

Colin Rowe: Space as well-composed illusion

Christoph Schnoor

'Space-talk'

It seems almost certain that space-talk made its decisive entry into the critical vocabulary of American and English architects with the publication of Sigfried Giedion's *Space, Time and Architecture* in 1941, and Nikolaus Pevsner's *An Outline of European Architecture* in 1943. Certainly, before the early 1940s, English-speaking readers appear to have been relatively underexposed to the analysis of buildings in terms of space and, since then, have come to accept such analysis (Bruno Zevi, *Architecture as Space*, 1957, might be an instance) as a relative commonplace; and, quite possibly, Le Corbusier might be taken as a representative of something to the same effect related to French usage. For, while Le Corbusier's publications seem to be distinctly 'dumb' as regards space-talk, with him too the new critical vocabulary ('ineffable space') seems to insinuate itself during the course of the 1940s and to become explicitly advertised in *New World of Space* (1948). However this may be, when Anglo-American usage is considered, there remain two, possibly three, exceptions to what has just been stipulated: Bernard Berenson; his disciple Geoffrey Scott; and, maybe, Frank Lloyd Wright.¹

British-born architectural historian Colin Rowe is well known for his intriguing analyses of modern architecture. But rarely did Rowe examine architectural space explicitly as a scholarly subject-matter as he commences to do here, in this footnote to a 1979 lecture. And even as he does, the topic seems to be to him of such insignificance that it can only be picked up with a note of contempt: 'space-talk' does not imply that anything serious could lie behind the word. Thus, this essay investigates a neglected aspect, both in terms of Rowe's essays as in scholarly critique of them: neither has he himself explicitly written about space nor has any scholar explicitly examined the role of architectural space in his writings – which might simply mean that there is nothing to say?

Despite such under-representation of the topic both on Rowe's part and on the part of his critics, this paper argues that not only does 'space' play a very

¹ Colin Rowe, 'The Present Urban Predicament', lecture delivered at The Royal Institution, London in 1979, in: Alexander Caragone (ed.), *As I was saying. Recollections and Miscellaneous Essays*, Cambridge, Mass. and London: MIT Press, 1996, Vol. 3, 165–220, here 219.

important role in his writings, but also that Colin Rowe is in fact one of the few post-war historians to have conveyed differentiated spatial analyses of modern architecture. It is argued that their success lies in the fact that Rowe showed no interest in the notion of 'pure space' – as Nikolaus Pevsner might have – but that he understood architectural space as relevant only when 'contaminated' with ambiguity and active character: Rowe categorizes modernist space in terms of oppositions such as flatness versus depth and horizontal versus vertical, as well as the overlap of conflicting scales or whole systems, while infusing space with the notion of movement.² Rowe also belongs to the small number of post-war historians who introduced the analysis of modernist spaces to an English speaking audience, having dealt with the subject in his *pièce de jeunesse* of 1947, 'The Mathematics of the Ideal Villa'. Thus, he should have included his own writings in the introductory quote. It is suggested that 'space' plays the most important minor part in his writings. This essay investigates how the above categories affect Rowe's readings of and writings on space and where their intellectual sources might be located; further it suggests that it is through the marriage of aspects of composition with Rowe's intense interest in perception, that space becomes either the carrier or the 'other central item' that is used to transport his arguments.

The role of architectural space in Rowe's essays has not been separately addressed by scholars reviewing his writings, either. Out of Mauro Marzo's 2010 volume *L'Architettura come testo e la figura di Colin Rowe*, a collection of essays on Rowe as summary of a conference held in Venice in 2008, particularly Katia Mazzucco, Francesco Benelli and Sébastien Marot establish the historiographic background of Rowe's education in art history as provided by Rudolf Wittkower in London.³ Historian Anthony Vidler has, in his *Histories of the Immediate Present*, recently described Rowe's approach to historiography as 'Mannerist Modernism', devoting a full chapter on Colin Rowe.⁴ Vidler lucidly points out the significance of Rowe's 'Mannerism and Modern Architecture' of 1950, stressing how much Rowe was inspired by Michelangelo's architectural juxtapositions and clashes, and how he applied them to his reading of, for example, Le Corbusier's architecture. Thus,

