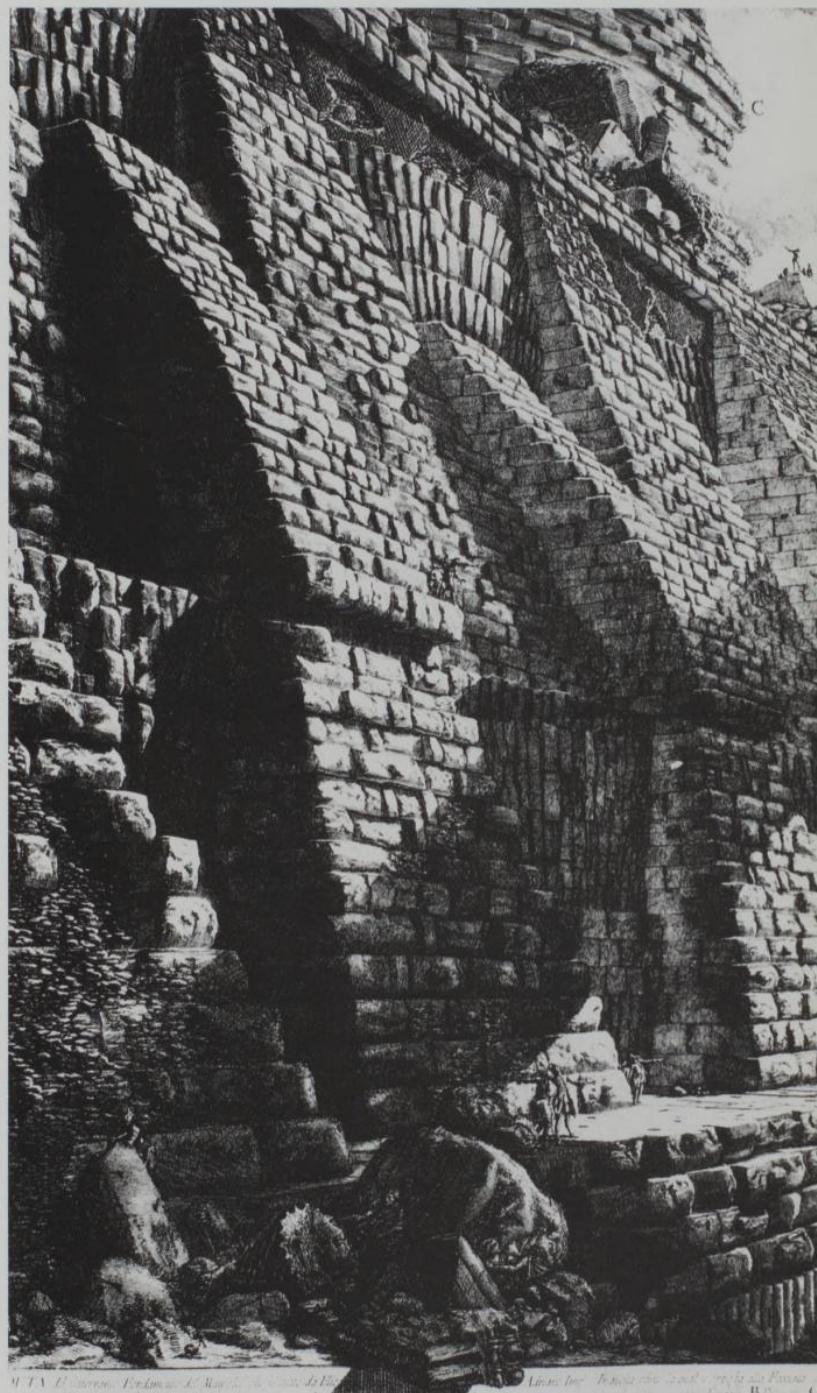
Blondel went on to distinguish sixty-four different building *genres* (or 'types' – see 'Type', p. 304–5) discussing the form and decoration appropriate to each. Earlier, in chapter four of volume one of the *Cours*, Blondel had described the range of characters which were possible in architecture – in all he listed no fewer than thirty-eight – among them sublime, noble, free, male, firm, virile, light, elegant, delicate, pastoral, naïf, feminine, mysterious, grand, bold, terrifying, dwarf, frivolous, licentious, ambiguous, vague, barbaric, flat, trifling and impoverished (on 'male' and 'feminine', see chapter 4). Fascinating though his expositions of the

architectural expression of each character are, when he came to the description of the sixty-four building *genres*, he made little use of them, which is indicative of the difficulty of fitting these essentially literary figures to the determinate forms of architecture.

More fruitful than Blondel's literal borrowing from literary modes was that of Blondel's contemporary, the architect J.-D. LeRoy, who suggested that the themes expressed by architecture might instead be drawn from the experience of nature. LeRoy, in his *Histoire de la Disposition et des formes différents que les chrétiens ont données à leurs temples depuis le règne de Constantin le Grand à nos jours* (1764), wrote – and this is the English translation made by Sir John Soane, whose attachment to 'character' we shall turn to shortly –

All grand spectacles impose on man: the immensity of the sky, the vast extent of the earth or of the sea, which we discover from the tops of mountains or from the middle of the ocean, seem to raise our minds and to enlarge our ideas. Our great works make likewise on us impressions of the same nature. We feel at their sight strong sensations, very superior to those which are only agreeable and which are the only ones which small edifices can give us. (50; Soane's translation quoted in Watkin, 1996, 201)

It is the attempt to perceive in architecture an analogous range of sensations to those experienced in front of nature that was to become the main preoccupation of late eighteenth-century discussions of character. This theme was introduced first in two British books on aesthetics, Lord Kames's *Elements of Criticism* (1762), and Thomas Whately's *Observations on Modern Gardening* (1770), both of which were translated shortly after publication, the former into German, the latter into French, and had considerable influence on continental thought. Kames's was the first English use of 'character' in relation to architecture in the new sense introduced in France by Boffrand: 'every building ought to have a character or expression suited to its destination' (vol. 2, 386). Kames placed considerable stress upon the expression of utility as part of the pleasure of architecture, and was critical of literal, emblematic devices – such as the temples of Ancient and of Modern Virtue at Stowe – to create 'the certain agreeable emotions or feelings' that were the foundation of the art (vol. 2, 432, 384). Whately put forward a more exact classification of 'character' into three kinds – emblematic, imitative, and original. The shortcoming of emblematic characters – such as



Foundations of Castel S. Angelo, Rome, etching by G.-B. Piranesi, *Antichità Romana*, 1756. LeRoy, familiar with Piranesi's engravings and Burke's *Essay on the Sublime*, pointed out that the works of man were no less capable of stimulating emotions of horror, wonder and delight than were spectacles of nature; in the late eighteenth century, 'character' acquired a secondary meaning as a description of the property of works of architecture giving rise to such emotions.

allegorical garden ornaments, with mythological or other significance – was that ‘they make no immediate impression; for they must be examined, compared, perhaps explained before the whole design of them is well understood’; far better that the allusions be ‘not sought for, not laboured, and have the force of a metaphor, free from the detail of an allegory’ (158). Likewise imitative character, because of the consciousness of resemblance, ‘checks that train of thought which the appearance naturally suggests’ (159). Whately argued that

the art of gardening aspires to more than imitation: it can create *original* characters, and give expressions to the several scenes superior to any they can receive from allusions. Certain properties, and certain dispositions, of the objects of nature, are adapted to excite particular ideas and sensations: ... all are very well known: they require no discernment, examination, or

discussion, but are obvious at a glance; and instantaneously distinguished by our feelings. (160–61)

The merit of ‘original character’ is that ‘we soon lose sight of the means by which the character is formed’ (163).

It was this idea, that architecture might achieve a direct appeal to the spirit without mental reflection, that fascinated late eighteenth-century French architects, in particular Le Camus de Mézières, Boullée and Ledoux, and which dominated discussions of character in the latter part of the century. Here, it seemed, there was a real possibility that architecture might create ‘characters’ that, while analogous to nature in their effect, were entirely specific to architecture. In *Le Génie de l'architecture* (1780) Le Camus de Mézières made use of analogies from both painting and theatre to explain his notion of character, but ultimately saw architecture as capable



Elysian Fields, Stowe, Buckinghamshire, W. Kent, c. 1735. Whately suggested that landscape gardening had the power to create ‘original characters’, whose direct appeal to the emotions was unencumbered by allegory or intellectual reflection.



Humphry Repton's proposed changes to West Wycombe Park, Buckinghamshire, 1794–95. 'Unity of character' for practitioners of the picturesque like Repton meant 'it seemed as if some great artist had designed both the building and the landscape, they so peculiarly suit and embellish each other'. From Repton, *Observations*, 1805.

of producing its own specific characters. Within the house, 'Each room must have its own particular character. The analogy, the relation of proportions, decides our sensations; each room makes us want the next; and this engages our minds and holds them in suspense' (88). It was from Le Camus de Mézières that Boullée developed his notion of the Poetry of Architecture: here, Boullée described character in terms of the moods of the seasons – the magnificent splendour of summer, the smiling variety of autumn, the sombre gloom of winter – each of which could be expressed in architecture by means of their particular qualities of light and shade (see ill. p. 230). 'This type of architecture based on shadows', he claimed, 'is my own artistic discovery' (90).

To the two main eighteenth-century senses of 'character' described so far – the expression of the building's particular purpose, and the evocation of specific moods – we should add a third, the sense of character as expression of locality, of place. Fundamental to the practice of picturesque landscape and architecture, this particular meaning follows from Alexander Pope's well-

known lines in his 'Epistle to Lord Burlington' of 1731:

To build, to plant, whatever you intend,
To rear the Column, or the Arch to bend,
To swell the Terras, or sink the Grot;
In all, let *Nature* never be forgot.
Consult the *Genius* of the *Place* in all.

For practitioners of the picturesque, like Humphry Repton, 'unity of character' was 'amongst the first principles of good taste' (1795, 95). And as Repton's contemporary Uvedale Price explained, 'union of character' was found where 'it seemed as if some great artist had designed both the building and the landscape, they so peculiarly suit, and embellish each other' (1810, vol. 2, 177).

Of the architects mentioned so far, probably the most enthusiastic exponent of 'character' was the English architect Sir John Soane. Soane's extensive reading of French architectural thought, and his familiarity with the principles of the picturesque, gave him a particularly broad

grasp of the various senses of the concept, and in his Royal Academy lectures it was (together with ‘simplicity’) one of his two most heavily used critical terms, conferred upon everything of which he approved – for example of Vanbrugh, he writes ‘His works are full of character, and his outlines rich and varied’ (563). Soane used ‘character’ in all the ways so far considered. It appears in the sense used by the picturesque, to describe the relatedness of the architecture to its natural setting: ‘The surrounding scenery having determined the architectural character of the villa ...’ (588). Secondly, following Boffrand and Blondel, Soane used ‘character’ to describe the architectural expression of the building’s purpose. In a long and eloquent passage in Lecture XI, he pressed this sense:

Too much attention cannot be given to produce a distinct character in every building, not only in the great features, but in the minor details likewise: even a Moulding, however diminutive, contributes to increase or lessen the character of the assemblage of which it forms a part.



Interior, St Martin's-in-the-Fields, London, James Gibbs, 1722–26. Criticized by Soane for inappropriate character: ‘who that looks at the interior of St Martin's... but is inclined to imagine himself in a private box in an Italian theatre than in a place of devotion’.

(opposite) Joseph Gandy, view under the Dome of Sir John Soane's Museum, 1811. Soane's own house in Lincoln's Inn Fields was a complex essay in the various notions of ‘character’ current at the end of the eighteenth century: not only did the building advertise itself as ‘the house of an architect’, but within Soane experimented with effects of light and dark to create different moods or ‘characters’ appropriate to the stages of a narrative, or of a theatrical drama.

Character is so important that all its most delicate and refined modifications must be well understood and practised with all the fine feelings and nice discrimination of the artist. He who is satisfied with heaping stone upon stone, may be a useful builder, and increase his fortune. He may raise a convenient house for his employer, but such a man will never be an artist, he will not advance the interests or credit of the art, nor give it importance in public estimation. He will neither add to its powers to move the soul, or to speak to the feelings of mankind.

Notwithstanding all that has been urged to the contrary, be assured my young friends, that architecture in the hands of men of genius may be made to assume whatever character is required of it. But to attain this object, to produce this variety, it is essential that every building should be conformable to the uses it is intended for, and that it should express clearly its destination and its character, marked in the most decided and indisputable manner. The cathedral and the church; the palace of the sovereign, and the dignified prelate; the hotel of the nobleman; the hall of justice; the mansion of the chief magistrate; the house of the rich individual; the gay theatre, and the gloomy prison; nay even the warehouse and the shop, require a different style of architecture in their external appearance, and the same distinctive marks must be continued in the internal arrangements as well as in the decorations. Who that looks at the interior of St Martin's church, and observes its sash-windows and projecting balconies at the east end, but is inclined rather to imagine himself in a private box in an Italian theatre than in a place of devotion?

Without distinctness of character, buildings may be convenient and answer the purposes for which they were raised, but they will never be pointed out as examples for imitation, nor add to the splendour of the possessor, improve the national taste, or increase the national glory. (648)

Thirdly, in a reference to Le Camus de Mézières and Ledoux, Soane described ‘character’ in terms of the mood created by light:

The ‘lumière mystérieuse’, so successfully practised by the French artists, is a most powerful agent in the hands of a man of genius, and its power cannot be too fully understood, nor too highly appreciated. It is, however, little attended to in our architecture, and for this obvious reason, that we do not sufficiently feel



the importance of character in our buildings, to which the mode of admitting light contributes in no small degree. (598)

Turning from Soane, immersed in English and French theory, we must now consider the other generic theory of 'character' developed in the eighteenth century, that of the German Romantics. Principally identified with Goethe, the theory of 'expressive character' was developed in reaction to the various French theories, and in part emerged out of Goethe's theories of animal and plant morphology – themselves developed in reaction to French methods of biological description. The earliest and most passionate statement by Goethe of this new theory was in his essay 'On German Architecture' (1772), in which his contemplation of Strasbourg cathedral (see ill. p. 300) led him to see its character as the expression of the soul of its mason, Erwin von Steinbach. Goethe deduced from this that the truth (see p. 299–301) of all art and architecture lay in the degree to which it expressed the character of its maker: 'Now this characteristic art is the only true art. If, out of ardent, united, individual, independent feeling, it quickens, unconcerned, yea, unconscious of all that is strange, then born whether of rough savageness or of civilized sensibility, it is whole and living' (159). This notion of 'character' as the outward expression of an inner force, whether of the individuality of the artist, or of his culture, places art in a correspondence to nature. As developed by the German Romantics, this theory of character was used most particularly in relation to the national identity of art. Thus, for example, in an essay of 1816 Goethe wrote: 'just as we bring out the character of the individual which consists in not being controlled by circumstances but controlling and conquering them, so we rightly recognize in every people or group a character which manifests itself in an artist or other remarkable man' (Gage, 146).

Although the older senses of 'character', particularly that of manifesting the building's purpose, continued in normal usage during the nineteenth century, it was to be 'expressive character' that became the most active and interesting sense in which 'character' was to be used, and it was to be this theory of 'character' which prevailed, particularly in Germany and in the English-speaking world. For instance, Jacob Burckhardt's writings all rest upon the principle that national distinctions in architecture are the outcome of the expression of the specific, historically developed characters of particular peoples; and in the United States, discussions about the development of an American architecture took place largely in terms of 'char-

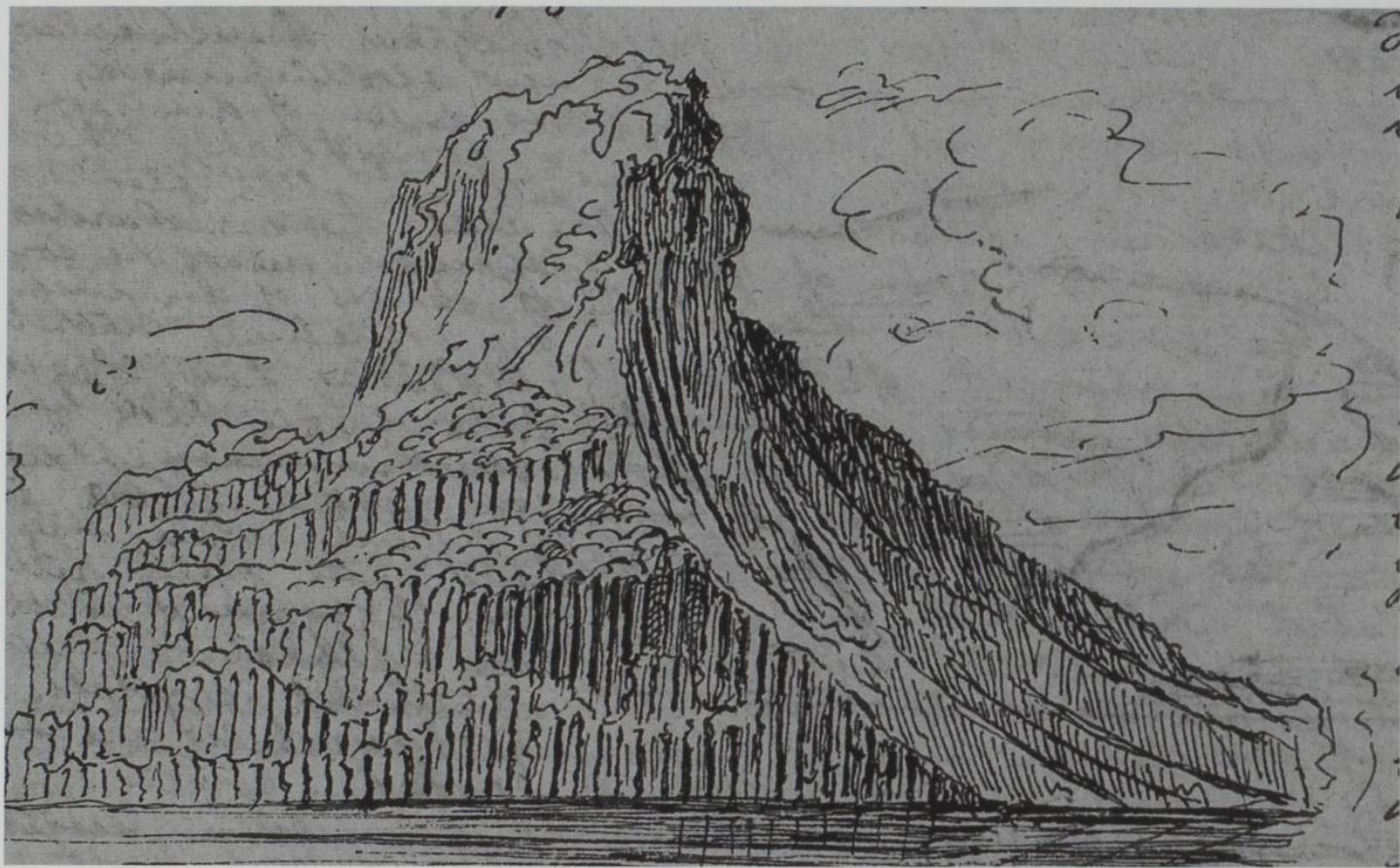
acter' – one may recall Emerson's indictment of American culture, 'in all, feminine, no character' (1910, vol. 4, 108).