² This paper was made possible by a travel grant by Unitec Institute of Technology in Auckland, New Zealand. The author was able to visit the Rowe library in Austin/Texas in 2010 which not only holds Rowe's books but additionally an assembly of Rowe's documents – fragments of published and unpublished writings. The author gratefully acknowledges the opportunity to present preliminary versions of this paper both at the *Journal of Art Historiography* Colloquium 'Constructing the Discipline' held in Glasgow in 2010, and at the Collins-Kaufmann-Forum at the Columbia-University in New York. He expresses thanks to Katia Mazzucco for her comments, and to Mary McLeod and Barry Bergdoll for their joint invitation and ensuing discussions. Further particular thanks go to Francesco Benelli and Francesco Passanti for their assessments and advice.

³ These are: Katia Mazzucco, 'L'incontro di Colin Rowe con Rudolf Wittkower e un'immagine del cosiddetto "metodo warburghiano"'; Francesco Benelli, 'Rudolf Wittkower e Colin Rowe: continuità e frattura' and Sébastien Marot, 'Extrapolating Transparency', in: Mauro Marzo (ed.), *L'architettura come testo e la figura di Colin Rowe*, Venezia: Università Iuav di Venezia and Marsilio, 2010.

⁴ Anthony Vidler, *Histories of the Immediate Present. Inventing Architectural Modernism*, Cambridge, Mass./London: MIT Press, 2008, chapter 'Mannerist Modernism: Colin Rowe', 61-106.

Vidler suggests that Rowe's central *modus operandi* was that of a 'Mannerist Modernism': his art of producing unexpected juxtapositions and of finding architecturally ambiguous situations is indeed central to Rowe's writings and possibly to his interest in architecture overall. Vidler, however, does not discuss Rowe's spatial analyses. Werner Oechslin has repeatedly pointed at the significance of Rowe's writings, not the least in his introduction to the German version of Peter Eisenman's PhD thesis, where he locates Rowe's approach to the analysis of formal principles within the context of Rowe's studies with Wittkower.⁵ Moreover, in the introduction of *Transparenz*, the German version of Rowe's and Robert Slutzky's examination of phenomenal transparency, Oechslin traces the origins of this article in the Texas-years of Rowe, Slutzky and Swiss architect Bernhard Hoesli.⁶ But as much as analysis of formal principles is discussed, Oechslin does not approach the spatial implications of such analysis. Alexander Caragonne ambitiously reconstructed the 'Texas Rangers' years and gave a historiographically significant account of the work of the group of architects and historians at work in Austin/Texas in the early 1950s.⁷

Rowe's analyses of urban space, particularly in *Collage City*, and their huge implications for urban planning from the 1970s onwards, do not form part of this enquiry. Rather, and in order to stay concise, this essay predominantly draws on *The Mathematics of the Ideal Villa* – Rowe's publication of 1976 which includes essays dating from 1947 to 1959, augmented by archival material from Rowe's estate. Of the essays in this volume, at least six argue partially through the means of analyzing space: 'The Mathematics of the Ideal Villa', 'Transparency: Literal and Phenomenal', 'Chicago Frame', 'Neo-"Classicism" and Modern Architecture I/II' and 'La Tourette'. Of these, particularly 'Mathematics', 'Transparency' and 'Neo-"Classicism" I/II' are called on for closer investigation.

Against the notion of pure space

'Space' was not the primary topic of Rowe's essays. This is visible even through their titles which never contain the word 'space'. Even more, he seems to be sceptical towards the notion which theorists of modern architecture brought forward: that architecture was first and foremost about space, a position which would have brought together unlikely allies such as August Schmarsow and Bruno Zevi. It seems that Rowe fought August Schmarsow's notion that architecture was

⁵ Werner Oechslin, "'Out of History"? Peter Eisenman's "Formal Basis of Modern Architecture"', in: Peter Eisenman, *Die formale Grundlegung der modernen Architektur*, Zurich: gta, 2005, 12–61.

⁶ Werner Oechslin, 'Transparenz: die Suche nach einer verlässlichen Entwurfsmethode nach den Prinzipien der modernen Architektur', in: Colin Rowe and Robert Slutzky, *Transparenz*, Zurich: gta, 1997 (1968), 9–20.

⁷ Alexander Caragonne, *The Texas Rangers. Notes from an Architectural Underground*, London and Cambridge, Mass.: MIT Press, 1995.

primarily 'the creatress of space'.⁸ In an unpublished – and unfortunately undated – fragment of a typescript that might have been entitled 'The nature of architecture'⁹, Rowe shows a distinct scepticism in relation to the idea of space:

Mr Bruno Zevi, following a well established tradition, has recently suggested that the essential distinguishing quality of architecture is its possession of interior space; but while this is a useful assumption in some investigations [...], the presence or absence of internal void can scarcely assist any attempt to distinguish architecture from building [...].¹⁰

In showing himself discontent with the assumption that 'interior space' as such would be the 'essential distinguishing quality of architecture', Rowe suggests that a definition in these terms did not suffice to identify the (aesthetic) characteristics of architecture; adding that architecture could be understood as an aspect of building as much as literature was an aspect of speech. Nikolaus Pevsner gets a similarly sceptical mention from Rowe. On the final page of his *Outline of European Architecture*, Pevsner summarizes the 'bareness' of modern architecture, explaining it as a complete reinvention of architecture in terms of function and form. Further in the typescript fragment, Rowe quotes Pevsner's crucial phrase: 'In architecture, sheer proportion at last took its legitimate place again. No mouldings, no frills were permitted to detract one's attention from true architectural values: the relation of wall to window, solid to void, volume to space, block to block.'¹¹ Rowe's comments are rather dismissive, even irritated: 'A distinctly platonic entity, a 'true' architectural value' [sic] is preconceived, and this true value is further implied to reside almost exclusively in 'sheer proportion' and elementary geometrical abstraction, while 'moldings' or 'frills' are reduced to the level of irrelevance.'¹²

While Rowe's scepticism is not limited to the topic of space, this remark does indicate a critical distance on his side from Pevsner's or Zevi's notion of pure space. The irritation may indeed lie in the idea of 'purity' – something that Rowe might equate with 'emptiness', as for example his criticism of Superstudio's projects demonstrates.¹³ Indeed, if there is one central problem with modernism for Rowe, it must be the idea of purity. Purity as a notion never held much attraction for Rowe, rather the reverse would be true: irritation (the empty panel in an early modern house such as the Villa Schwob), collision (as discussed in *Collage City*), ambiguity (in many instances, not the least in 'Transparency'), are central nodes of interest or fascination for him.

⁸ Schmarsow spoke of 'Architektur als Raumgestalterin': August Schmarsow, *Das Wesen der architektonischen Schöpfung*, Leipzig: Hiersemann, 1894.

⁹ Notes in the margins by Rowe suggest this title.

¹⁰ Fragmented typescript, 32b, Colin Rowe library, Charles-Moore Foundation, Austin/Texas.

¹¹ Nikolaus Pevsner, *An Outline of European Architecture*, London: John Murray 1948 (1943), 215.

¹² Fragmented typescript, n. pag., Colin Rowe library, Charles-Moore Foundation, Austin/Texas.

¹³ Colin Rowe and Fred Koetter, *Collage City*, Cambridge, Mass.: MIT Press, 1978, 42.