Yet despite the widespread adoption of the notion of 'expressive character', of works of art as the outward expression of their makers' spirit, it did not go uncriticized. Even John Ruskin, whose enthusiasm for the German Romantic idea that architecture's meaning lay in its power to communicate the soul of its builders informed all his architectural writings, was nonetheless aware of its problems as a theory of architectural expression – for how was the viewing subject to be certain of understanding what they perceived in the way intended by the makers? Ruskin identified this problem in volume one of *The Stones of Venice*:

A building which recorded the Bible history by means of a series of sculptural pictures, would be perfectly useless to a person unacquainted with the Bible beforehand So, again, the power of exciting emotion must vary or vanish, as the spectator becomes thoughtless or cold; and the building may be often blamed for what is the fault of its critic, or endowed with a charm which is of its spectator's creation. It is not, therefore, possible to make expressional character any fair criterion of excellence in buildings, until we can fully place ourselves in the position of those to whom their expression was originally addressed, and until we are certain that we understand every symbol, and are capable of being touched by every association which its builders employed as letters of their language. (chapter 2, §2)

It was precisely so as to put the nineteenth-century spectator 'in the position of those to whom their expression was originally addressed' that Ruskin wrote the chapter on 'The Nature of Gothic' in volume two of *The Stones of Venice*. In this chapter, the most exhaustive analysis of 'expressive character' attempted by any nineteenth-century writer, Ruskin set out to show exactly how the immanent properties of Gothic architecture communicated themselves to their audience. Drawing an analogy with the double character of rocks and minerals, their external crystalline form, and their internal atomic structure, so,

Exactly in the same manner, we shall find that Gothic architecture has external forms, and internal elements. Its elements are certain mental tendencies of the builders, legibly expressed in it; as fancifulness, love of variety, love of richness, and such others. Its



John Ruskin, sketch of island of basalt, from his Early Geological Notebook. Ruskin gave precision to the notion of 'expressive character' in architecture by an analogy with the crystalline structure of rocks and minerals in geology: the internal elements – in architecture, the mental tendencies of the builders – correspond to the outward shape of the rock, or building.

external forms are pointed arches, vaulted roofs, &c. And unless both the elements and the forms are there, we have no right to call the style Gothic. ... We must therefore inquire into each of these characters successively; and determine first, what is the Mental Expression, and secondly, what the Material Form, of Gothic architecture, properly so called. (§4)

Ruskin proceeded to list six properties of the material form of Gothic architecture (Savageness, Changefulness, Naturalism, Grotesqueness, Rigidity, Redundance), and then to show the correspondence of each of these to specific mental tendencies of the builders. Ruskin's particularly ambitious system of relating the visible characteristics of Gothic architecture to the mental and social life of its builders took the theory of 'expressive character' a step beyond the looseness of all previous uses of the concept.

The other nineteenth-century theorist to show ambivalence towards 'character' was Viollet-le-Duc. Although he, in common with many other architects and critics, lamented the lack of character of the works of his own time ('Will this age, which is so fertile in discoveries ... transmit to posterity only imitations or hybrid works, without character' [*Lectures*, vol. 1, 446]), Viollet was fiercely opposed to the whole system of elucidating the meaning of architecture in terms of character types. As he wrote in the entry on 'Construction' in the *Dictionnaire Raisonné*,

A building can in no way whatsoever be 'fanatical', 'oppressive', or 'tyrannical'; these are epithets that simply do not apply to a unitary assemblage of stones, lumber and iron. A building is either a good building or a bad one, well thought out, or devoid of any rational justification. (1990, 116)

As far as Viollet was concerned, the only meaning a building could have was in the integrity of its structure, and the system of ‘characters’ was superfluous. This reaction against ‘character’ was to become even more explicit amongst Viollet-le-Duc’s American followers. Leopold Eidlitz stated: ‘The character of his [the architect’s] work must refer solely to construction, and construction to the idea which is to be expressed and to the material which is at his command for the purpose’ (1881, 486). And in a similar vein Henry van Brunt, in his essay ‘The Growth of Characteristic Architectural Style in the United States’ (1893), writes:

the most distinctive character of our best work in architecture is its hospitality to new materials and new methods of construction, its perfect willingness to attempt to confer architectural character upon the science of the engineer, and to adapt itself without prejudice to the exactions of practical use and occupation. (321–22)

Louis Sullivan’s ambivalence towards ‘character’, noted in the quotation at the beginning of this entry, presumably derived from the difficulty of reconciling his own passionate enthusiasm for the ‘expressive character’ of German Romantic thought with the structural rationalists’ hostility towards ‘character’.

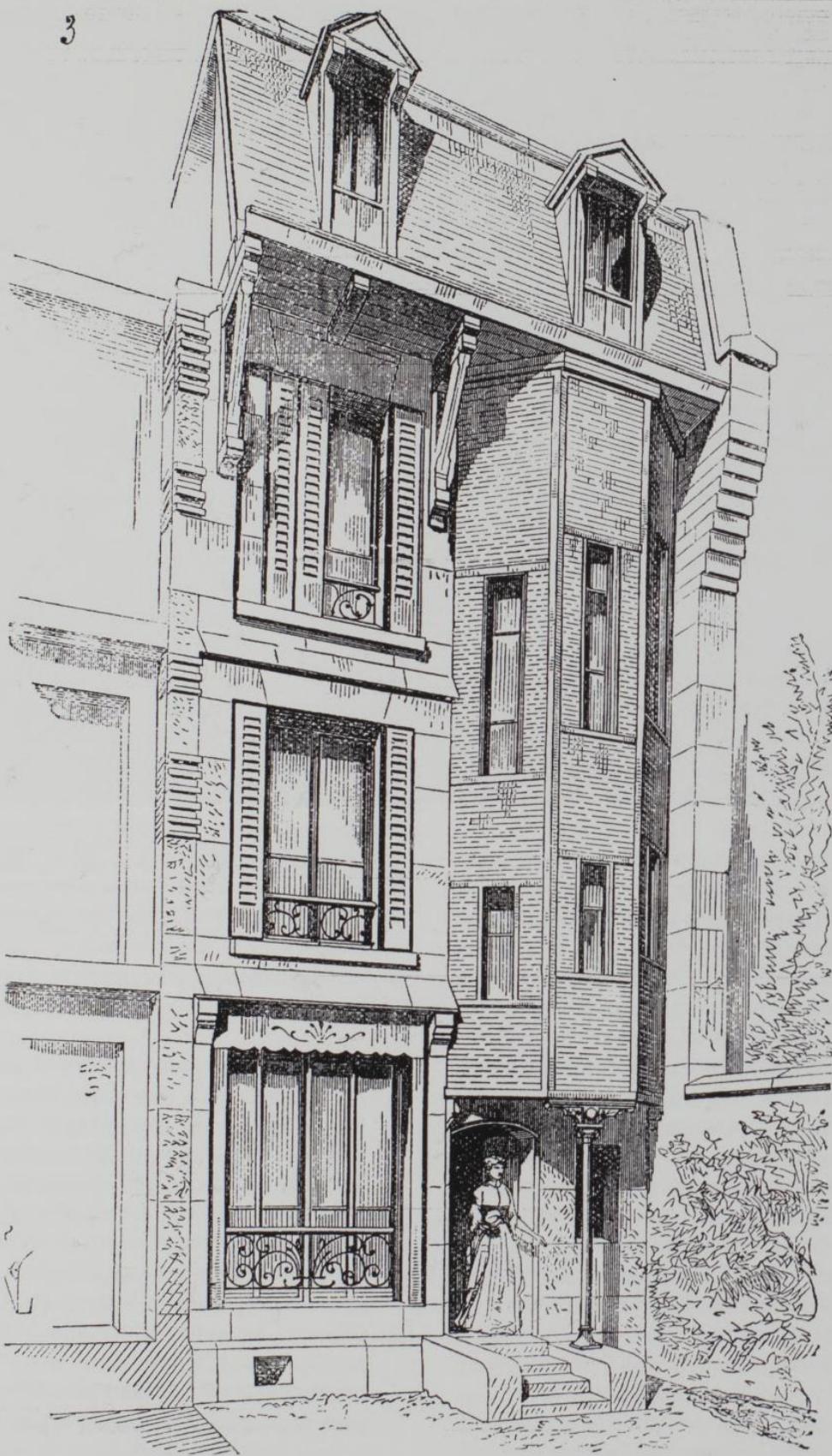
The relative decline of ‘character’, in all its senses, in the early twentieth century would appear to have been primarily due to the influence of structural rationalism. Wherever structural rationalism took hold, ‘character’ was ridiculed. For example, W. R. Lethaby ended his rationalist 1910 lecture ‘The Architecture of Adventure’ by saying:

The method of design to a modern mind can only be understood in the scientific, or in the engineer’s sense, as a definite analysis of possibilities – not as a vague poetic dealing with poetic matters, with derivative ideas of what looks domestic, or what looks farmland, or looks ecclesiastical – the dealing with a multitude of flavours – that is what architects have been doing in the last hundred years. (95)

Yet, suspicious though architects and critics became of ‘character’ in the modernist era, they never, as we have seen, found it possible to dispense with altogether.

¹ On the history of ‘character’ see Szambien, *Symétrie Goût Caractère*, 1986, chapter 9, 174–99; Egbert, *The Beaux-Arts Tradition in French Architecture*, 1980, chapter 6; Watkin, *Sir John Soane*, 1996, chapter 4, 184–255; Vidler, *Claude-Nicolas Ledoux*, 1990, chapter 2, 19–73; and for a slightly different view, see Rykwert, *The Dancing Column*, 1996, 43–56.

E.-E. Viollet-le-Duc, design for a French Street Villa. Viollet-le-Duc and his followers outlawed ‘character’, as irrelevant to the methodical pursuit of reasoned construction that they considered to be the principal business of architecture. From Viollet-le-Duc, *Entretiens sur l’Architecture*, vol. 2, 1872.



Context

The task of the architectural project is to reveal, through the transformation of form, the essence of the surrounding context. V. Gregotti, 1982 introduction to French edition of Gregotti 1966, 12

Introduced into the architectural vocabulary in the 1960s, ‘context’, ‘contextual’ and ‘contextualism’ were part of the first substantial critique of modernist practice, and might on that account be classed as postmodernist terms. But whether they were the last modernist terms, or the first postmodernist ones matters very little; they are included here partly on chronological grounds, as belonging to the period of late modernism, and partly because they were wholly directed towards the discourse of modernism, but most particularly because they illustrate so well the imperialism effected by the act of translation from one language to another.

The story begins in Milan in the 1950s, when in the editorials written by Ernesto Rogers for the magazine *Casabella Continuità* in the middle of the decade there appeared the first serious critique of the work of the first generation of modernist architects. Rogers criticized their tendency to treat every scheme as a unique abstract problem, their indifference to location, and their desire to make of every work a prodigy. Rather, Rogers argued, consider architecture as a dialogue with its surroundings, both in the immediate physical sense, but also as a historical continuum. The terms used by Rogers were ‘*le preesistenze ambientali*’ (surrounding pre-existences), or ‘ambiente’, and although both have since been translated into English as ‘context’ this is misleading, for Rogers used neither this word, nor its Italian equivalent *contesto* – which entered general use in Italy in the 1970s as a translation of the English word ‘context’ only after that had become current in the USA. It is worth investigating what Rogers meant by *preesistenze ambientali*, for it differed in several respects from the Anglo-Saxon ‘context’ with which it has subsequently become

confused. Compared to previous arguments for the responsiveness of architecture to location – such as the *genius loci* of the English picturesque, or the English critic Trystan Edwards’s objections to the ‘selfish’ modern commercial building (1946, 2) – what distinguished Rogers’s concept was the absolute importance of the historical continuity manifested by the city and existing in the minds of its occupants. As Rogers wrote in one of his editorials, ‘to consider *l’ambiente* means to consider history’ (1955, 203). For Rogers, the two concepts of *preesistenze ambientali* and ‘history’ (see pp. 196–205) were indissolubly linked: ‘to understand history is essential for the formation of the architect, since he must be able to insert his own work into the *preesistenze ambientali* and to take it, dialectically, into account’ (1961, 96). Rogers’s idea of *ambiente* as a historical process came from a variety of sources, but one in particular which he cited specifically was an essay by the poet T. S. Eliot, ‘Tradition and the Individual Talent’ (1917). It is worth quoting from this essay, for it helps make clear the interconnectedness of continuity, history and *ambiente* in Rogers’s mind. Eliot wrote, ‘the historical sense involves a perception, not only of the pastness of the past, but of its presence’ –

The existing monuments form an ideal order among themselves, which is modified by the introduction of the new (the really new) work of art among them. The existing order is complete before the new work arrives; for order to persist after the supervention of novelty, the *whole* order must be, if ever so slightly, altered; and so the relations, proportions, values of each work of art towards the whole are readjusted; and this is conformity between the old and the new. Whoever has approved this idea of order, of the form of European, of English literature will not find it preposterous that the past should be altered by the present as much as the present is directed by the past. (1917, 26–27)



Shop, office and apartments, 2-4 Corso Francia, Turin, Italy, Banfi, Belgiojoso, Peresutti and Rogers, 1959. The '*ambiente*' revealed through this project included the Italian historical tradition of mixed-use buildings shaped to fit existing plots; covered arcades over the pavement; and the marking of the city boundary by monumental towers – all reinterpreted in the idiom of modern architecture.

It is this sense that all work impacts upon present consciousness of the historical past that was so essential to Rogers's notion of '*ambiente*'.

Two examples will suffice to show how Rogers used *preesistenze ambientali* in his critique of orthodox modern architecture: 'One might accuse of formalism an architect who does not absorb into his work the particular and characteristic contents suggested by the *ambiente*' (1955, 201); or,

Let us resist the affected cosmopolitanism which in the name of a still shallowly felt universal style raises the same architecture in New York, Tokyo, or Rio; identical architecture in both the country and the town. Let us seek rather to blend our works into the *preesistenze ambientali*, both the natural surroundings, and those created historically by human genius. (1956, 3)

The scheme which first brought these ideas to international notice – as well as contributing to Rogers's own formulation of them – was the controversy in 1954 over Frank Lloyd Wright's Masieri Memorial in Venice. His project, which would have occupied a prominent location on the Grand Canal, provoked passionate argument inside Italy and abroad about the suitedness of modern architecture to historic sites, and about the degree to which Wright's design did or did not take sufficient account of its surroundings. That the scheme was not built had less to do with the merits of the design than with the political objections at the time to an American building in Italy.¹

Rogers's *ambiente* became a topic of general discussion amongst the circle of Milan architects associated with *Casabella*, and featured significantly in their writings; particularly worth remarking on are Vittorio Gregotti's *Il Territorio dell'Architettura* (1966), and above all Aldo Rossi's *The Architecture of the City* (1966) whose subsequent fame has eclipsed all other Italian architectural criticism of that era, but which can only satisfactorily be understood in relation to it. *The*

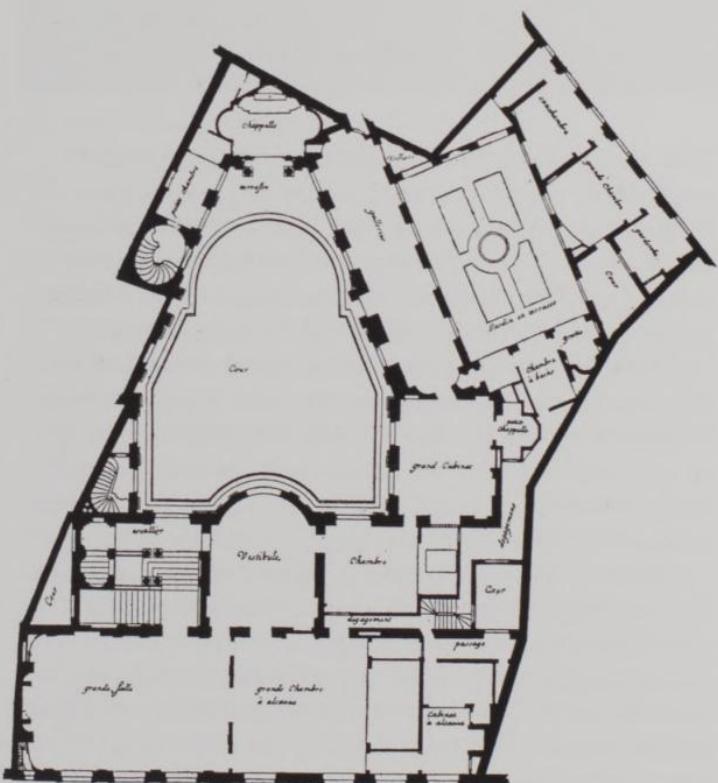
Architecture of the City is in part an extended disquisition upon the concept of *ambiente*. For readers of the American edition of the book, where the word *ambiente* was translated throughout as ‘context’, this nuance is rendered invisible, and it is made to seem that Rossi was party to the same debate as Colin Rowe and others at Cornell University where, as we shall see, ‘contextualism’ was invented. Nothing could have been further from the truth: the word Rossi used throughout was *ambiente*, never *contesto* or ‘context’, and his objections to ‘context’ were in fact objections to Rogers’s *ambiente* (or its perversion by others), and unrelated to any New England conversations. The paradox presented to readers of the English-language edition, of how someone could be so critical of ‘context’ and yet put forward such a persuasive argument for it, is purely an effect of the translation and does not arise in the Italian original. Rossi’s objections that ‘context seems strangely bound up with illusion, with illusionism. As such it has nothing to do with the architecture of the city’ (123), or ‘As for the term *context*, we find that it is mostly an impediment to research’ (126), were, we must remember, objections to *l’ambiente*, not ‘context’. Rossi’s criticism of Rogers’s *l’ambiente* was that it was insufficiently concrete: and what Rossi wanted to

show was that it could be made concrete if one studied architectural forms themselves, independently of their functions, for in these forms was the only tangible point of contact between the economic processes of cities, on the one hand, documented through the verifiable histories of land development and partition, and on the other hand the vagueness of the ‘collective historical consciousness’ of the city that was Rogers’s *preesistenze ambientali*.

If we turn now to the history of the English-language word ‘context’, its first significant appearance within the vocabulary of architecture seems to have been in Christopher Alexander’s *Notes on the Synthesis of Form* of 1964, though its presence in this particular text seems to have had little to do with its subsequent usage. Alexander used ‘context’ as a synonym for ‘environment’: introducing the book, he wrote ‘every design problem begins with an effort to achieve fitness between two entities: the form in question, and its context. The form is the solution to the problem; the context defines the problem’ (15). This mechanistic relationship is softened later in the book – the aim of design, he writes, is not to meet the requirements in the best possible way, but ‘to prevent misfit between the form and the context’ (99). Nonetheless, the purpose of the book was to devise a scheme for ordering the variables that constituted ‘context’ so as to develop a method of design free from all the preconceptions that, in Alexander’s opinion, had hampered previous efforts to achieve truly functional design. Alexander’s choice of ‘context’ instead of the more customary ‘environment’ may have been due to his desire to include cultural variables, but otherwise his strictly functionalist use of the term had little to do with its subsequent history.