Composition? Ordinance

If, on the one hand, the notion of pure space is met with scepticism, but space as an aspect of architecture might indeed occupy a central minor role in Rowe's work, what aspects of aesthetic analysis and criticism does it need to be combined with in order to become more acceptable? In 1956, two years after having written 'Character and Composition' (the essay was only published in 1974), one obvious hint comes from an unpublished letter by Rowe to Louis Kahn, in which Rowe referred to his conversation with Kahn of a few weeks earlier about their opposed interests in growth and composition:

And I took the side of COMPOSITION and then had great difficulty in explainin[g] what I meant by it. You deplored COMPOSITION because it appeared to be no more than a manipulation of forms for the sake of effect. You wanted to GROW a building, and I, I think, suggested that I wanted to COMPOSE it. Or at least I was very emphatic about the PARTI. I still am; but I do wish that I had had the time to explain myself more completely, and had been able to indicate that the composition of which I was speaking was the result of a process of dialectic, and not of an irrelevant fantasy or purely arbitrary choice.¹⁴

Rowe adds what he understood composition to be: 'I don't like the word. I prefer formal structure, or organisation, or perhaps anything ORDINANCE which implies to me accepting of irreducible facts and the working out of their logical consequences.'¹⁵ One wishes to know the end of this conversation, but even from this snippet it becomes apparent that while Kahn might have insisted on something like 'letting the building compose itself', Rowe wished to understand composition as entering into an argument with the 'objective data with a life of their own in which one can't intervene' as which he read Kahn's hexagonal or cubic cells.¹⁶ He was searching for the formal structure and for the logical consequences and possibilities that derive from this structure.

It might be appropriate to listen to Rowe's own words on composition in order to determine what he meant by this. But his somewhat cryptic essay 'Character and Composition' that could provide clarification is indeed an oddball in *The Mathematics of the Ideal Villa*. Attempting to historically trace the usage of the terms 'character' and 'composition' in the English language architectural literature, the essay clarifies as much as it obscures. Rowe points out that 'since both words are

¹⁴ Colin Rowe, letter to Louis Kahn of 7 February, 1956, unpublished typescript, Colin Rowe library, Charles-Moore Foundation, Austin/Texas.

¹⁵ Rowe, letter to Kahn of 7 Feb '56.

¹⁶ Rowe, letter to Kahn of 7 Feb '56.

now somewhat suspect to the strictly orthodox, their suspicions do prompt some investigation of a possible relationship and the ideas which this relationship involves.¹⁷ It remains unclear whether Rowe's attempt is to salvage both terms from disappearance or whether the essay should be read as equally critical as supportive. On the one hand, he sarcastically scolds the 1920s modernists for their functionalist rhetoric and the partial irrelevance of their statements – since their works were not as functionalist as they professed them to be – but on the other hand the essay is not a full rehabilitation of the terms character and composition either.

The above mentioned letter dates from the time when Rowe analyzed a project by Louis Kahn for a Jewish Community Center in Trenton, New Jersey. Rowe assesses Kahn's architecture as 'firm and palpable' against the qualities of Mies' architecture as 'delicate and tentative'.¹⁸ He summarizes Kahn's Trenton design as 'emphatically the most complete development to date of themes which were there scarcely allowed to surface; and [...] it seems so far to present the most comprehensive solution to the problems initiated by the anxiety to introduce centralization and/or the vertical stressing of space.'¹⁹ This is of course a direct reference to the compositional principles of the Beaux-Arts – and thus one could wonder about Rowe's own personal preferences – did he not propose to Louis Kahn that he favoured composing a building over 'growing' it? But it has to be clear that Rowe, particularly in the 1950s, while attempting to reformulate the teaching curriculum in Austin/Texas, at a school that had strongly relied on the Beaux-Arts tradition, was trying to establish a sense of architecture as composed structural and spatial entities: 'composition' not as composition in the traditional Beaux-Arts sense, but rather as using a system which underpins the design and which allows to work with or against it, to support or to interrupt it.