The introduction of ‘contextualism’ and ‘contextualist’ into the architectural vocabulary occurred in 1966 in the Urban Design studio that the English critic Colin Rowe had started teaching at Cornell University in 1963 (Rowe, 1996, vol. 3, 2; Schumacher, 1971, 86). It seems likely that the terms were borrowed from the literary New Criticism movement – even though their sense there was entirely different, and negative, rather than positive, as was the case in architecture. Rowe’s Cornell studio developed a critique of modernist architecture that had a good deal in common with Ernesto Rogers’s. They shared a distaste for ‘prodigy’ architecture, and for the modernist supposition that the particularity of a building’s programme justified in every case a unique solution; and

First floor plan, Hôtel de Beauvais, Paris, Antoine Le Pautre, 1652–55. Le Pautre’s preservation of the internal symmetries and room relationships while adapting the standard arrangement of the Parisian *hôtel* to an irregular plot was one of Rowe’s favoured examples of satisfactory relation of building to context.



many of the examples they chose to illustrate their ideas were the same. But there were also significant differences. Whereas Rogers was concerned with how the dialectical processes of history were manifested through architecture, Rowe was uninterested in this speculative understanding of the historical environment, and concentrated on the formal properties of works of architecture. And whereas Rogers thought of the environment as formed by objects, 'monuments', Rowe was more interested in the relationships between objects and the spaces they occupied. Indicative of Rowe's approach were his preferred exemplars, like Antoine Le Pautre's Hôtel de Beauvais (1652–55) in Paris, where the model French town house was compressed and deformed to fit the irregular site without losing the distinctive features of the type; Rowe compared this to Le Corbusier's Villa Savoie, an isolated primary solid, indifferent to the boundless spatial field it occupies (Rowe, 1978, 78). In the first published statement of the Cornell studio's 'contextualism' (which appeared, significantly, in *Casabella*), an ex-student, Thomas Schumacher, wrote: 'It is precisely the ways in which idealized forms can be adjusted to a context or used as "collage" that contextualism seeks to explain, and it is the systems of geometric organization which can be abstracted from any given context that contextualism seeks to divine as design tools' (1971, 84). In general, Rogers's and Rossi's interest in *ambiente* was distinguished by 'history', whereas the Cornell studio's concern with 'context' was formal, marked in particular by its study of figure/ground relationships.² And where the Italians were polemical, marked by an underlying commitment to the 'modern', Rowe's aim was compromise, between the modernist, and the pre-modernist city. Rowe has since summed up the studio's approach: 'If not conservative, its general tone was radical middle of

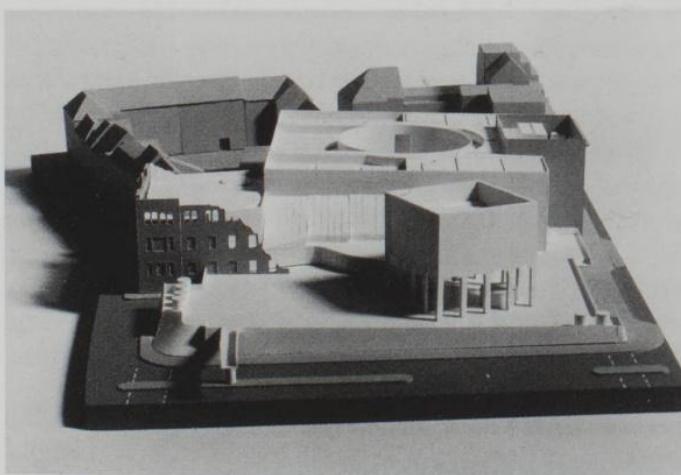
the road. ... Its ideal was a mediation between the city of Modern architecture – a void with objects – and the historical city – a solid with voids' (1996, vol. 3, 2).

In the final testament of Cornell contextualism, Rowe and Koetter's book *Collage City* (1978), the authors made practically no reference to 'context' or 'contextualism'. By this time, though, 'context' had become well established in the architectural vocabulary. Kenneth Frampton in 1976 reviewed James Stirling's 1975 competition entry for the Düsseldorf Museum in terms of its 'contextual' content, and it was not long before Stirling himself began to talk about his own work, including schemes designed before the word had gained currency, in terms of 'context'; for example, commenting in 1984 on the 1971 design for an art gallery at St Andrews University, Stirling wrote 'It was both *formal* and *contextual*' (1998, 153).

Rowe and Koetter were already avoiding the words 'context' and 'contextual' by the late 1970s, yet it was around this time, as if to stiffen up the idea and give it broader credibility, that the Italian *ambiente* was taken over and subsumed into the American 'context'. However, it was not to be long before reservations about the concept itself started to be voiced. Commenting in 1985 on a scheme to extend Frank Lloyd Wright's Guggenheim Museum in New York, the American critic Michael Sorkin wrote, 'A consequence of the profession's present preoccupation with "context" is a kind of collective confidence about the possibility of adding on. There's an implicit argument that architects, duly skilled and sensitized, should be able to intervene anywhere' (148). Sorkin went on to explain why he thought this wrong. By the late 1980s, there was no doubt that many architects were uncomfortable about 'context', and were increasingly prepared to say so; in his 'diary' of the design for the French national library competition in 1989, Rem Koolhaas wrote in exasperation, 'But can such a container still have a relationship with the city? Should it? Is it important? Or is "fuck context" becoming the theme?' (1995, 640).

1 See Levine, *The Architecture of Frank Lloyd Wright*, 1996, 374–83.

2 For a useful comparison of European and American notions of context, see Shane, 'Contextualism', *Architectural Design*, vol. 46, November 1976, 676–79.



Model, competition entry for Düsseldorf Museum, James Stirling and Michael Wilford, 1975. As Kenneth Frampton observed, its 'evident dependence on a broad cultural context stands in considerable contrast to much of his work' (1976).

When in 1932 the English architect Howard Robertson, Principal of the Architectural Association School of Architecture, revised his book *Principles of Architectural Composition* (1924), he renamed it *Modern Architectural Design*. This simple change of title at once tells a great deal, though not quite everything, about the inflation of the word ‘design’ in the mid-twentieth century, a word which after 1945 was in danger of altogether subsuming ‘architecture’ itself. Architects came to be referred to as ‘designers’, the discipline taught in schools of architecture became known as ‘design’, and a great many books about architecture featured ‘design’ in their titles. The pervasiveness of the word did not go unresisted; to Alison and Peter Smithson, for example, ‘“design” was a dirty word’ (201), and they preferred the term ‘ordering’ (though that too had its own connotations).

Why is ‘design’ a confusing word? As a verb, it describes the activity of preparing instructions for making an object or a building. As a noun, it has two distinct meanings. First of all, it is those instructions themselves, particularly in the form of drawings: the word comes from the Italian *disegno* (drawing), and in English by the seventeenth century, ‘design’ was routinely used for the drawings of the architect – Sir Roger Pratt talks of ‘drafts and designs’ (34) as synonymous. Secondly, as a noun, it may also refer to the work executed from the instructions, as one may say referring to an object, ‘I like the design’: this sense has also been common since the seventeenth century – John Evelyn, visiting Chambord in 1644, recorded in his Diary, ‘That which made me desirous of seeing this Palace, was the extravagance of the designe, especially the Stayre-case mention’d by the Architect Palladio’ (80). In both cases, whether drawing or executed work, in the neo-Platonic climate of the Italian Renaissance, ‘design’ was widely taken, so Vasari (1568) put it, as ‘nothing but a visual expression of the concept which one has in the intellect’;¹ this direct equivalence between the ‘artistic idea’ and its representation, so

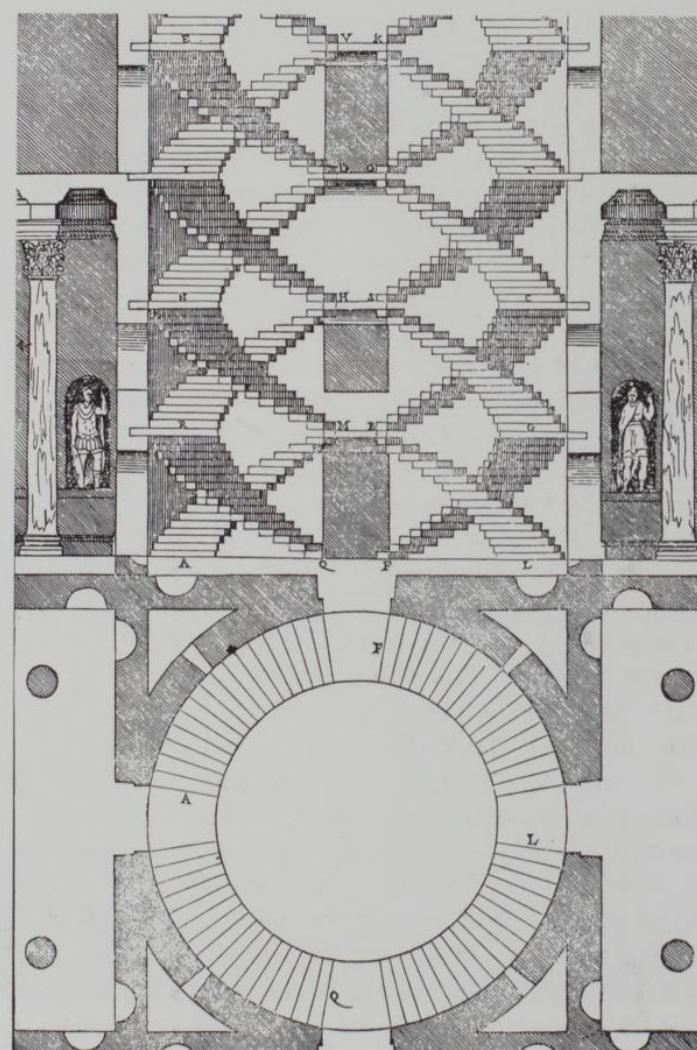
necessary to the understanding of the modern usage, was already in place in English by the early seventeenth century – Sir Henry Wotton explained in *The Elements of Architecture* (1624) that Vitruvius’s term *dispositio* means nothing ‘more than a neat and full expression of the first Idea or Designment thereof’ (118). When modernism appropriated ‘design’ in the 1930s, it was able to capitalize upon these already existing meanings. ‘Design’ fulfilled modernism’s need for a term that enabled one to distinguish between a work of architecture in its materiality, as an object of experience, and a work of architecture as the representation of an underlying ‘form’ or idea. If ‘form’ was to be a primary category of architecture, then ‘design’ was its necessary accomplice, for ‘design’ is the activity which realizes form, and brings it into the world: as Louis Kahn put it, ‘Design calls into being what realization – form – tells us’ (288). ‘Design’, with its inherent confusion between ‘visual expression of a concept in the intellect’ and a drawing, between what emanates from the architect’s mind and a built work, was grist to modernism’s mill. If, as Paul-Alan Johnson remarks, ‘architecture is the last stronghold of Platonism’ (244), ‘design’ is the principal concept that has made this possible, for it is what has allowed works of architecture to appear, paradoxically, as both pure ‘idea’ and at the same time as solid material objects; it takes its place in the modernist triad with ‘space’ and ‘form’.

At one level, we might regard the growth in the popularity of ‘design’ from the 1930s as no more than a substitution for the term ‘composition’ – as the change in the title of Howard Robertson’s book suggests. These two words had coexisted throughout the nineteenth century, and had been used synonymously and interchangeably, as Soane did in his lectures (559). But by 1930, objections had been raised against ‘composition’ by certain modernist practitioners and critics, and an alternative was needed:² ‘design’, with its other connotations, was a more than adequate replacement. Frank Lloyd Wright, for

example, famously declared in 1931 ‘Composition is dead that creation may live’; and the Czech critic Karel Teige, in 1929, indicted Le Corbusier’s ‘Mundaneum’ project: ‘Composition; with this word it is possible to summarize all the architectural faults of the Mundaneum’ (90). But ‘design’, while undoubtedly filling the void left by the extirpation of the suspect term ‘composition’, was no mere substitute.

The pervasiveness of ‘design’ is to do with the polarities it set up: ‘design’ provided a means of creating an opposition between ‘building’ and all that that implied on the one hand, and everything in architecture that was non-material on the other hand. This opposition was made clear by Geoffrey Scott in his *The Architecture of Humanism* of 1914: ‘The relation of construction to design is the fundamental problem of architectural aesthetics’ (100). In other words, ‘design’ concerns what is *not* construction. This polarity was not new – for example, in 1726 Leoni had translated the important distinction made by Alberti at the beginning of *De Re Aedificatoria* as ‘the whole art of building consists in the design, and in the structure’ (1). Though as Rykwert, Leach and Tavernor point out (422–23) in their recent translation, ‘design’ – at least with its late twentieth-century connotations – is hardly what Alberti meant, and they retain the Latin original *lineamenti*. Leoni’s choice of words for Alberti’s distinction suggests that ‘design/structure’ was an accepted and well-understood trope in the eighteenth century, as a way of describing two aspects of a single activity – architecture. This convention continued throughout the nineteenth century, but in the early twentieth century this distinction, hitherto belonging only in speech and thought, was to become manifested as two discrete activities.

The attraction of ‘design’ was that for an occupation aspiring to join the liberal arts, but actually concerned with the materiality of building and encumbered with associations of manual work and commerce, the word indicated that part of its product which was the pure work of mind. This had undoubtedly been the appeal of ‘design’ to sixteenth-century Italian architects, but the need to distinguish between the manual and intellectual content became all the more necessary in the early twentieth century for one reason in particular: the change in the training of architects. Until the beginning of the twentieth century, architects in all countries except France (and even there, too, to a large degree) learnt the business by working, as articled pupils or apprentices, in the workplace of practising architects. In the early part of the twentieth century, training was transferred almost



Double spiral staircase, Château de Chambord, France, c. 1530, from A. Palladio, *Quattro Libri*, 1570. Having seen Palladio's illustration, John Evelyn wanted to see Chambord for 'the extravagance of the designe, especially the stayre-case'.

everywhere to the academy, to universities and to schools of architecture – a change that corresponded to that taking place in the majority of other occupations. In architecture, its effect was that what architects learnt in their training ceased to be ‘practice’, and became ‘principles’, in other words a wholly dematerialized and cerebral version of the art; and what students ‘produced’ from their training was not ‘architecture’, but drawings – commonly referred to as ‘designs’. The separation between architecture as a mental product – which was taught – and architecture as a practice engaged with the material world, now emerged for the first time as a visible fact of life. Hitherto, the opposition of ‘design’ and ‘structure’ had been no more than a way of thinking about two aspects of one activity – architecture – and it had been inconceivable that either could exist without the other. Now, with the separation of education from practice, ‘design’, rather than being a convenient way of conceptualizing a particular feature of architecture, came to be seen as a pure and self-sufficient activity within itself. Education made real a division that had existed previously only in discourse; and the appropriation within education of the term ‘design’ with its long and seemingly respectable pedigree, helped to make this quite arbitrary and artificial separation between training and practice seem normal and commonsensical. In short, the category ‘design’ allowed architecture to be *taught*, rather than learnt by experience.

The sense in which ‘design’ became perceived as a mental activity disengaged from the world is strikingly clear from the pronouncements of architectural educators: in the remarks of Richard Llewelyn Davies, the instigator of reforms in British architectural education in the 1960s, it is noticeable how ‘design’ is presented as an activity which is an end in itself: ‘Design work in the studio is our strong point. ... In the studio, the student is continuously reminded of the one-ness of architectural design ...’ (13). It is no surprise that architects, anxious to validate the intellectual component of their work, willingly embraced this separation and reification of ‘design’. However, it has to be said that in the long run it has been to their disadvantage, for the development of what is called ‘design and build’ – in which architects are employed by building contractors to supply designs – has taken at their word architects’ claim to specialization in the mental activity of ‘design’, and accordingly relegated them to this as their sole sphere of competence.

The turning of ‘design’ from being a category within architecture into an activity of its own was substantially

assisted by arguments of philosophers. Just as Plato and neo-Platonism enabled Renaissance architects to distinguish between an object and its ‘design’, the philosophy of Kant encouraged people to think of ‘design’ as a pure property in its own right. In *The Critique of Judgment* (1790), Kant had written ‘In painting, sculpture, and in fact in all the formative arts, in architecture and horticulture, so far as fine arts, the *design* is what is essential’ (67). By ‘design’ Kant was referring in part to the long-standing trope of drawing (or design) *versus* colour, but also to it as the manifestation of ‘form’, in which sense it provided the basis for all pure judgments of taste.

If philosophy tended to support the existence of ‘design’ as a thing in itself, this point of view did not go uncontested. A major theme of nineteenth-century political economy was the separation between mental and manual labour, a theme taken up in its implications for architecture by John Ruskin. Ruskin’s argument, developed in ‘The Nature of Gothic’, valued Gothic architecture because of the freedom enjoyed by the medieval craftsman to direct his own work; while recognizing the need for some division of labour in architecture between those who directed and those who executed the work, what he deplored in the architecture of his own time was the degraded and dishonourable status of those who worked with their hands, relative to their medieval forebears. Ruskin did not take issue with the distinction in architecture between those who conceived the work and those who executed it; what he objected to was regarding the one as an honourable, the other as a dishonourable occupation. As he put it, ‘in each several profession, no master should be too proud to do its hardest work. The painter should grind his own colours; the architect work in the mason’s yard with his men’ (§21). Ruskin hardly ever used the word ‘design’ in relation to architecture; in fact, ‘design’ (by which he generally meant the specific sense of ‘drawing’) was an activity that Ruskin valued highly because it was the moment when human creativity demonstrated its power to transform nature into art: ‘A looking-glass does not design – it receives and communicates indiscriminately all that passes before it. ... design properly so called, is human invention, consulting human capacity’ (*The Two Paths*, 35–36). If Ruskin was silent on ‘design’ in architecture, his English successors, William Morris and the architects Philip Webb and W. R. Lethaby, looked to the implications of what he had said, and treated ‘design’ with suspicion, for in it they saw both the cause and the symptom of the social degradation of manual work.



Design Studio, Crown Hall, IIT, Chicago, late 1950s. It was above all the institutionalization of architecture in schools of architecture, separating training from practice, that led to 'design' becoming an end in itself.

Lethaby, in 1892, emphasized the historical change the activity had undergone, and contrasted its past with its present status: 'Design was not the abstract exercise of a faculty plus a pair of compasses ... It was insight as to the capabilities of material for expression when submitted to certain forms of handiwork. ... The crafts ... are even now being destroyed by a system in which design is divorced from work' (153). And Philip Webb, in a letter to Lethaby, made a revealing correction that sums up all the objections when he crossed out the word 'design' and substituted 'invention' (Lethaby, Webb, 136). If one asks why, despite evident resistance to the word, it should have become so widespread, it should be born in mind that Webb and Lethaby were also opposed to the model of architectural education introduced in the early twentieth century, and that their objections to 'design' ultimately carried no more weight than their objections to the institutionalization of architectural education.³

We have so far considered 'design' in relation to architecture, but specifically in Britain the word also has another sense, relative to commodities and consumer goods, implied in the phrase 'good design'. When, in 1937, Nikolaus Pevsner wrote that 'to fight against the shoddy design of those goods by which most of our fellow-men are surrounded becomes a moral duty', and was 'an integral part of the social question of our time' (11), he was not (despite the tone) presenting a new argument, but simply bringing up to date a debate about 'design' that had already been going on for over two hundred years.

In Britain, from the early eighteenth century onwards, it became common to judge a nation's cultural wealth not by its monuments and architecture, but by its 'many thousands of large and rich shops ... stocked with all sorts of goods' (Souligné, 1709, 154).⁴ However, while the existence of all these goods might be a sign of an advanced civilization, as *possessions* owned by individuals they also signified luxury – and luxury, as Voltaire observed, is a paradox, everywhere desired, but universally condemned as a vice. The threats presented by articles of luxury were that they made people covetous, and so threatened public order; and that if they fell into the wrong hands, they devalued social distinctions. Satirizing the pursuit of luxury, Swift made Gulliver say of early eighteenth-century England, 'When I am at home and dressed as I ought to be, I carry on my body the workmanship of an hundred tradesmen; the building and furniture of my house employ as many more, and five times the number to adorn my wife' (288). If Swift

thought it absurd that one woman's dress should need a thousand men's labour, others of his contemporaries were arguing exactly the opposite. In *The Fable of the Bees* (1714) Bernard Mandeville argued, as had others before, that the pursuit of luxury was advantageous to society as a whole because of the wealth it caused to circulate; in addition, though, he also suggested that vain lust for material goods need not be the threat to public morality it was generally assumed to be, but that, if regulated by good taste, the pursuit of such objects would divert the selfish passions into a socially acceptable and harmless form of rivalry. This important and original observation opened up the possibility that, if they were suitably contrived (or 'well designed'), consumer goods need not be vulgar and offensive luxuries that threatened public order. This argument lay at the heart of subsequent debates about 'good design', particularly as they developed in mid-nineteenth century Britain.⁵ Nikolaus Pevsner's mission against 'shoddy design' belongs within the same tradition (though Pevsner had learnt the argument in Germany through the Deutsche Werkbund, where it had been subtly inflected to become also a mild critique of capitalism).⁶

The other sense of 'design', which also originated in the early eighteenth century, was as a means of economic competition. The success of French luxury goods was largely seen as due to their superiority in design. In 1735, Bishop Berkeley in *The Querist* recommended setting up a school of design in Ireland to train textile designers, asking 'Whether France and Flanders could have drawn so much money from England for figured lace, silks and tapestry, if they had not had academies for designing' (§65). And he went on, 'Whether those who may slight this affair as notional have sufficiently considered the extensive use of the art of design, and its influence in most trades and manufactures...' (§68). By the mid-eighteenth century, the sense of 'design' as a form of added value seems to have been generally understood; the architect Sir William Chambers commented that for articles of consumption, 'Design is of universal benefit, and stamps additional value on the most trifling performances, the importance of which, to a commercial people, is obvious; it requires no illustration' (75). This principle underlies the many attempts by governments – whether in Britain in the 1840s, or in Germany in the 1900s, or again in Britain in the 1980s – to improve standards of design as a way of securing economic competitiveness.

All the ambiguities surrounding the word 'design' are contained in the present-day 'designer sunglasses',



Living room and dining room, 1 Kensington Palace Gardens, London, before and after alterations by Wells Coates, 1932. A familiar theme of modernist discourse in Britain and Germany was the contrast of 'bad' (i.e., cluttered and ornamental) versus 'good' design (i.e., simple, undecorated) – 'bad design' signalled the imminent collapse of civilization and resistance to it was seen, therefore, as a 'moral duty'.

or 'designer T-shirt': tinged with contempt for things so obviously luxurious, the expression at the same time concedes a socially acceptable interest in such objects, even a desire to possess them because of the opportunity they present for the exercise of taste; but the epithet also acknowledges that the attentions of a designer have justified a price far in excess of that of their humbler, 'design-free' counterparts.

1 Panofsky, *Idea*, pp.60–62, discusses this passage in the context of Renaissance art theory.

2 Rowe, 'Character and Composition', in *The Mathematics of the Ideal Villa and Other Essays*, 1982, pp.59–87.

3 See Swenarton, *Artisans and Architects*, chapter 4, and Crinson and Lubbock, *Architecture: Art or Profession*, pp.65–86, on the contested models of education.

4 This argument is developed at length by Jules Lubbock in *The Tyranny of Taste*, 1995, from which the quotation is taken.

5 See Lubbock, *The Tyranny of Taste*, 1995, chapter 3.

6 See Schwarz, *The Werkbund*, 1996, pp.13–73.

Flexibility

In our time the demand for 'flexible' structures has come to the fore. C. Norberg-Schulz, 1963, 152

Flexibility is, of course, in its own way a type of Functionalism. P. Collins, 1965, 234

An important modernist term, particularly in the period after about 1950, 'flexibility' offered hope of redeeming functionalism from determinist excess by introducing time, and the unknown. Against the presumption that all parts of a building should be destined for specific uses, a recognition that not all uses could be foreseen at the moment of design made 'flexibility' a desirable architectural property. As Alan Colquhoun has put it,

The philosophy behind the notion of flexibility is that the requirements of modern life are so complex and changeable that any attempt on the part of the designer to anticipate them results in a building which is unsuited to its function and represents, as it were, a 'false consciousness' of the society in which he operates. (1977, 116)

Although, as we shall see, particular elements of flexibility had been acknowledged in works of architecture produced earlier, as a general architectural principle, the word 'flexibility' entered currency around the early 1950s. One of the earliest statements is by Walter Gropius, who, in 1954, set out his convictions thus: '(1) that the architect should conceive buildings not as monuments but as receptacles for the flow of life which they have to serve, and (2) that his conception should be flexible enough to create a background fit to absorb the dynamic features of our modern life' (1954, 178). By the 1960s, 'flexibility' had become an axiom of architectural criticism: Louis Kahn's 1961 Richards Laboratories at Philadelphia were criticized (and gained notoriety) because 'the buildings, not mindful enough of the

demands for flexibility on the part of the scientists, do not work very well' (Stern, 1969, 11). And James Stirling, describing in 1965 his own Leicester University Engineering Building completed five years earlier, stated it had been 'essential to propose a generalized solution that can take change and has inherent flexibility' (1998, 99).

The first of the controversies over 'flexibility' was whether flexibility was better achieved by making the work of architecture incomplete and unfinished in certain respects, leaving it to the future to decide, or whether the architect should design a building that was complete, though nonetheless flexible. A case for the incomplete solution was put by the English architect John Weeks, on the grounds that for many large institutions, such as airports or hospitals, it was impossible to predict the changes that might be required before the buildings became physically obsolete, and so the only viable solution was an indeterminate architecture, in which certain elements were left unfinished (Weeks, 1963). Forceful opposition to this came from the Dutch architects associated with Team X. (For some inexplicable reason, Dutch contributions to the concept of 'flexibility' exceed those of all other nations.) Writing in 1962, Aldo van Eyck attacked 'Flexibility and False Neutrality': 'Flexibility as such should not be overemphasized or turned into yet another absolute, a new abstract whim. ... We must beware of the glove that fits all hands, and therefore becomes no hand' (1962, 93). And in the same issue of *Forum*, Herman Hertzberger strongly criticized the results of 'flexibility':

Flexibility signifies – since there is no single solution that is preferable to all others – the absolute denial of a fixed, clearcut standpoint. The flexible plan starts out from the certainty that the correct solution does not exist, because the problem requiring solution is in a permanent state of flux, i.e. it is always temporary. Flexibility is always inherent in relativity, but in

actual fact it only has to do with uncertainty; with not daring to commit oneself, and therefore with refusing to accept the responsibility that is inevitably bound up with each and every action that one takes. (1962, 117)

In Hertzberger's view 'flexibility' could only ever represent 'the set of all unsuitable solutions to a problem', an argument he amplified in a subsequent article: 'flexibility does not necessarily contribute to a better functioning of things (for flexibility can never produce the best imaginable results for any given situation)' (1967). Hertzberger's main objection was that architecture which tried to anticipate all future possibilities while choosing none of them produced boring results, with which subjects could not identify. Instead he wanted single, distinctive permanent forms, that were 'polyvalent' – 'a form that without changing itself, can be used for every purpose and which, with minimal flexibility, allows an optimal solution'. But Hertzberger's attack upon 'flexibility' was also an attack upon functionalism, and upon the tendency of functionalism to render human use into abstract 'activities':

even if living and working or eating and sleeping could justifiably be termed activities, that still does not mean that they make specific demands on the space in which they are to take place – it is the people who make specific demands because they wish to

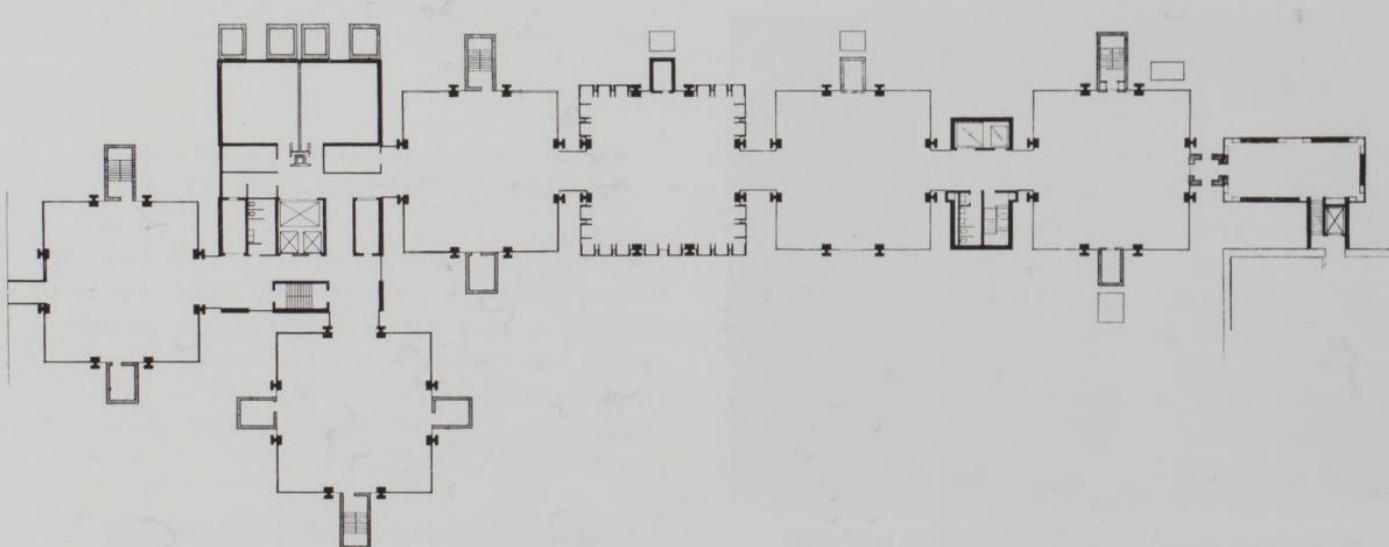
interpret one and the same function in their own specific ways. (1962, 117)

As we shall see, this desire to oppose 'the collective coagulation of individual freedom' imposed by functionalism connected with another, altogether different sense of 'flexibility'.

By the late 1970s, 'flexibility' was losing some of its appeal as an architectural quality: for example James Stirling, earlier an adherent of flexibility, was reported as saying *apropos* his design for the Stuttgart Staatsgalerie (1977–82), that 'he was sick and tired of the boring, meaningless, non-committed, faceless flexibility and open-endedness of the present architecture' (Stirling 1984, 252).

The purpose of 'flexibility' within modernist architectural discourse was as a way of dealing with the contradiction that arose between the expectation, so well articulated by Gropius, that the architect's ultimate concern in designing buildings was with their human use and occupation, and the reality that the architect's involvement in a building ceased at the very moment that occupation began. The incorporation of 'flexibility' into the design allowed architects the illusion of projecting their control over the building into the future, beyond the period of their actual responsibility for it.

It is possible to identify three distinct strategies of 'flexibility' in architecture.



Plan, Richards Laboratories, University of Pennsylvania, Philadelphia, Louis Kahn, 1957–61. 'Not mindful enough of the demands for flexibility on the part of the scientists' – the Richards laboratories were widely criticized for lacking 'flexibility'.



Central courtyard, Staatsgalerie, Stuttgart, James Stirling and Michael Wilford, 1979–83. Stirling said the Staatsgalerie came from his being 'sick and tired of the boring, meaningless, non-committed, faceless flexibility and open-endedness of the present architecture'.

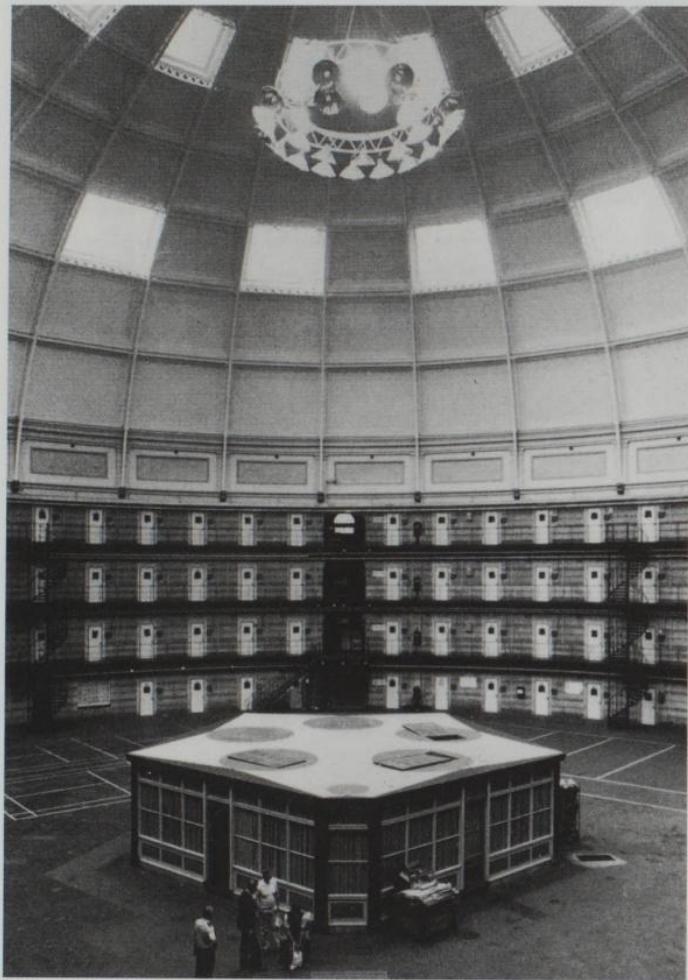
1. Redundancy. This is explained well by the architect Rem Koolhaas in *S,M,L,XL* (1995) in relation to the Koepel at Arnhem, a circular Panopticon-type nineteenth-century prison building.

Perhaps the most important and least recognized difference between traditional ... and contemporary architecture is revealed in the way a hypermonumental, space-wasting building like the Arnhem panopticon proves flexible, while modern architecture is based on a deterministic coincidence between form and program, its purpose no longer an abstraction like 'moral improvement' but a literal inventory of all the details of everyday life. Flexibility is not the exhaustive anticipation of all possible changes. ... Flexibility is the creation of margin –

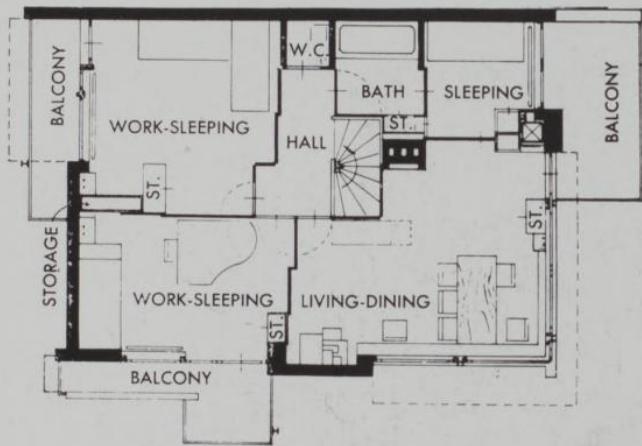
excess capacity that enables different and even opposite interpretations and uses. (239–40)

The spatial redundancy identified by Koolhaas in the Arnhem prison is a characteristic of many pre-modern buildings: it was a feature of, for example, baroque palaces, where rooms were not dedicated to specific uses. However, though this type of flexibility may now be discernible in these older buildings, it was not described as such in their own time.

2. Flexibility by Technical Means. The exemplary modernist case of this type of flexibility – and apparently the first instance in which the quality of 'flexibility' was so designated – was Rietveld's 1924 Schröder House at Utrecht, where the open upper floor was installed with

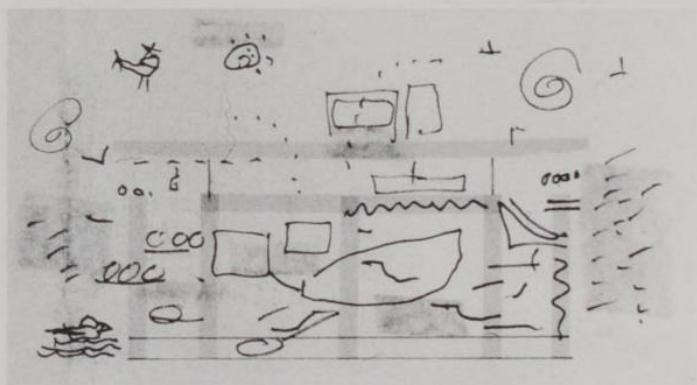
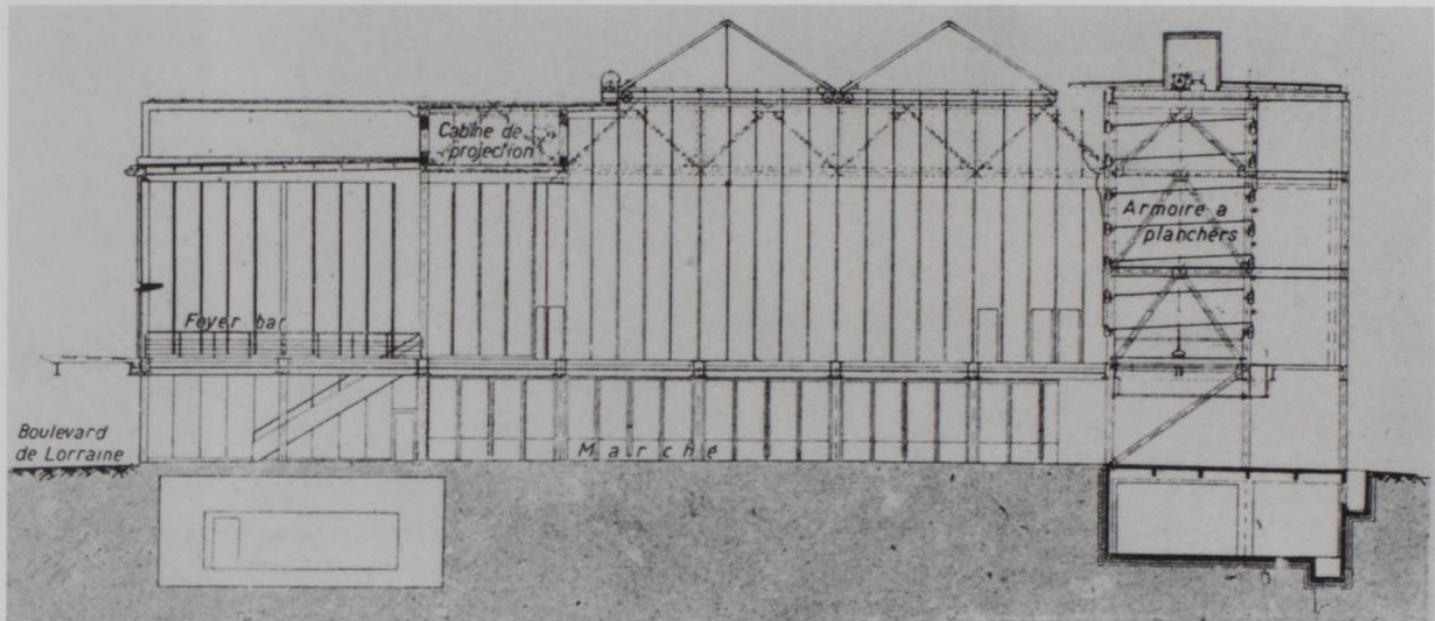


Interior, Koepel Prison, Arnhem, 1882. Koolhaas points out that the 'flexibility' of pre-twentieth century buildings like the Koepel lay in their wasteful surplus of space.