Aspects of spatiality

'Mathematics of the Ideal Villa': ambivalent readings of space

In 'The Mathematics of the Ideal Villa' of 1947, Rowe introduces a set of opposites in order to examine the similarities and differences between some of Palladio's and Le Corbusier's villas. With this, Rowe lays the foundation stone for most of his later examinations of spatial aspects in modern architecture.

The topic of illusion and confusion is introduced in the comparison of Le Corbusier's Villa Stein/de Monzie with Palladio's Villa Malcontenta, in saying that 'there is at Garches a permanent tension between the organized and the apparently fortuitous. Conceptually, all is clear; but, sensuously, all is deeply perplexing.'²⁰ At

¹⁷ Colin Rowe, 'Character and Composition', in Colin Rowe, *The Mathematics of the Ideal Villa and Other Essays*, Cambridge, Mass.: MIT Press, 1976, 62.

¹⁸ Colin Rowe, 'Neo-"Classicism" II', in Rowe, *The Mathematics of the Ideal Villa*, 154.

¹⁹ Rowe, 'Neo-"Classicism" II', 154.

²⁰ Colin Rowe, 'The Mathematics of the Ideal Villa', in: Rowe, *The Mathematics of the Ideal Villa*, 12.

this stage, Rowe does not yet have the methodological tools to structurally analyze this confusion; the discovery of phenomenal transparency will assist him in this.

Rowe also establishes the notion of space as implying movement. But it is not the movement of a visitor through space; instead, it is a notion of movement that implies volition on the part of the architecture, in this case the Villa Stein/de Monzie as initiated by its architect:

That is, by gouging out a large volume of the block as terrace and roof garden, he introduces a contrary impulse of energy; and by opposing an explosive movement with an implosive one, by introducing inversive gestures alongside expansive ones, he again makes simultaneous use of conflicting strategies.²¹

An important dichotomy that Rowe establishes in 'Mathematics' is the relative flexibility of the plan in Le Corbusier's Villa Stein/de Monzie in combination with rigidity in section versus Palladio's limited possibilities in plan but freedom in section: Rowe relates such choices of freedom, based on the structural system used, directly to the question of centrality and 'peripheral' quality of a plan, establishing that in the Villa Stein/de Monzie, 'the necessary equidistance between floor and ceiling conveys an equal importance to all parts of the volume in between; and thus the development of absolute focus becomes an arbitrary, if not impossible, proceeding.'²² He further points out that Le Corbusier 'accepts the principle of the horizontal extension; thus, at Garches central focus is consistently broken up, concentration at any one point is disintegrated, and the dismembered fragments of the center become a peripheral dispersion of incident, a serial installation of interest around the extremities of the plan.'²³ This establishes a framework Rowe was able to pick up some ten years later, in his 'Neo-"Classicism"' essays, when analyzing modernist notions of space in terms of what he called 'International Style space'.

'Neo-"Classicism"': Centralized versus peripheral

The decentralization of the floor plan and its development into a pinwheel or related, 'peripheral' systems is one of the central topics by which modern architecture is defined for Colin Rowe. This notion is tested and argued repeatedly in his essays. Since this possibly represented the main achievement of modernism to him, Rowe's irritation is understandable in his realization of the extent to which post-war architecture was apparently reverting to the traditional, superseded notion of a centralized plan. Such is the motivation of the two essays 'Neo-"Classicism" and Modern Architecture' I and II, written in 1956 and -57. Rowe examines examples of post-war American architecture that appear more Palladian to him than

²¹ Rowe, 'The Mathematics of the Ideal Villa', 12.

²² Rowe, 'The Mathematics of the Ideal Villa', 12.