Plans and interior of first floor, Schröder House, Utrecht, Netherlands, G. Rietveld, 1924. The sliding partitions of the Schröder House could turn the open plan of the upper floor into various combinations of smaller compartments: it has often been regarded as the prototype for the 'flexible' modern interior created by technical means.

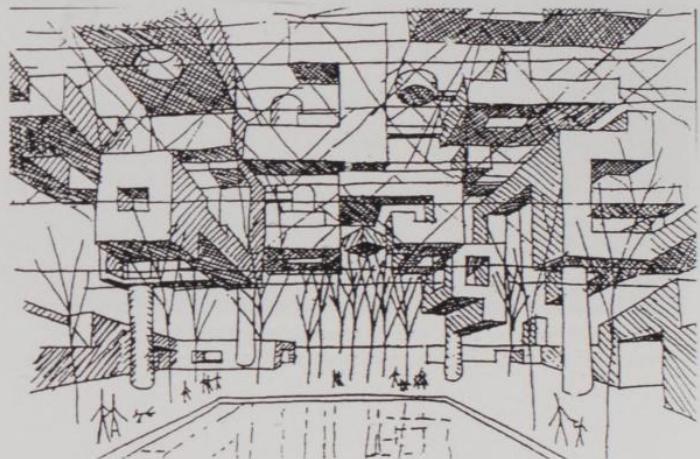
moveable partitions. In the words of the Dutch critic J. G. Wattjes, writing in 1925: 'A system of portable screens has replaced the usual fixed dividing walls, thus providing a great degree of flexibility in the interior spatial division ... the intention is that the interior can be altered daily according to the changing needs of the different times of day or night' (quoted in Bonta, 192). There have been many subsequent modernist buildings in which there have been attempts to attain flexibility through making elements of the building – walls, windows, even floors – moveable; a particularly ambitious and noteworthy example was Beaudouin, Lods, Bodiansky and Prouvé's Maison du Peuple of 1939 at Clichy in Paris (see ill. p. 146), where morning use of the building as a market hall could be converted to afternoon and evening use as a theatre and cinema



(top) Section of Maison du Peuple, Clichy, Paris, Beaudouin, Lods, Bodiansky and Prouvé, 1939. One of the most ambitious of 'flexible' buildings, the Maison de Peuple for the socialist commune of Clichy could be turned from an open market hall in the mornings into a theatre and cinema in the afternoons and evenings, by means of moveable floors, roof and walls.

(above left) Cedric Price, Fun Palace, 'story board' sketch, 1964.

(above right) Yona Friedman, Spatial City, drawing, 1958–60. Friedman envisaged that modern constructive techniques would allow 'buildings' and 'urban space' to be separated, so that space, unencumbered by buildings, could become the endlessly flexible medium of a free society.



by means of moveable floors, roof and walls.¹ In the post-war period, flexibility through technology shifted away from the ingenious systems of sliding or folding elements (though these continued to feature in many later modernist buildings), and concentrated instead upon the development of lightweight building structures, and of mechanical services, which allowed climatic control of spaces without the need for traditional architectural elements at all. Particularly influential were the systems developed in the United States the 1950s by Anton Ehrenkrantz and Konrad Wachsmann for buildings in which all services were carried in the roof space. Intended so as to offer freedom in the layout



Inter-Action Centre, Kentish Town, London, C. Price and E. Berman, 1972–77.
Perhaps the closest built example to the ideal of a totally 'flexible' architecture –
in which flexibility of the structure and flexibility of use become indistinguishable.

and arrangement of school and factory buildings, these systems were seized upon by certain European architects, Yona Friedman in France, Constant Nieuwenhuys (known as Constant) in the Netherlands, and Cedric Price in Britain, as holding the potential for something very much more, offering not merely flexibility within buildings, but releasing buildings from their traditional fixity, and making possible a city within which all buildings could be mobile. Friedman's demand that 'New constructions serving for individual shelters must 1. touch a minimum surface on the ground; 2. be demountable and moveable; 3. be transformable at will by the individual' (1957, 294) envisaged a city carried

in a service structure, within which everything would be mobile and flexible.

Cedric Price's Fun Palace (1964; see illus. above and p. 170) was 'a flexible education and entertainment centre' where an open framework of steel lattice towers and a high-level truss roof both provided support for short-life enclosures within, and carried all the services and heating which could be directed anywhere within the overall enclosure.² The Fun Palace was not built, but a smaller project of 1972–77, Cedric Price's Inter-Action Centre at Kentish Town in North London, was the closest built example to this ideal of a totally 'flexible' architecture, achieved through technical means; though it should be

added that the Inter-Action Centre was also the result of a somewhat unusual and anarchic design process, where the supporting steel frame was erected before anyone knew what it was to contain, and was left for a year awaiting further building while the various parties involved argued over what they wanted put within it.³ The Centre Beaubourg in Paris, though claims were made for its 'flexibility', was not truly so; and the fact that its 'flexibility' was no more than emblematic has been born out by the need for its recent lengthy closure for repairs.

It was a feature of all the attempts to attain 'flexibility' by technical means for the 'flexibility' to be invariably perceived as a property of the building. This assumption that 'flexibility' is achieved through the building, and that it is the business of the architect to embed it in the design, has been a general feature of the normal architectural use of the concept – and is what sets it apart from the third sense of 'flexibility', which sees it not as a characteristic of buildings, but of use.

3. As a political strategy. The critique of capitalism developed by the Situationist International in the late 1950s centred particularly upon capitalism's tendency to commodify all aspects of everyday life. Domestic life, leisure and space had all in turn become removed from the realm of individual freedom by being separated into their functional components and turned into commodities with an exchange value. Part of the object of the Situationist International was to resist this process, and to recover, through 'the free realm of playful activity', all those aspects of life that had been brought under capitalist regulation. In relation to cities and urban space, the particular strategy developed was the *détournement* – the (mis)appropriation of existing buildings and spaces with already determined uses. Some of these ideas are to be found, more developed, in Henri Lefebvre's *The Production of Space* (1974). For Lefebvre, the capitalist domination of space, both by imposing functional categories upon it physically, and by imposing an abstract schema through which the mind perceived space, was one of capitalism's most invasive acts. 'Functionalism stresses function to the point where, because each function has a specially assigned place within dominated space, the very possibility of multifunctionality is eliminated' (369). Against the 'asphyxiation' of everything by abstract space, Lefebvre envisaged a new sort of spatial practice which would 'restore unity to what abstract space breaks up – to the functions, elements and moments of social practice' (52). Lefebvre had in mind actions like the early Christians' co-opting of the originally secular

Roman basilicas for their worship, and which in time became the model for Christian churches (369); in this case, the act preceded the form which became in time associated with the purpose. For Lefebvre, resistance to 'dominated space' can only be effected by appropriation, by the assertion of the freedom of use, through the user's realization of the space's flexibility and multifunctionality; but, he writes regretfully, 'The true space of pleasure, which would be an appropriated space par excellence, does not yet exist' (167).

In Lefebvre's idea that through use, through positive acts of appropriation, the functionalist domination of space can be broken, 'flexibility' acquires its political connotation. As far as Lefebvre was concerned, architects and architecture, complicit in the practice of abstract, dominant space, had no part whatsoever to play in the realization of flexibility: 'use' was a political act to be directed *against* architecture. But the architects Constant, Yona Friedman, and to some extent Hertzberger too, envisaged architecture as enabling an active fulfilment of diversified use. Although both Constant and Friedman were interested in the technical means of achieving flexibility, it must be stressed that the ultimate aim of flexibility was to disturb the established property relations and functional classifications set up by capitalism. This is evident in, for example, Constant's article 'The Great Game to Come' (1959): 'We believe that all static, unchanging elements must be avoided and that the variable or changing character of architectural elements is the precondition for a flexible relationship with the events that will take place within them' (63). The stress is upon the events to take place, for which the mobile architectural elements are merely the precondition. Within this scheme, 'flexibility' is not a property of buildings but of spaces; and it is a property which they acquire through the uses to which they are put.

If 'flexibility' has been a confusing word, it is surely on account of having had to perform two contradictory roles – on the one hand it has served to extend functionalism and so make it viable, but on the other hand it has been employed to resist functionalism. This distinction has not often been acknowledged in architects' use of the term.

1 See Ellis, 'Prouvé's People's Palace', *Architectural Review*, vol. 177, May 1985, 40–48.

2 See *Architectural Review*, vol. 137, January 1965, 74–75.

3 See Alsop, 'Speculations on Cedric Price Architects' Inter-Action Centre', *Architectural Design*, nos 7–8, 1977, 483–86.

Form

The architect must be a form-artist; only the art of form leads the way to a new architecture. August Endell, 1897

The paradigm of the architect passed down to us through the modern period is that of the form-giver, the creator of hierarchical and symbolic structures characterized, on the one hand, by their unity of parts and, on the other, by the transparency of form to meaning.

Bernard Tschumi, 1987, 207

In the ninety years between the optimistic enthusiasm of August Endell and the cynical scepticism of Bernard Tschumi unrolls the history of ‘form’, the most important, but also the most difficult concept within the architecture of this century. In a single sentence, Tschumi warns us of several of the problems we shall encounter with it: of its indispensability to modernist discourse; of the supposition that ‘form’ is what architects create; of the belief that ‘form’ exists to transmit meaning.

Form is one of the triad of terms ('space' and 'design' are the other two) through which architectural modernism exists. In its dependency on 'form' architecture is not alone – in every other art practice, and in culture in general, 'form' has become an indispensable category, without which whole territories of analysis would remain unknown and be unapproachable. Yet architecture lays claim to particular privilege in matters of 'form', because of its work in physically shaping the material objects and spaces that surround us – a claim that takes us straight away to the central problem of 'form', one that underlies its entire significance within Western thought. There is in 'form' an inherent ambiguity, between its meaning 'shape' on the one hand, and on the other 'idea' or 'essence': one describes the property of things as they are known to the senses, the other as they are known to the mind. In its appropriation of 'form', architecture has, according to one's point of view, either fallen victim to, or taken mischievous advantage of this

inherent confusion. Much of what we shall have to say about 'form' concerns the working out, in the practice of an art concerned with making material objects, of the ambiguity between the two senses of the term. The German language (which is where the modern concept of form was principally developed) has a slight advantage over English for thinking about this problem, for where English has only the single word, 'form', German has two, '*Gestalt*' and '*Form*'. *Gestalt* generally refers to objects as they are perceived by the senses, whereas *Form* usually implies some degree of abstraction from the concrete particular.¹

Until the end of the nineteenth century, almost nowhere except within the world of German philosophical aesthetics was 'form' used in architecture in any other sense than to mean simply 'shape' or 'mass', or in other words, than as a description of the sensory properties of buildings. It was the appropriation of its other 'ideal' sense to architecture that the German architect August Endell announced so excitedly in 1897, and whose adventures in the world of architecture we shall be following here. When in the English-speaking world 'form' started to be used in its enlarged, modernist sense around 1930, people frequently had difficulty in accommodating the new concept within their previous understanding of the term: for example, in one of the first English books to attempt to describe the principles of the new architecture, *Modern Architectural Design* (1932), the author, Howard Robertson, wrote: 'The major aesthetic task therefore is to deal interestingly and appropriately with form. It is this preoccupation with basic, what one might call "naked" form, which distinguishes modern architectural design' (20). Robertson knew that form was important, but without quite understanding why, or what it could mean apart from 'shape'. It is still the case that people frequently use 'form' when they mean no more than 'shape', and a useful mental test of the meaning intended is to try

substituting ‘shape’ or ‘mass’.

In addition to the ‘form/shape’ confusion, there is another more complex problem in understanding ‘form’ in the vocabulary of architecture in the twentieth century. This problem is that for much of the time, what ‘form’ itself has been taken to mean has been rather less important than what it does *not* mean. It can be argued that the real significance of ‘form’ has been its use as an oppositional category to define other values: ‘form’, this flabby container, has, as we shall see, accommodated itself to an astonishing variety of sometimes quite contradictory concepts, but it has also been used as a defining category against a succession of other values. To anticipate the discussion that follows, it has been opposed variously to: decoration; mass culture; social values; technological experimentation and development; and functionality.

To talk about architecture without using the word ‘form’ may now seem inconceivable, but let us be clear about one thing: ‘form’ is merely a device for thought – it is neither a thing, nor a substance. And as a device within everyday architectural speech, its availability is of relatively recent origin, for it has only entered currency within the last century. To those who say that the apparently commonsensical consensus that surrounds its use hardly merits bringing it in for questioning, we can only reply that its very normality is precisely what should make us suspicious of it. Like a virus that invades a cell and becomes part of it, ‘form’ has entered criticism so completely, overcoming all resistance, to the extent that now we can hardly speak about architecture without it. As the historian David Summers has warned in relation to visual art, ‘Form is far from the neutral taxonomic and developmental category it might be thought to be’;² the same goes for architecture.

‘Form’ in Antiquity: Plato and Aristotle

What made ‘form’ such a pliable and versatile concept, so convenient to the purposes of twentieth-century architecture? Part of the explanation for this lies in its long history within Western philosophy, during which it served as the solution to a wide variety of philosophical problems. It is worth looking briefly at the philosophical uses of ‘form’ before it was appropriated by architecture, both in order to find some of the causes for its attraction, but also because in its various original purposes are revealed the sources of some of the confusions in its modern architectural currency.

The principal originator of the concept of ‘form’ in antiquity was Plato. For Plato, ‘forms’ provided the

solution to a complex of problems – the nature of substances, the process of physical change, and the perception of things.³ Against Pythagoras’s earlier theory that all things could in essence be described as numbers or ratios of numbers, Plato proposed that geometrical figures, triangles and solids underlay the substance of the world. Plato’s argument is developed in the *Dialogue of Timaeus*. There Plato first of all distinguishes between ‘that which always is and never becomes’ and ‘that which is always becoming but never is’. The first is ‘apprehensible by intelligence with the aid of reasoning, being eternally the same’, the second is the object of sensation; what is unchanging and known only to the mind is the ‘form’, contrasted with the thing, known to sense. This distinction, fundamental to Plato’s thinking, is repeated throughout his philosophy: ‘particulars are objects of sight but not of intelligence, while the Forms are the objects of intelligence but not of sight’ (*Republic*, §507). In making any thing, argues Plato, the maker follows the ‘form’, not things already existing (§§27–28). Elsewhere, in the *Dialogue of Cratylus*, he gives as an example a carpenter making a shuttle: ‘And suppose the shuttle be broken in the making, will he make another, looking like the broken one? Or will he look to the form according to which he made the other?’. The answer, of course, is to the latter; and Plato continues ‘Might not that justly be called the true or ideal shuttle?’ (*Dialogues*, vol. 3, §389). From this, it is readily apparent that as far as Plato was concerned, forms were always superior to things made in their resemblance. Returning to *Timaeus*, Plato develops the distinction between the form and the thing as follows:

there exist, first, the unchanging form, uncreated and indestructible, admitting no modification and entering no combination, imperceptible to sight or the other senses, the object of thought: second, that which bears the same name as the form and resembles it, but is sensible, has come into existence ... is apprehended by opinion with the aid of sensation. (§52)

Forms, as objects of thought, find their correspondence in things, which are bounded by surfaces, all of which according to Plato are composed of either one of two types of triangles (§53). In the *Republic*, Plato explains that philosophers, in pursuit of the intelligible forms, start with basic geometric figures, ‘though they are not really thinking about them at all, but about the originals which they resemble’. And he continues, ‘The figures they draw or model ... they treat as illustrations only, the real subjects of their investigation being invisible except to

the eye of the mind' (§510). By presenting as a series of 'shapes' those features of objects that were the inherently invisible form of things, Plato set up that confusion over the two senses of form with which the modern use of the concept is still entangled, and in no field more than so than architecture.

In Plato's pupil Aristotle, we find a reluctance to make categorical distinctions between forms and things. In general, Aristotle refused to accept that forms had any absolute existence independently of the matter of the objects in which they were found: 'Each thing itself and its essence are one and the same' (*Metaphysics*, §1031b). Although Aristotle used 'form' in a variety of different senses, both referring to shape and to idea, his most inclusive definition, and the one that most comprehensively conveys his thought, is when he says 'By form I mean the essence of each thing and its primary substance' (§1032b). Aristotle's discussion of form has other interesting aspects: thus he conceives the form of things existing in what they are not, or in what they have not yet become. In other words, form may be conceived of as a lack (*Physics* Book II, chapter 1, §193b); and this attraction of two opposites he describes in terms of gender, 'what desires the form is matter, as the female desires the male' (*Physics*, Book I, chapter 9, §192a).

But one should not see Aristotle's notion of 'form' as merely arising out his critique of Plato, and a reluctance to accept the absolute priority to what is always 'imperceptible to the sight or the other senses'; Aristotle's ideas about 'form' arose from his consideration of a different question, the generative process of plants and animals. At the beginning of *On the Parts of Animals*, Aristotle argued that it was wrong to look for the origin of organic things in the process of their development, but that rather one must start by considering their characteristics in their completed, final state, and only then to deal with their evolution. Aristotle justified this by an analogy with building:

the plan of the house, or the house, has this and that form; and because it has this and that form, therefore is its construction carried out in this or that manner. For the process of evolution is for the sake of the thing finally evolved, and not this for the sake of the process.

Plants and animals have their pre-existence not in an idea, but in an actual predecessor in time – 'for man is generated from man; and thus it is the possession of certain characters by the parent that determines the

development of like characters in the child' (§640a). Elsewhere, Aristotle argues that same is true of all processes of material production, for everything must come from something: thus he says 'house comes from house', for no house can exist independent of the material object (*Metaphysics*, §1032b). And even in the case of works of art, which have spontaneous novelty, they have their pre-existing cause in the skills and abilities of a human, sentient artist, and in the identifiable conventions of that particular art. Although 'Art indeed consists in the conception of the result to be produced before its realization in the material' (*Parts of Animals*, §640a), Aristotle sees this 'form' as like the genetic transmission between organic objects, not as an uncreated, indestructible pure object of thought. In the distinction between Plato's 'form' as an unknowable, pre-existing idea, and Aristotle's 'form' as the genetic material produced from the mind of the artist, we have a further cause for modern ambiguity.