²³ Rowe, 'The Mathematics of the Ideal Villa', 12.

truly modernist, as they seem to have reintroduced the 'cult of the axis'.²⁴ These are Louis Kahn's project for a Jewish Community Centre in Trenton of 1956 and houses by Marcel Breuer or Philip Johnson, but also by less well-known practices as John Johansen or Bolton and Barnstone, all of the decade between 1947 and -56. In the first of these articles, Rowe predominantly examines the underlying theory, whereas in the second essay he investigates the formal appearances of modernist space. Wondering about the theoretical implications of a reappearance of symmetrical layout that could be termed 'neo-Palladian', Rowe formulates the problem as follows: 'Either we are scarcely able to accept these buildings as examples of modern architecture; or we are scarcely able to accept modern architecture's theoretical professions.'²⁵ It must be clear that Rowe is prepared to accept neither of his own propositions, calling the one 'absurd' and the other 'distressing'. Admitting that modernist theory is 'something less than a consistent doctrine and something more than a body of principles'²⁶, and thus prone to some contradictions in itself, he undertakes an analysis of what he terms 'International Style space', in order to be able to examine the neo-Palladian design characteristics against the modernist forms they deviated from:

[S]ince it is implied that, while the elements of this new spatial order may all have been present for many years, their effective synthesis was an achievement of the twenties, it will be useful to clarify certain precepts of what will here be called (for the want of any better term) International Style space.²⁷

For the purpose of his investigation, he defines International Style space particularly as the space of Le Corbusier's Villa Stein/de Monzie in Garches of 1928, Mies van der Rohe's house for the Berlin Building Exhibition of 1931 and of Le Corbusier's foyer for the Centrosoyus Building, Moscow, which he reads as 'manifestations of the spatial revolution of the twenties'.²⁸ To this list, Mies van der Rohe's Barcelona Pavilion could easily be added and its space described as follows:

In the Barcelona pavilion the walls are screens but they do not define a fixed volume. The volume beneath the post-supported slab roof is in a sense bounded by imaginary planes. The walls are independent screens set up within this total volume, having each a separate existence and creating

²⁴ Colin Rowe, 'Neo-"Classicism" and Modern Architecture I', in: Rowe, *The Mathematics of the Ideal Villa*, 121.

²⁵ Rowe, 'Neo-"Classicism" I', 121.

²⁶ Rowe, 'Neo-"Classicism" I', 123.

²⁷ Rowe, 'Neo-"Classicism" II', 141.

²⁸ Rowe, 'Neo-"Classicism" II', 141.

subordinate volumes. The design is unified by the slab roof on its regular supports, not by the usual continuous screen walls.²⁹

The plan can be composed almost entirely in terms of the needs it must provide for, with only minimal concessions to the inescapable needs of sound construction.³⁰

But these lines are not from Rowe. Instead, they are taken from Henry Russell Hitchcock and Philip Johnson's 1932 publication in which they coined the term 'The International Style'. Surprisingly, in their above sketch of the Barcelona pavilion they show a disregard for any discussion of modernist plan and space from an aesthetic and perceptual point of view, despite their mention of space as 'volumes'. Their analysis of this space, as witnessed in Mies van der Rohe's Barcelona pavilion, is neither very haptic nor precise, and their analysis of the plan is almost functionalist, despite their claim to define a new style.

Rowe is more sophisticated in his analysis of 'International Style space'. He firstly summarizes the underlying principle of the new kind of space, stating that 'it was demanded that columns be disengaged from walls and be left free to rise through the open space of the building. [...] Detached from the liberated columns, the walls were now to become a series of freely disposed screens.'³¹ And in variation of what he had outlined in his 1947 comparison of Palladio with Le Corbusier, Rowe emphasizes that the International Style Space 'was characterized by a tendency to emphasize a peripheric rather than a central expression of the building.'³² Referring to Theo van Doesburg's spatial drawings, he adds that 'the center was to be gradually abolished and the composition was to be developed in the opposite direction. Or to paraphrase Gropius, the new demand led to the dead symmetry of similar parts being transmuted into an asymmetrical but equal balance.'³³ Exploring the specific relationships between column, roof and wall, Rowe notes the necessary abolition of visible beams in this system and thus highlights a central aspect that led to the perception of a new kind of space:

Further it should be noticed that, on the whole, International Style space was a system which tended to prohibit any display of beams; and, rather than the upper surface of the roof slab being flat, it seems even more certainly to have required that the under surfaces of the roofs and floors should present uninterrupted planes.³⁴

²⁹ Henry-Russell Hitchcock and Philip Johnson, *The International Style*, New York and London: Norton, 1966 (augmented edition of *The International Style: Architecture since 1922*, New York and London: Norton, 1932), 48.

³⁰ Hitchcock and Johnson, *The International Style*, 41.

³¹ Rowe, 'Neo-"Classicism" II', 141.

³² Rowe, 'Neo-"Classicism" II', 143.

³³ Rowe, 'Neo-"Classicism" II', 143.

³⁴ Rowe, 'Neo-"Classicism" II', 143.

Taking the intended freedom of the plan as a starting point, he argues that column and underside of the roof had to remain separate in order not to lead to 'a compartmentalization of space and thus to a violation of something of the freedom of the plan.'³⁵ He further asserts that

the appearance of beams could only tend to prescribe fixed positions for the partitions; and, since these fixed positions would be in line with the columns, it was therefore essential, if the independence of the columns and partitions was to be asserted with any eloquence, that the underside of the slab should be expressed as an uninterrupted horizontal surface.³⁶

Without explicitly naming it so, Rowe thus describes the character of the 'International Style Space' as a partly a-tectonic, sculptural space whose exponents had to go through considerable efforts in order to arrive at a symbolic highlighting of the new spatial achievements. Tectonic expression of the post- and lintel system would have led to a structured, interrupted underside of the ceiling – and would have meant spatial expression of structural bays or cells. Rowe further clarifies that '[l]ike all other spatial systems that of the International Style resulted from a reappraisal of the functions attributed to the column, the wall, and the roof.'³⁷ Therefore, it is only logical that he should investigate their new roles in detail. But as innocent as his remark 'like all other spatial systems' may seem, it indicates that Rowe thereby positions the 'International Style Space' within the history of architectural theory in which the role of the column in relation to the wall has been discussed for centuries. Abbé Laugier, whose *Essai sur l'architecture* might have influenced Le Corbusier in the development of his *Maison Dom-Ino* principle, for example had demanded that 'the column must be free-standing so that its origin and purpose are expressed in a natural way'³⁸, and had claimed that 'the use of pilasters is one of the great abuses that have found their way into architecture.'³⁹ Thus with his spatial-structural analysis of the International Style space, Rowe implicitly refers to the century-old debate of the role of the column in architecture.

Yet, Rowe does not quite go as far in this essay as assessing the *symbolic* role of this detachment of column and wall; whereas, in his 'Chicago Frame' essay of 1956, he had established the reasoning behind Mies van der Rohe's decisions as to symbolize the skyscraper's role for modernization.⁴⁰ In his pre-war buildings such as the Barcelona Pavilion, Mies used the columns to express a sense of a higher

³⁵ Rowe, 'Neo-"Classicism" II', 143.

³⁶ Rowe, 'Neo-"Classicism" II', 143.

³⁷ Rowe, 'Neo-"Classicism" II', 141.

³⁸ Marc-Antoine Laugier, *An Essay on Architecture*. Translated and with an introduction by Wolfgang and Anni Herrmann, Los Angeles: Hennessey and Ingalls, 1977 (*Essai sur l'architecture*, 1753), 14.

³⁹ Laugier, *Essay on Architecture*, 17.

⁴⁰ Colin Rowe, 'Chicago Frame', in: Rowe, *The Mathematics of the Ideal Villa*, 105–6.

order permeating the building. Instead of pointing this out, Rowe simply identifies the column – particularly in Mies' architecture – to be a 'caesura in a general space'⁴¹ that does not spatially express the structural bay or of structural cells.