Neo-Platonism and the Renaissance

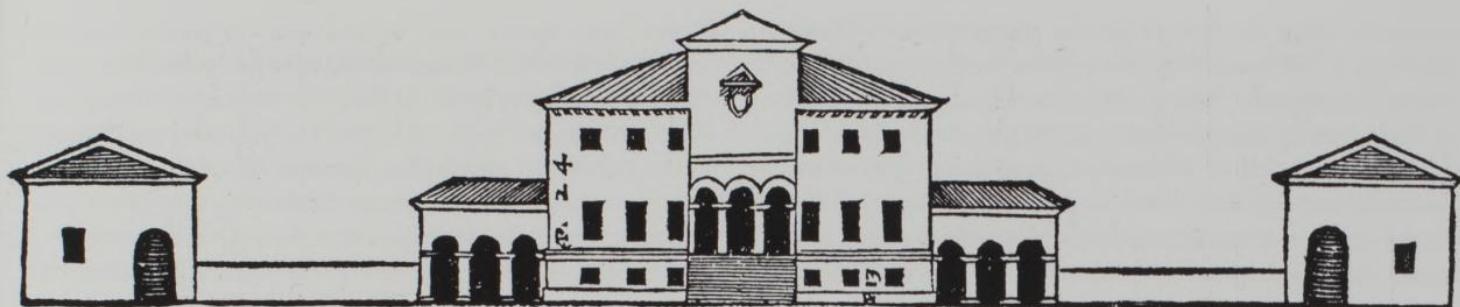
Aristotle's metaphor of building to describe the relationship between form and matter was used by successive philosophers in later antiquity and the Middle Ages though, confusingly, it was most popular with neo-Platonists who adopted it in order to identify the causes and origins of beauty – which was not at all the purpose for which Aristotle had intended it. Thus the third-century AD Alexandrian philosopher Plotinus, in the *Ennead*, to show that beauty lies in the Ideal-Form, asks

On what principle does the architect, when he finds the house standing before him correspondent with his inner ideal of a house, pronounce it beautiful? Is it not that the house before him, the stones apart, is the inner idea stamped upon the mass of exterior matter, the indivisible exhibited in diversity? (Hofstadter and Kuhns, 144)

Plotinus's fifteenth-century Florentine translator, the neo-Platonist Marsilio Ficino, outlines a similar argument to identify beauty as in the independence of form from matter:

In the beginning, an architect conceives an idea of the building, like an Idea in the soul. Then he builds, as nearly as possible, the kind of house he has thought out. Who will deny that the house is a body, and that it is very much like the incorporeal idea of the builder in likeness to which it was made? Furthermore, it is





(opposite) Michelangelo, Tomb of Giuliano de'Medici, Medici Chapel, San Lorenzo, Florence, 1531–33. Sculpture, according to Vasari (following Michelangelo), was 'an art which lifts the superfluous from the material, and reduces it to that form which is drawn from the mind of the artist'.

to be judged like the idea more because of a certain incorporeal plan than because of its matter. Therefore, subtract its matter, if you can. You can indeed subtract it in thought, but leave the plan; nothing material or corporeal will remain to you. (Hofstadter and Kuhns, 225)

These and similar conceptions of 'form' deriving from classical philosophy circulated amongst Renaissance humanists during the fifteenth and sixteenth centuries. However, their influence appears to have been insignificant in the day-to-day vocabulary of architecture, where 'form', in so far as it was used at all, was generally only a synonym for shape. Thus Vasari, in his life of Michelangelo, records 'The people of Rome ... were anxious to give some useful, commodious and beautiful form to the Capitol' (1965, 388). The exceptions to this are those Renaissance humanists who were concerned to show that architecture conformed to ancient philosophers' conception of the world, and indeed provided an analogue for its processes. Alberti, in *De Re Aedificatore*, written in the mid-fifteenth century, managed to make use of several of the antique theories of 'form' already mentioned. His well known claim that 'within the form and figure of a building there resides some natural excellence that excites the mind and is immediately recognized by it' (302), is based upon the Pythagorean theory of numbers and arithmetic as the basis of everything. On the other hand, when he says that 'It is quite possible to project whole forms in the mind, without any recourse to the material' (7), this accords with neo-Platonist thought; and Erwin Panofsky interpreted Alberti's distinction between *materia*, the products of nature, and *lineamenti*, 'the products of thought', in the same terms. Panofsky, with a modernist's propensity to see everything in terms of 'form', translated *lineamenti* as 'form', but this is unconvincing, for Alberti's

(above) A. Palladio, Villa Godi, Lugo di Vicenza, 1532–42. 'Buildings are esteemed more for their form than for their materials': Palladio, like most architects until the modern era, used 'form' as a synonym for 'shape'.

definition of *lineamenti* has little in common with any notion of form, ancient or modern: Alberti describes *lineamenti* as 'the correct, infallible way of joining and fitting together those lines and angles which define and enclose the surfaces of the building' (7).⁴

The Aristotelian notion of form, as a property of all material things, seems to have featured little in Renaissance architectural thought, though it did appear in relation to sculpture – defined by Vasari as 'an art which lifts the superfluous from the material, and reduces it to that form which is drawn in the mind of the artist' (1878, vol. I, 148); and Michelangelo's view of sculpture as what encloses the artist's idea had, as Panofsky points out, a definite Aristotelian basis.⁵ A rare case of a more Aristotelian view of 'form' used relative to architecture occurs when Daniele Barbaro, Palladio's patron, wrote as follows in his commentary on Vitruvius: 'Imprinted in every work raised up from reason and accomplished through drawing is evidence of the artist, of the form and quality that was in his mind; for the artist works first from the mind and symbolizes then the exterior matter after the interior state, especially in architecture' (11).

Post-Renaissance

In general, it can be said that while the notions of form developed in ancient philosophy were of interest to humanist scholars, they had little impact on the ordinary practice of architecture, or its vocabulary, until the twentieth century. Throughout the sixteenth, seventeenth and eighteenth centuries, and indeed until the twentieth century everywhere except in German-speaking countries, when architects and critics talked about 'form', they almost invariably meant only 'shape'. When Palladio stated that 'buildings are esteemed more for their form than for their materials' (Burns, 209), it does not appear, notwithstanding his association with Daniele Barbaro, that he had anything metaphysical in mind. Nor, for

example, when the French theorist Quatremère de Quincy wrote in 1788 that 'stone, in copying itself, or to put it better, in copying nothing, has offered no form to art', is it likely that he meant more than 'shape'. And when Sir John Soane, in his *Lectures*, said the student 'will learn to appreciate that succession and variety of forms' (591) found in the works of the sixteenth-century Italians, his use of the word was entirely characteristic of English nineteenth-century writers. And even when in 1825 Joseph Gwilt wrote in his introduction to his edition of Sir William Chambers's Treatise that 'Form alone fastens on the mind in works of architecture' (76) – although this might sound like a 1920s modernist – he was simply stressing that it was not materials themselves that mattered, but the way they were arranged. Nor, when Viollet-le-Duc announced at the beginning of his *Lectures* (1860) that his purpose was 'to inquire into the reason of every form – for every architectural form has its reason' (vol. 1, 7) should we imagine that he was talking about an abstract concept. Although Viollet referred repeatedly to 'form' in his Lectures, his purpose in doing so was to stress its dependence upon the structural principle employed:

form is not the result of caprice ... only the expression of structure ... I cannot give you the rules by which the form [*forme*] is governed, inasmuch as it is the very nature of that form to adapt itself to all the requirements of the structure; give me a structure and I will find you the forms that naturally result from it, but if you change the structure, I must change the forms. (vol. I, 283–84)

The transformation of 'form' into an altogether more vital and dynamic concept started in Germany, in the 1790s, and until the early twentieth century remained almost entirely confined to German-speaking countries. Even there, for most of the nineteenth century, discussion of 'form' was largely restricted to philosophical aesthetics, only in the 1890s becoming widely used by artists and architects in its by then greatly expanded sense. The new interest in 'form' that developed in the 1790s had two distinct aspects, each in their own way important for the subsequent development of the concept. The first emerges from the philosophy of aesthetic perception developed by Kant; the second from the theories of nature and natural generation developed by Goethe.

Kant

The discipline of philosophical aesthetics in the late eighteenth century took off with the realization that the source of beauty lay not in objects themselves, but in the process by which they were perceived. In the development of this argument, 'form' was to be a key concept, no longer (as it had been throughout antiquity and the Renaissance) a property of things, but exclusively of the seeing of them. The single most important contributor to this new approach was Immanuel Kant, whose *Critique of Judgment* (1790) established 'form' as the basic category for the perception of art. Kant argued that the judgment of beauty belonged to a separate faculty of mind, unconnected to either knowledge (cognition) or emotions (desire). Our ability to make sense of the bewildering variety of sensations presented to us lay in the existence within the mind of constructs of space and of time, and of a faculty of 'form', which Kant described as 'that which so determines the manifold of appearance that it allows of being ordered in certain relations' (*Critique of Pure Reason*, 66). It is important to stress that for Kant, form was different to that aspect of things which is known through sensation – that is *matter*; and *form* is not *matter*. Aesthetic judgment, the perception of what the mind finds pleasing, occurs through its ability to recognize in the external world features that satisfy the internal concept of form. Kant stresses that aesthetic judgments are *only* related to 'form' – 'in a pure judgment of taste the delight in the object is connected with the mere estimate of its form' (*Critique of Judgment*, 146). Everything about an object that brings to mind either knowledge or desire is irrelevant to the pure aesthetic judgment, 'whose determining ground, is ... simply finality of form' (65). And anything that gives rise to charm, or other association, that is to say all contingent properties like colour, or ornament, is superfluous: as Kant puts it, 'In painting, sculpture, and in fact in all the formative arts, in architecture and horticulture, so far as fine arts, the *design* is what is essential. Here it is not what gratifies in sensation, but merely what pleases by its form, that is the fundamental prerequisite for taste' (67). Kant also excludes from aesthetic judgment those aspects of an object that concern its usefulness, since these involve knowledge about what the object does or is, and so belong to cognition, and not to the aesthetic: 'the aesthetic judgment ... brings to our notice no quality of the object, but only the final form in the determination of the powers of representation engaged upon it' (71). Not surprisingly, since it would have undermined his argument that 'forms'

were a property of the beholders' mind, Kant was unspecific about the appearance forms might take in objects – though he did suggest that forms of the regular geometric kind favoured by neo-Platonists are not conducive to aesthetic judgments, for they are presentations of determinate concepts, whereas irregularity, because it is not suggestive of purpose, allows more freedom to the exercise of purely aesthetic judgments (86–88).

The significance of Kant's thought, in the history of 'form', was to establish that 'form' lies in the beholding, not in the thing beheld, and that in so far as the mind recognizes beauty in objects, it is because it sees within them a representation of that form, independent of content or meaning. Kant's contemporaries, the Romantic writers Goethe, Schiller and A. W. Schlegel, while they were enthusiastic about Kant's account of the relationship between the beholder and the object in creating aesthetic experience, felt that his abstract scheme failed to provide a satisfactory account of why we take pleasure in forms, and in the nature of that pleasure. Schiller, in his *On the Aesthetic Education of Man* (1794–95), developed the notion of 'living-forms' to describe what made works of art aesthetically satisfying. Schiller proposed a scheme in which human psychology could be accounted for through two drives – 'form-drive' and 'sense-drive', while a third drive, 'play-drive', allowed each of the two main drives to recognize their opposite, while retaining their integrity. The outward objects to which the play-drive corresponded were 'living-forms'. Schiller explained how these were manifested:

the term beauty is neither extended to cover the whole realm of living things nor is it merely confined to this realm. A block of marble, though it is and remains lifeless, can nevertheless, thanks to the architect or sculptor, become living form [*lebende Gestalt*]; and a human being, though he may live and have form [*Gestalt*], is far from being on that account a living form. As long as we merely think about his form, it is lifeless, a mere abstraction; as long as we merely feel his life, it is formless, a mere impression. Only when his form [*Form*] lives in our feeling and his life takes on form in our understanding, does he become living form. (XV.3)

For Schiller, as for Goethe and Schlegel, the subject of all art was to articulate in such 'living forms' the life we feel within ourselves.

Goethe

Schiller's concept of 'living form' corresponded closely to the ideas that his friend Goethe was developing about natural science. In his research into the morphology of plants, undertaken from the late 1780s, Goethe wanted – in an essentially Aristotelian quest – to find an original plant, to whose *Urform* all other plants – even those not yet existing – could be related. Goethe's thinking focussed particularly in what he saw as the inadequacy of the methods of biological classification developed by Linnaeus and later Cuvier, methods which essentially categorized plants and animals according to their component parts, as if they were constructed in the same way as man-made artefacts. For Goethe, this system failed because it neither took account of the essential coherence and wholeness of specimens, nor of their quality as vital and living; as he remarked to Schiller, 'there ought to be another method of presenting nature, not in separate pieces, but as living actuality, striving from the whole to the parts' (Magnus, 69). Moreover, the Linnaean system treated natural form as essentially static, neglecting that in nature, as Goethe put it, 'nothing stands still'.⁶ The alternative method of classification proposed by Goethe placed all specimens within a series from the simplest to the most complex; from the features common to all specimens, Goethe deduced the existence of an *Urpflanze* (an archetypal original plant), from whose form all other plants might be contrived. As he wrote to Herder in 1787,

The archetypal plant [*Urpflanze*] will be the strangest growth the world has ever seen, and Nature herself shall envy me for it. With such a model, and with the key to it in one's hands, one will be able to contrive an infinite variety of plants. They will be strictly logical plants – in other words, even though they may not actually exist, they could exist. They will not be mere picturesque and imaginative projections. They will be imbued with inner truth and necessity. And the same law will be applicable to all that lives. (*Italian Journey*, 299)

Seen in these terms, the '*Urform*' was a principle of all organic material, in accordance with which all generation took place. And Goethe was at pains to stress that in no sense could the form be considered apart from the inward spirit: as he wrote,

Nature has neither core
Nor shell,
But everything at once does spell.



Archetypal plants, from J. W. von Goethe, *Zur Naturwissenschaft*, 1823, vol. 2.
Goethe speculated upon the existence of an archetypal, original plant, from
which the forms of all other plants might be deduced.

Look to thyself, and thou shalt see
Whether thou core or shell mayest be.
(Magnus, 238)

For Goethe and the other Romantics, exactly the same principles of organic form found in nature applied equally to art, and indeed to all products of human culture. The very same concept of *Urform* was adapted by Wilhelm von Humboldt to the study of language, whence in turn it provided an analogy for architecture, in the thinking of Gottfried Semper (see chapter 5, p. 71). The significance of Goethe's theory was to provide a theory of 'form' which acknowledged the ever-changing features of nature – and of art – without positing the existence of an absolute ideal category, known only to thought. One of the clearest, and perhaps one the most influential statements of the Romantics' conception of 'organic form', occurs in Schlegel's *Lectures on Dramatic Art* delivered in 1808–9, and translated into English in 1846:

we must understand the exact meaning of the term form, since most critics, and more especially those who insist on a stiff regularity, interpret it merely in a mechanical, and not in an organic sense. Form is mechanical when, through external force, it is imparted to any material merely as an accidental addition without reference to its quality; as, for example, when we give a particular shape to a soft mass that it may retain the same after its induration. Organic form, again, is innate; it unfolds itself from within, and acquires its determination contemporaneously with the perfect development of the germ. We everywhere discover such forms in nature throughout the whole range of living powers, from the crystallization of salts and minerals to plants and flowers, and from these again to the human body. In the fine arts, as well as in the domain of nature – the supreme artist, all genuine forms are organic, that is determined by the quality of the work. In a word, the form is nothing but a significant exterior,

the speaking physiognomy of each thing, which, as long as it is not disfigured by any destructive accident, gives a true evidence of its hidden essence. (340)

While the Romantics' notion of 'living form' preserved the Kantian idea that form was a property of the beholder as much as of the object, it also threatened the purity of Kant's conception, for form was in danger of becoming, as Schlegel said, a *sign* of something else, of an inner life force. While the Romantics were at pains to preserve the unity between the two concepts through their insistence that it was through the subject's sense of their own psychology that they were able to recognize the living form in the object, a tendency to separate the mental category from the property of objects became apparent in the development of idealist philosophy in early nineteenth-century Germany to which we shall now turn.

Philosophical Idealism

For idealist philosophers, of whom Hegel is the most famous, the appearance of things presented to the senses concealed an Idea that lay within, or beyond – an approach based upon Plato, even if it was also critical of him. The purpose of aesthetics was to reveal that underlying Idea: in art, 'every definite content determines a form [Form] suitable to it' (Hegel, *Aesthetics*, 13). The possible content signified by the form ranged from the character of individual artists, to the character of whole civilizations or epochs. Considered in terms of the practice of art, the idealist attitude towards 'form' is well summarized by a later idealist philosopher, Robert Vischer, in an essay of 1873: 'form', he argues, is the 'surrogate' of Idea, and it is the aim of the artist 'to emancipate this idea' (120).

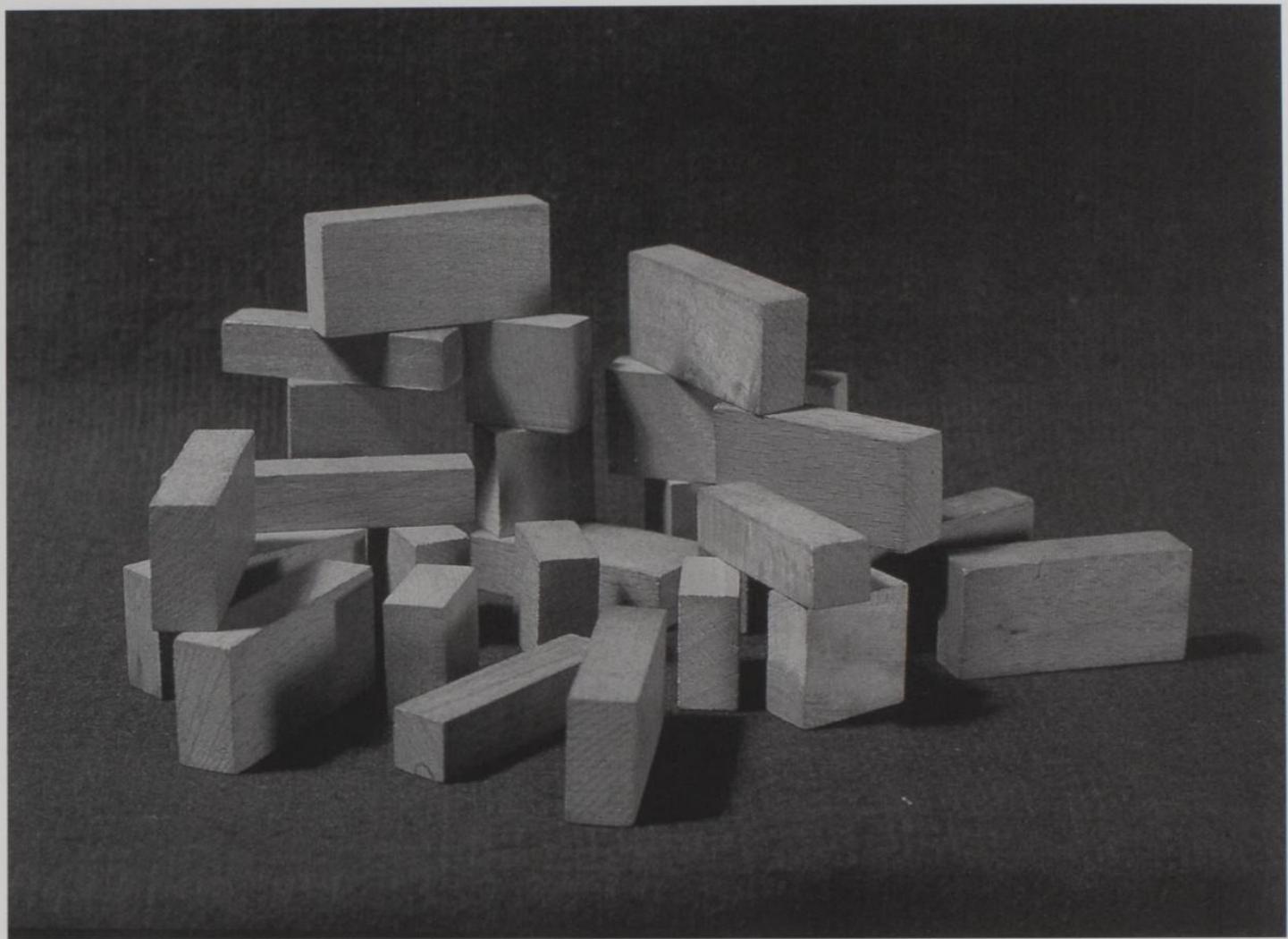
It will already be apparent how very confusing a concept 'form' had become by the early nineteenth century in Germany: on the one hand, in Kant, exclusively a property of perception; on the other hand, in Goethe, a property of things, recognizable as a 'germ', or genetic principle; and in Hegel, a property above and before things, knowable only to the mind. It is hardly surprising that when architects first started to make use of 'form', all three different senses were easily mixed up. The first architectural writer in whose work 'form' was an important concept, Gottfried Semper, employed it in at least two senses. For Semper, 'the forms of art ... are the necessary outcome of a principle or idea that must have existed before them' (quoted in Ettlinger, 57); or as he put it elsewhere, form is 'the idea becoming visible' (*Der Stil*, trans. Mallgrave, 190) – both of which are purely idealist,

Hegelian statements of the notion of form. On the other hand, his description at the beginning of *Der Stil* of the project as a search for the common *Urform* that underlay the successive transformations of art (see p. 71 above), was clearly indebted to Goethe; as too was his statement in the Prolegomenon to show not 'the *making* of artistic form, but its *becoming*' (183).

Formalism

If 'form' was already a confusing concept in the early nineteenth century, what happened to it later in the century made it even more so. From the 1830s, German philosophical aesthetics was divided between two schools, one generally referred to as idealist, concerned with the signification of forms;⁷ the other, formalist, concentrating upon the mode of perception of forms devoid of suprasensory meaning. Common to both, but with an utterly different meaning to each, lay the single term 'form'. Within the field of philosophy, formalism was the more dominant school for most of the century. The leading post-Kantian was J. F. Herbart, whose contribution to aesthetics was, as Mallgrave and Ikonomou put it, to argue that 'the meaning of a work of art is superfluous because each work consists, in essence, of a set of unique relations of form, composed by the artist with craft and intention' (10). Herbart defined aesthetics in terms of the psychological reception of the elementary relations of lines, tones, planes and colour, and much of his work was devoted to psychological aspects of this process; and indeed, his work contributed as much to the early development of psychology as it did to aesthetics. One of Herbart's better-known disciples was the Swiss pedagogue Friedrich Froebel, whose 'gifts' (see ill. p. 158), sets of progressively more complex colourless, geometrically shaped bricks, provided an object lesson in the process of Herbartian formalist aesthetics – the bricks are 'pure forms' from which the young child learns of what the world is made. The legend that the presentation of a set of Froebel bricks guided the young Frank Lloyd Wright's future choice of career provides an unexpectedly direct connection between Kant's aesthetics and modern architecture.⁸

Herbart's aesthetics were developed by other philosophers in the second half of the nineteenth century, principally by Robert Zimmermann, who developed an extensive 'science of form', which concentrated particularly on the relationships perceived between forms, rather than the forms themselves. Something of the potential for the application of formalist aesthetics to architecture was realized in an essay by the architect



Froebel Gift no. IV, c. 1890: 'Pure forms'. The philosopher Herbart's idea that forms exist independently of meaning was developed into a pedagogical system by the Swiss educationalist Friedrich Froebel, whose 'gifts' – sets of plain wooden bricks – provided the child with instruction by stages in the elements of which the world is supposedly made.

Adolf Göller, 'What is the Cause of the Perpetual Style Change in Architecture?' (1887), in which Göller proposed that 'Architecture ... is the true *art of visible pure form*' (198). Göller defined the beauty of form as 'an inherently pleasurable, meaningless play of lines or of light and shade' (195); 'form delights the spectator even without there being any content' (*Aesthetik*, 6). Unlike painting or sculpture, 'architecture offers us systems of abstract, geometrical lines without the images of concrete things that we encounter in life. In viewing architectural works, we therefore lack the latent ideas or memories that invariably and necessarily come to mind with painting and sculpture. It follows that architectural forms mean

nothing to natural reason' ('Style Change', 196). This surprising view, anticipating the development of abstract, non-objective art and suggesting that its origin lay in architecture, was possible because of Göller's rigid, Kantian exclusion from 'form' of anything that signified a content.

Göller's essay was unusual, and from the 1870s, what reanimated the potentially arid formalist approach to aesthetics was the recovery of the earlier, Romantic notion of 'living form' to create the more scientific concept of 'empathy'. The basis of this, that works of art hold interest for us because of our ability to see in them the sensations that we know from our own bodies, was first

made explicit by the philosopher Hermann Lotze, in 1856: 'no form is so unyielding that our imagination cannot project its life into it' (I, 584). Taken up by the philosopher Robert Vischer, empathy was first related to architecture in an important and influential, though entirely speculative, essay of 1873, 'On the Optical Sense of Form'. Applied to architecture, empathy was to be fruitful in enriching the concept of 'form' in the 1890s. Although it was widely taken up, the two writers with most influence on its subsequent use (and not just in architecture, but in all the arts) were the art historian Heinrich Wölfflin and the sculptor Adolf Hildebrand. We shall now consider in more detail what these two had to say about 'form'.

Wölfflin

Wölfflin's doctoral thesis, 'Prolegomena to a Psychology of Architecture', was presented in 1886 (although not published until the 1930s), and states particularly clearly the conception of form contained in his later and well known books, *Renaissance and Baroque* (1889) and *Principles of Art History* (1915). The opening question of the 'Prolegomena' is how is it that forms of architecture can express a mood or emotion? Wölfflin's answer was in the principle of empathy – 'Physical forms express a character only because we ourselves possess a body' (151); for 'Our own bodily organization is the form through which we apprehend everything physical' (157–58). Having established a correspondence between the sense of our own body and of the work of architecture, Wölfflin turns to an account of architecture in which the conception of 'form' is clearly indebted to Goethe and the Romantics (the source he acknowledges is Schopenhauer):

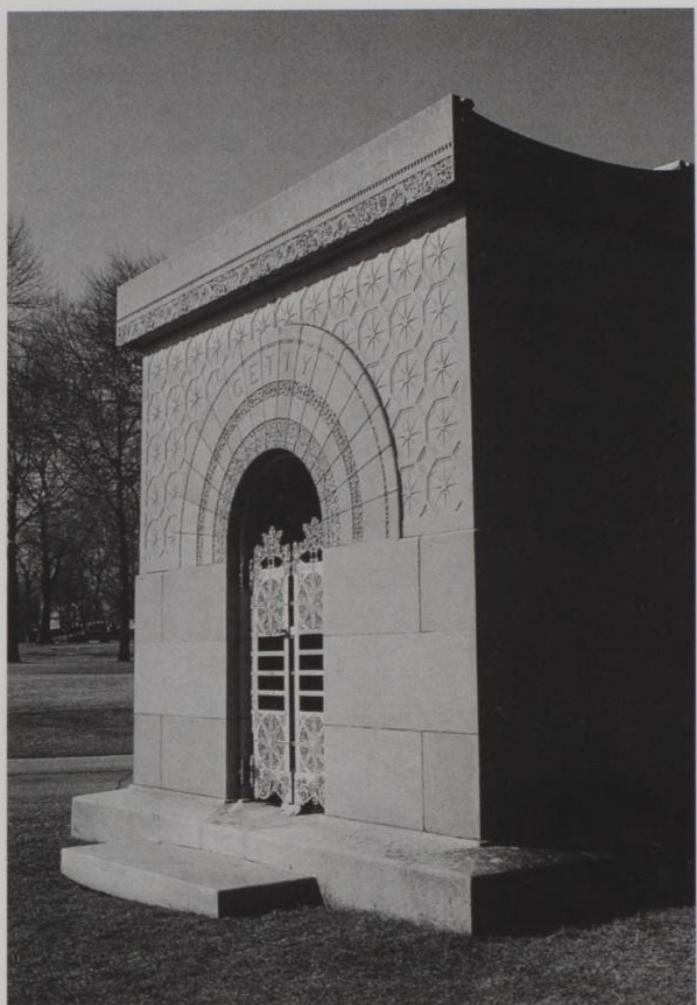
What holds us upright and prevents a formless collapse? It is the opposing force that we may call will, life, or whatever. I call it force of form [*Formkraft*]. *The opposition between matter and force of form*, which sets the entire organic world in motion, is the principal theme of architecture.... We assume that in everything there is a will that struggles to become form and has to overcome the resistance of a formless matter. (159)

He continues, emphasizing in a manner reminiscent of Aristotle, the coexistence of form and matter: 'form is not wrapped around matter as something extraneous but works its way out of matter as an immanent will. Matter and form are inseparable' (160). A number of interesting

observations follow from this proposition. First of all, it allows him to see ornament not – as most modernists were to do – as what is antagonistic to form, but rather as 'the expression of excessive force of form' (179). Secondly, there are his comments on 'modern' (i.e., Renaissance and post-Renaissance) architecture: 'The modern spirit characteristically prefers the architectural form to work its way out of the material with some effort; it does not look for a conclusion so much as for a process of becoming: a gradual victory of form' (178). Thirdly, and perhaps most importantly, he acknowledged that if 'form' belongs primarily to the viewer's perception, then historical changes in architecture are to be understood primarily in terms of changes in the mode of vision – in other words, that vision has *its* history as well as architecture. This proposition, which follows naturally from Kant's aesthetics, was to present something of a problem in the subsequent modernist use of the concept of form, for it undermined the argument that new forms were the necessary outcome of new material conditions; and it also called into question the widespread supposition – for example in the teaching of the Bauhaus – that in dealing with form one was dealing with a timeless, universal category. This fundamental difficulty may be one of the reasons why, as we shall see, there was little interest in the further development of 'form' after the 1920s.

Hildebrand

Adolf Hildebrand's essay *The Problem of Form in the Fine Arts* (1893), although principally about sculpture, has some important things to say about architecture, and as it was widely read in avant-garde circles in the early part of the twentieth century, appears to have had some influence on architectural thinking. The book is directed against 'impressionism', against the view that the subject of art consists in the appearance of things. Hildebrand starts by distinguishing between 'form' and appearance: things present themselves in a multitude of changing appearances, none of which reveals the form, which can only be perceived by the mind. 'The idea of form is the sum total that we have extracted by comparing appearances' (227–28). The sense of form is gained by the kinaesthetic experience, the real or imagined movement necessary to interpret the appearance things present to the eye. Developing out of this argument, Hildebrand has one profoundly original observation, and one which shifted the entire conception of 'form' in architecture, and that is that the 'form' in architecture is *space*; in architecture, he says 'space itself, in the sense of inherent form, becomes effective form for the eye' (269). Although the concept of



Getty tomb, Graceland cemetery, Chicago, L. Sullivan, 1890. Forms, in Louis Sullivan's remarkably perceptive summary of their purpose in architectural discourse, 'stand for relationships between the immaterial and the material, between the subjective and the objective'.

'spatial form' had certainly been used before (see Wölfflin, 'Prolegomena', 154), it is to Hildebrand, as well as to the aesthetic philosopher August Schmarsow, that we owe the proposition that 'form' in architecture is to be identified primarily through the experience of space. Schmarsow presented a more developed version of this theme in a lecture given the same year as Hildebrand's book. In 'The Essence of Architectural Creation' (1893) Schmarsow argued that the particularity of architecture lies in the fact that the viewer's empathetic sense is directed not to its masses, but into its space. Schmarsow proposes a direct equivalence between architectural space and the body's form:

The intuited form of space, which surrounds us wherever we may be and which we then always erect around ourselves and consider more necessary than the form of our own body, consists of the residues of sensory experience to which the muscular sensations of our body, the sensitivity of our skin, and the structure of our body all contribute. As soon as we have learned to experience ourselves and ourselves alone as the centre of this space, whose co-ordinates intersect in us, we have found the precious kernel ... on which the architectural creation is based. (286–87)

Schmarsow subsequently elaborated this argument, and as a contribution to the meaning of 'form' relative to architecture, it was fundamental to both Paul Frankl's *Principles of Architectural History* (1914), and to the aesthetics of modern architecture. For example, in 1921, H. Sorgel in *Architektur-Aesthetik* wrote, in what was by then a fairly unoriginal remark, 'The "problem of form" in architecture must be transposed into a "problem of space"' (Neumeyer, 171).

We might at this point take stock of what, by about 1900, 'form' had been used to mean. There are at least four sets of opposing ideas:

- (i) 'form' as a property of the seeing of objects (Kant), or of the objects themselves;
- (ii) 'form' as a 'germ', a generative principle contained within organic matter, or works of art (Goethe); or as an 'idea' preceding the thing (Hegel);
- (iii) 'form' as the end of art, and entire subject of art, as Götter had proposed; or as merely the sign, through which an idea or force was revealed;
- (iv) 'form' in works of architecture presented by their mass; or by their space.

Loaded down as it was with the burden of representing some of the major divisions of thought in nineteenth-century aesthetics, it is hardly surprising that the term lacked clarity when it started to be widely used in architectural vocabulary in the twentieth century. Indeed, as we shall see, in its ambiguity lay part of its appeal.

So far, we have considered the later development of 'form' only within the German-speaking world. Its entry, in its newly enlarged sense, into the English-language vocabulary of architecture occurred in the United States, where the Vienna-trained architect Leopold Eidlitz, in his book *The Nature and Function of Art* (1881), was the first to present an essentially Hegelian view of 'form' to an American audience. Eidlitz's attitude to form can be summed up in his statement, 'Forms in architectural art are the expressions of ideas in matter' (307). Eidlitz's book precedes the much better-known and quite unique discourse on 'form' by Louis Sullivan in *Kindergarten Chats*, numbers 12, 13 and 14 (1901). These essays, usually read for Sullivan's views on 'function', are even more interesting for what he says about 'form'. To quote a characteristic passage:

Form in everything and anything, everywhere and at every instant. According to their nature, their function, some forms are definite, some indefinite; some are nebulous, others concrete and sharp; some symmetrical, others purely rhythmical. Some are abstract, others material. Some appeal to the eye, some to the ear, some to the touch, some to the sense of smell ... But all, without fail, stand for relationships between the immaterial and the material, between the subjective and the objective – between the Infinite Spirit and the finite mind. (45)

Even from this passage, it will be clear that Sullivan was primarily inspired by the 'organic form' of the German Romantics, of Goethe and Schiller, and their view that in this lay the correspondence between nature and art. As an expression of their relevance to architecture, *Kindergarten Chats* cannot be equalled, at any date or in any other language.

'Form' within twentieth-century modernism

Architectural modernism adopted 'form' and made it its cardinal term for various reasons: (1) it was not a metaphor (if its biological derivation was overlooked); (2) it implied that the true substance of architecture lay

beyond the immediately perceptible world of the senses; (3) it connected the mental apparatus of aesthetic perception with the material world; and (4) it gave to architects a description for that part of their work over which they held exclusive and unequivocal control. None of these factors describe what 'form' actually meant in modernist discourse, and to find this out, we must look at the various oppositions in which it was used.

Form as resistance to ornament. This is the first and probably most familiar use of 'form' within modernism, as a means of describing, and validating, that aspect of architecture which is *not* ornament. This sense is made clear for example by the German critic Adolf Behne, writing in the 1920s: 'The concept of "form" does not deal with accessories, decoration, taste or style ... but with the consequences arising from a building's ability to be an enduring structure' (137). The main source of the anti-decoration concept of form lay in the polemics against Secession artists and designers in Vienna in the 1890s, evolved most famously by Adolf Loos. Although his essay 'Ornament and Crime' of 1908 is the best-known expression of this point of view, it is important to understand that Loos was able to reach the position advanced in this essay through the already existing propositions about 'form'. In an earlier article, 'The Principle of Cladding' (1898), Loos had written 'Every material possesses its own language of forms, and none may lay claim for itself to the forms of another material. For forms have been constituted out of the applicability and methods of production of materials' (66). Loos was here attacking the simulation of one material in another, characteristic of Secession work. The notion that each material has its own forms is directly derived from Semper, and one might find its origin in a sentence such as the following from *Der Stil*: 'Every material conditions its own particular manner of formation by the properties that distinguish it from other materials and that demand a technical treatment appropriate to it' (§61, 258). However, Loos's rendering of Semper's idea about the relation between form and materials is rather reductive, and suggests a literal determination of Form by Material that Semper had been keen to avoid; for Semper, all forms were the outcome of an idea or artistic motive, which was simply modified by the particular material in which it was worked. While Loos removed all mention of 'Idea', the underlying conception of form which he is employing nonetheless remains idealist, and allows him to argue that there is a 'form' which is inherent to material, and which is endangered, or destroyed by decoration. Loos set the



Interior, ZentralSparkasse, Mariahilf-Neubau, Vienna, Adolf Loos, 1914.

precedent for twentieth-century modernism's use of 'form' as resistance to those despicable tendencies, the ornamental and the decorative.

Form as antidote to mass culture. In a long speech entitled 'Where Do We Stand?' delivered at the 1911 Congress of the Deutsche Werkbund, the architect and critic Hermann Muthesius drew two specific oppositions, between 'form' and 'barbarism', and 'form' and 'Impressionism'. Muthesius spoke as follows:

What we are pleased to call culture is unthinkable without a compromising respect for form; and formlessness is just another name for philistinism. Form is a higher intellectual need in the same way that cleanliness is a higher physical need, because the sight of crude forms will cause a really cultivated

person something resembling bodily pain and the same uncomfortable sensation that is produced by dirt and foul smells.

While this may sound not unlike Adolf Loos's objections to ornament, in fact Muthesius's object of attack was very different. As Frederic Schwartz has shown, in pre-1914 Germany, 'culture' was a central and much discussed concept in the developing discourse of resistance to the alienating effects of capitalism.⁹ 'Form' therefore was, amongst other things, a guarantee against the soullessness of modern economic life. Muthesius returned to this later in the speech with his attack upon 'Impressionism':

It is evident that the ephemeral is incompatible with the true essence of architecture ... The present impressionistic attitude towards art in a sense is unfavourable to its development. Impressionism is

conceivable in painting, literature, sculpture and to some extent perhaps even music, but in architecture it does not bear thinking about. The few individualistic attempts already tried out by some architects to illustrate what might be an impressionistic manner are simply horrifying.

While this is an explicit attack upon Art Nouveau, as Schwartz points out, the reference to 'Impressionism', in the context of the Werkbund, refers to a discourse about the relationship between art and the market, and described both a social condition and art's response to it. Impressionism describes both the effects of laissez-faire – social atomization, individualism, and the indifference of those who sell goods to their production or their quality – and also the characteristics of the goods themselves, which betrayed signs of over-stimulated, nervous activity. Evidently 'form', as far as Muthesius was concerned, was not simply the means of achieving modernity, but also had the power to resist its worst aspects.¹⁰ Later in the speech, Muthesius continued: 'The recovery of a feeling for architectural form is the first condition in all the arts nowadays It is all a matter of restoring order and rigour in our modes of expression, and the outward sign can only be good form'. Seen in these terms, 'form' is what redeems modern industry from its own worst excesses, and restores it to culture. This conception of 'form' was to be important to modernists in Germany in the 1920s; an English manifestation was Herbert Read's *Art and Industry* (1934). That such ideas could be accommodated around the concept of form was made possible by the notion of 'form' set up by Hegel, and mediated to late nineteenth-century architects by Semper.

Muthesius's exhortations to 'form' as the main theme of architecture presented certain pedagogical problems which manifested themselves in the 1920s, for how was the student to learn the principles of what had no material existence, but was a purely metaphysical category? This task was the theme of the educational programme developed at the Bauhaus under Walter Gropius's direction, and Gropius's many pronouncements on the subject attempted to explain how a student was to learn what, by definition, could not be taught: as Gropius put it in 1923, 'The objective of all creative effort in the visual arts is to give form to space. But what is space, how can it be understood and given a form?' (120). When it came to learning the principles of form, Gropius explained, the student 'is given the mental equipment with which to shape his own ideas of form' (123). Quite how such an individualistic process would lead to the



Entrance, ZentralSparkasse, Mariahilf-Neubau, Vienna, Adolf Loos, 1914. 'Forms have been constituted out of the applicability and methods of production of materials.' For Loos, 'form' was primarily a means of resistance to the decorative and ornamental excess of his contemporaries.



AEG large machine factory, Voltastrasse, Berlin-Wedding, P. Behrens, 1912.
 'Culture is unthinkable without a compromising respect for form; and formlessness is just another name for philistinism': to Behrens and his Werkbund contemporaries, 'form' was an antidote to the superficiality and soullessness of the mass culture created by capitalism.

creation of the property that was meant to convey the supra-individual, collective nature of architecture, Gropius did not explain, and he later resorted to a more straightforwardly materialist explanation of where forms were to come from: 'by resolute consideration of modern production methods, constructions, and materials, forms will evolve that are often unusual and surprising' (1926, 95). At the Bauhaus's Russian equivalent, the Vkhutemas, concerned with the same problem, Moisei Ginzburg adopted a more speculative view: Ginzburg referred to

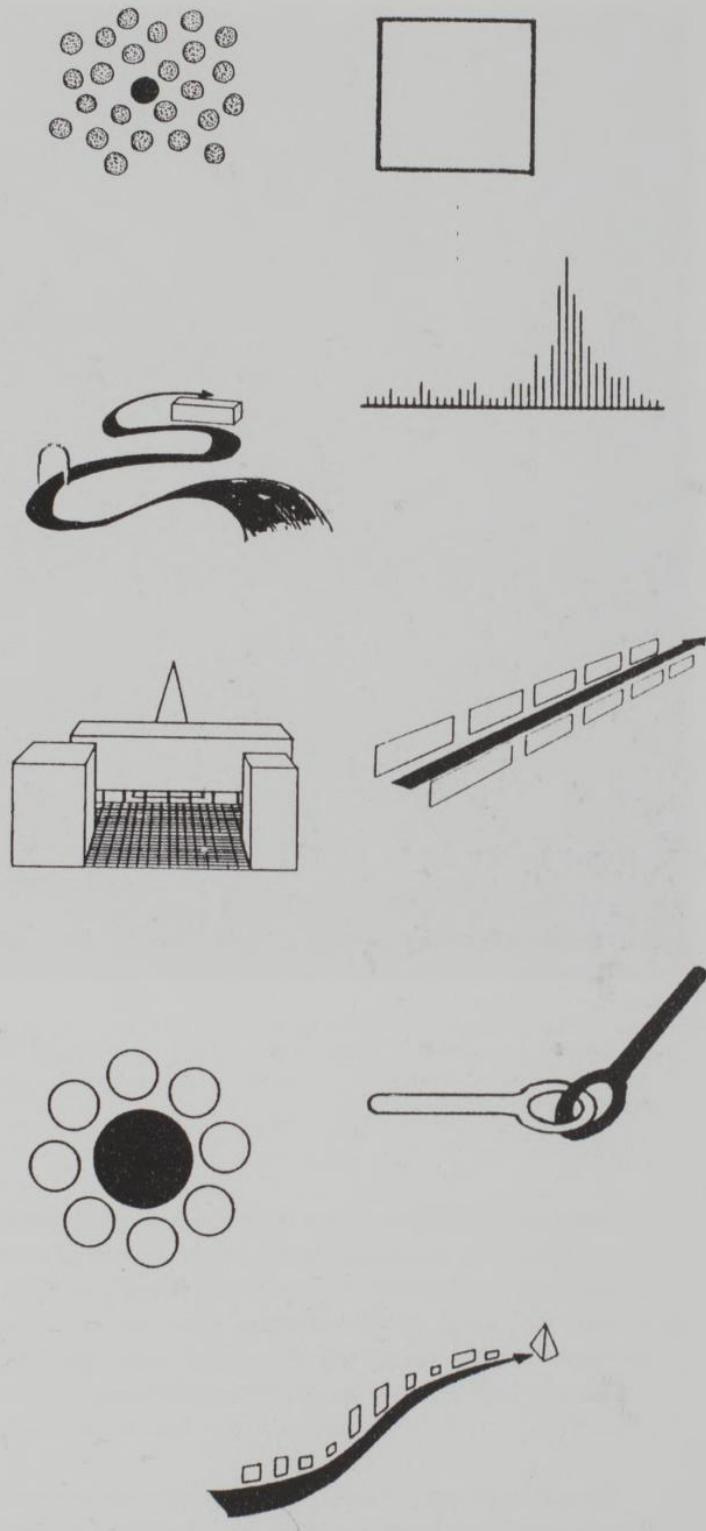
the basic danger of CANONIZATION of certain forms, of their becoming fixed elements of the architect's vocabulary. Constructivism is LEADING the BATTLE against this phenomenon, and studies these basic elements of architecture as something CONTINUOUSLY CHANGING in connection with the changing preconditions of the form-making situation. IT NEVER ADMITS therefore the FIXITY OF FORMS. Form is an unknown, 'x', which is always evaluated anew by the architect.

Interest in 'form' as the means of resisting the effects of mass culture and of urbanization have been recurrent throughout the twentieth century. For example, writing in 1960, the American urbanist Kevin Lynch, concerned with the lack of intelligibility of contemporary American cities, wrote 'we must learn to see hidden forms in the vast sprawl of our cities' (12). He took this up again when he considered the means of making the city's image more evident, in an argument which gains much of its effect from the confusion between form as invisible idea, and as physical shape: 'the objective here is to uncover the role of form itself. It is taken for granted that in actual design form should be used to reinforce meaning, and not to negate it' (46).

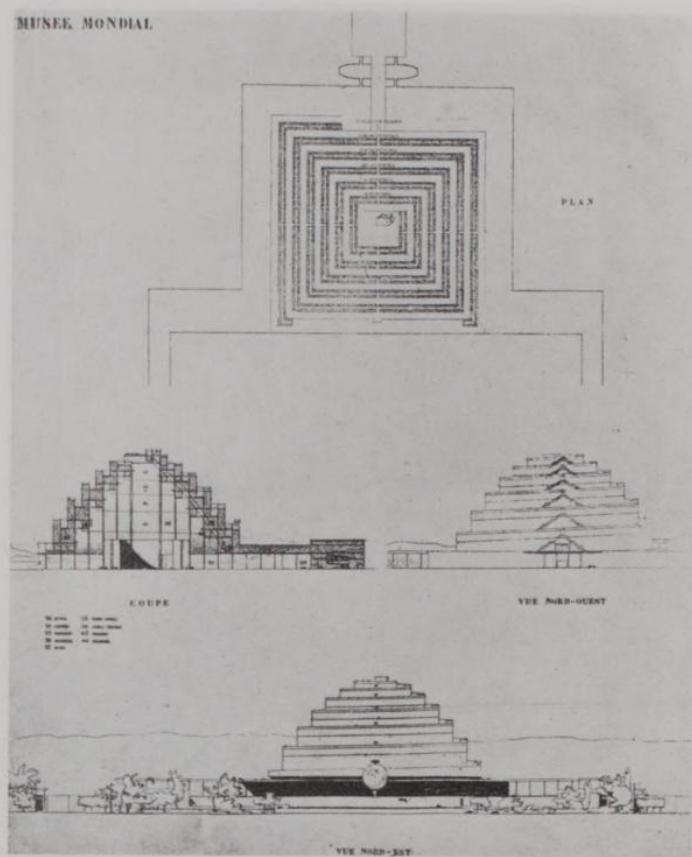
Form versus social values. In the early 1920s 'form', so highly valued within the Deutsche Werkbund, began to be treated with great suspicion by certain German architects. Mies van der Rohe, then a member of the G group in Berlin, wrote as follows in 1923:

We know no forms, only building problems.
 Form is not the goal but the result of our work.
 There is no form in and for itself. ... Form as
 goal is formalism; and that we reject. Nor do we
 strive for a style.
 Even the will to style is formalism. (Neumeyer, 242)

For so-called 'functionalist' architects, amongst whom Mies van der Rohe included himself in the early 1920s, the end was, as the critic Adolf Behne put it, to 'arrive at a negation of form' (123). What underlay this was a complete rejection of the nineteenth-century Kantian tradition in which utility was excluded from the aesthetic in architecture: as a product of philosophical aesthetics, 'form' had no place in the scheme of those architects who saw architecture as purely the application of technology to social ends. Indeed the rejection of form was one of the clearest and most explicit ways of affirming their attachment to the view of architecture as committed to social purpose. And from this point on to draw attention to an architect's concern with 'form' has always been a way of simultaneously signalling their neglect of social questions. This occurs particularly in the pejorative use of the word 'formalist', as in the Czech critic Karel Teige's 1929 attack on Le Corbusier's Mundaneum project, which 'in its obvious historicism ... shows the non-viability of architecture thought of as art. It shows the failure of Le Corbusier's aesthetic and formalistic theories ...' (89). In recent times, 'form' has regularly



'Form Qualities of the City': nine diagrams from Kevin Lynch's *The Image of the City*, 1961. Reading from top left: 'singularity or figure-background clarity'; 'form simplicity'; 'motion awareness'; 'time series'; 'visual scope'; 'continuity'; 'dominance'; 'clarity of joint'; 'directional differentiation'. 'We must learn to see hidden forms in the vast sprawl of our cities': to Lynch and other urbanists, 'form' was the property that would overcome the alienation of modern cities – and it was the task of the urban designer to discover and reveal 'form'.



Le Corbusier, Mundaneum Project, 1928–29. The Mundaneum project attracted notoriety on account of its dominant pyramid form, which was taken to indicate the neglect of social content.

been used to imply a neglect of social concerns, as for example when Diane Ghirardo writes: 'Perhaps the fundamental continuity between Modernist and Postmodernist architects derives from the reassertion of the power of form, and hence the primacy of design, to the exclusion of other strategies for improving cities and living conditions' (27).

Even in the 1920s, the critic Adolf Behne tried in his book *The Modern Functional Building* to nullify this particular polarity, introducing the surprisingly novel idea that 'form is an eminently social matter'; in this attempt to rescue the concept of form from what he saw as the ultimate dissolution of form by the functionalists, Behne's argument that what he described as 'romantic functionalism' – in effect the application of a Schlegel-like notion that the form of each building is the working out of its particular inner purpose – would lead only to solutions that were entirely individual and specific to their own particular circumstances, and which, lacking any general significance, would lead ultimately to anarchy. But if each building were considered not individually, but as part of the collective sum total of all buildings, it must conform to certain generally valid principles. It was the consciousness of these general principles that Behne described as 'form'. As well as recalling the socially redemptive power of form contained in Muthesius's 1911 formulation, Behne's idea, particularly in its binary opposition between the pursuit of individuality and of a socialized whole, owed a good deal to the sociologist Georg Simmel, for whom the very possibility of the study of society had rested upon the coexistence of 'forms of socialization' with the actual social life experienced by individuals. Behne might have had in mind an essay like Simmel's 'Subjective Culture' of 1908, where Simmel had argued that while truly great works of art might be distinguished by the individual spirituality of their creator, such works were of little value from the point of view of *culture*, and that the more a work gained in cultural significance, the less apparent was the individuality of its creator. Behne proposed that 'form' in architecture corresponded to 'forms' in society. As he put it,

Form is nothing more than the consequence of establishing a relationship between human beings. For the isolated and unique figure in nature there is no problem of form. ... The problem of form arises when an overview is demanded. Form is the prerequisite under which an overview becomes possible. Form is an eminently social matter. Anyone



'Horseshoe Siedlung', Berlin-Britz, Martin Wagner and Bruno Taut, 1925–26.
 'Form is an eminently social matter': the critic Adolf Behne attempted to reverse
 the prejudice against 'form' as inherently asocial by suggesting that 'form' was
 the means by which individuals would acquire consciousness of the collective
 nature of the society to which they belonged.

who recognizes the right of society recognizes the right of form. ... Anyone who sees a form in humanity, a pattern articulated in time and space, approaches the house with formal requirements, in which case 'formal' is not to be confused with 'decorative'. (137)

Behne's idea enjoyed some currency amongst the proponents of the New Architecture in Germany in the late 1920s: we find his contemporary, the architect Bruno Taut, making the same connection, in reverse, when he writes 'Architecture will thus become the creator of new social forms' (7). The idea reappears some time later, in 1955, used by the Smithsons, when writing about housing: 'Each form is an active force, it creates the

community, it is life itself made manifest'. The notion that architectural forms are equivalent to social forms (whether they derive out of, or themselves constitute social forms, is left ambiguous in the Smithsons' text) was the single most important new sense of 'form' to emerge out of modernism – and is one that has been the most problematic and controversial.

Form versus Functionalism. At the time that Simmel was promoting sociology as a science of 'forms', similar things were happening in other disciplines outside the visual arts. The field within which 'form' was to have most significance, with the most far-reaching effects, was linguistics. In the nineteenth century the study of language had already benefitted from Goethe's theory of form that

had influenced Humboldt's *On Language* (1836). In the early twentieth century, the importance of 'form' in linguistics was to be asserted again by Ferdinand de Saussure, in lectures given in 1911, and later published as *Course in General Linguistics*, in which he famously formulated the principle '*that language is a form and not a substance*' (122). The significance of this proposition for the development of linguistics, and of structuralist thinking in anthropology and literary criticism, is well known; its influence upon architecture was not felt until later, in the 1960s, when it provided the means to attack functionalism, then regarded as the dominant and least satisfactory aspect of architectural modernism.

For a circle of Dutch architects, of whom Aldo van Eyck and Herman Hertzberger are the best known, and for the Italian architect Aldo Rossi, Saussure's proposition that language was a form, not a substance, was fundamental, as was the notion that the meanings of language were arbitrary. In resisting the reductiveness of functionalism, the notion that forms in architecture existed prior to, and independently of any specific purpose to which they might be put, or meaning that might be attached to them, was of particular significance. Rossi formulated this argument primarily in terms of 'types' – though the distinction between 'form' and 'type' was not particularly clear, and indeed he used the terms interchangeably. Thus for example, in the introduction to the Portuguese edition of *The Architecture of the City* in 1971, Rossi wrote 'the presence of *form*, of architecture, predominates over questions of functional organization. ... Form is absolutely indifferent to organization precisely when it exists as typological form' (174). The stress upon the fundamentally non-physical, and linguistic sense of 'form' is made clear by Herman Hertzberger in a recent interview: 'I am a little tired of people who try to link forms to signs, because then you get into the meanings of forms. I don't think forms have a meaning' (38).

In the American architect Peter Eisenman's twenty-year crusade against functionalism, 'form' has again been the instrument of attack. Against orthodox modernist thinking, exemplified by Le Corbusier's statement that 'A work can only affect us emotionally and touch our sensibility if its form has been dictated by a genuine purpose' (1925a), Eisenman has repeatedly asserted that there is no correlation between form and function, nor between form and meaning. As Eisenman put it, 'one way of producing an environment which can accept or give a more precise and richer meaning than at present, is to understand the nature of the structure of form itself, as opposed to the relationship of form to function or of

form to meaning' (1975, 15). Eisenman's single-minded pursuit of 'the structure of form' has a surprising similarity to Frank Lloyd Wright's views about form earlier in the century. Eisenman's belief that there exists 'an unarticulated universe of form which remains to be excavated' (1982, 40) is curiously similar to Frank Lloyd Wright's view that 'in the stony bonework of the Earth, ... there sleep forms and styles enough for all the ages, for all of Man' (1928, *Collected Writings*, vol. 1, 275). Although Wright believed that all the forms of architecture lay hidden in nature, whereas Eisenman believes that they are to be found within the processes of architecture, both share the view that forms are already in existence, only awaiting discovery by the artist. Both, in common with a great many other architects, seem to have lost sight of the fact that 'form' is no more than a device of thought, that can hardly have a determinate existence prior to thought.

Form versus meaning. In Hertzberger and in Eisenman we have already seen 'form' validated in order to expel questions of meaning from the architect's domain.

A corresponding, but converse argument, that too much attention to form had destroyed interest in meaning, was put most famously by the American architect Robert Venturi. Introducing the second edition of his *Complexity and Contradiction in Architecture*, Venturi wrote that 'In the early '60's ... form was king in architectural thought, and most architects focused without question on aspects of form' (14). For Venturi, this meant that architects had neglected meaning and signification. His second book, *Learning from Las Vegas* (1972), written with Denise Scott Brown, 'a treatise on symbolism in architecture' (xiv), was intended to address this state of affairs. Against what they called 'Heroic and Original' modern architecture, in which 'the creation of architectural form was to be a logical process, free from images of past experience, determined solely by program and structure' (7), and whose 'total image derives from ... purely architectural qualities transmitted through abstract form' (129), the authors proposed 'Ugly and Ordinary' architecture. With its assortment of references to conventional roadside constructions, in 'Ugly and Ordinary' architecture, the 'elements act as symbols as well as expressive architectural abstractions'; as well as representing ordinariness symbolically and stylistically, they are enriching 'because they add a layer of literary meaning' (130). The modernist obsession with form, resulting in what Venturi and Scott Brown called 'ducks', denied attention to meaning.



(above) Central Fire Station, New Haven, Connecticut, Earl P. Carlin, 1959–62.

(right) Fire Station no. 4, Columbus, Indiana, Venturi and Rauch, 1965–67. Venturi, in his stand against modernist 'form', compared the New Haven fire station, 'whose image derives from... architectural qualities transmitted through abstract forms', to his own 'Ugly and Ordinary' Columbus fire house, whose image comes from the 'conventions of roadside architecture' – false facade, banality, familiarity of the components, and the sign.



Form versus 'reality'. Modern art, and particularly abstraction, had a direct relationship with theories of 'form' developed in late nineteenth-century Germany: Hildebrand's essay of 1893, and the writings of the historians Riegl, Worringer, and Wölfflin in Germany, or of the critics Clive Bell and Roger Fry in Britain, all contributed to the generally understood significance of