In 'Neo-"Classicism" II', Rowe further points at the different priorities of Mies' and Le Corbusier's spatiality. He differentiates between Mies 'who provided the most literally perfect transcription of this delicate and complex system of logic' and Le Corbusier who did not seem to be concerned with so much consistency, calling his distinctions between support and enclosure 'often perfunctory'.⁴² He points at the horizontality of Mies' spaces, stating that his 'vertical planes trail out suggestively, 'peripherally', into the landscape,'⁴³ whereas Le Corbusier had not avoided the conflict between the inherent horizontality of the structural system and the closed verticality of his buildings. Rowe suggests that in the Villa Stein/de Monzie in Garches, Le Corbusier condensed 'all the long walls which contribute to a rotary, pinwheeling moment to Mies' buildings' into the perimeter of a single block where they 'acquire an explosive, emphatic, enriched quality' very different from Mies' spaces.⁴⁴

Rowe continues with a lucid analysis of Mies' use of columns as it changed from Berlin to Chicago, but it is here where this essay should be left. It will have become obvious by now that Rowe manages to 'talk about space without talking about space', that he does not attempt to define the qualities of the empty volume that space is, but that he examines it through the analysis of the space-defining elements, as walls, floor, ceiling and columns. He approaches spatiality through the elements that intentionally order, rhythmicize and structure space.

In reassessing Hitchcock and Johnson's brief description of the Barcelona Pavilion, one will find that they do attempt to name space, in saying that 'the walls are screens but they do not define a fixed volume' and that the 'walls are independent screens set up within this total volume, having each a separate existence and creating subordinate volumes'. They speak about a hierarchy of perceived volumes, whereas Rowe tends to define the space through the tangible elements, and in this is more precise than Hitchcock and Johnson.

'Transparency': flatness versus depth

In their article 'Transparency: Literal and Phenomenal' of 1955–56, Colin Rowe and Robert Slutzky interpret Le Corbusier's Villa Stein/de Monzie in Garches as phenomenally transparent.⁴⁵ Phenomenal transparency constitutes another aspect of Rowe's interpretation of space through aspects of composition (as contaminated as

⁴¹ Rowe, 'Neo-"Classicism" II', 143.

⁴² Rowe, 'Neo-"Classicism" II', 144.

⁴³ Rowe, 'Neo-"Classicism" II', 144.

⁴⁴ Rowe, 'Neo-"Classicism" II', 144.

⁴⁵ Colin Rowe and Robert Slutzky: 'Transparency: Literal and Phenomenal', in: Rowe, *The Mathematics of the Ideal Villa*, 1976.

the term 'composition' is in the context of modern architecture). Rowe's earlier investigation of façades has taken a decisive leap forward. Whilst he, in 'Mannerism and Modern Architecture' of 1950, juxtaposed the provokingly empty panel on the street façade of Le Corbusier's Villa Schwob with comparable façades by Andrea Palladio and Federico Zuccheri, both of the 1570s, he had – literally – not gone beyond the façade itself. But with 'Transparency', a new complex investigation of notions of flatness versus spatial depth is developed, and these prove to be a rich source for further investigations, so rich that Bernhard Hoesli, Rowe's and Slutzky's 'comrade in battle' in Austin/Texas, took this principle back to Switzerland in order to turn it into a design method practiced at the ETH in Zurich.

Rowe and Slutzky's instrument of analysis is predominantly based on Gyorgy Kepes, who in his *Language of Vision* of 1944 had established the notion of an alternative reading of transparency to the everyday sense of the word.⁴⁶ It is surprising not to see Rowe and Slutzky mention Henry-Daniel Kahnweiler, whose *Der Weg zum Kubismus* of 1920 was available, since 1949, in English as *The Rise of Cubism*.⁴⁷ Kahnweiler, Picasso's art dealer, had analyzed the implications of the Cubist innovations as early as 1915:

This language has given painting an unprecedented freedom. It is no longer bound to the more or less verisimilar optic image which describes the object from a single viewpoint. It can, in order to give a thorough representation of the object's primary characteristics, depict them as stereometric drawing on the plane, or, through several representations of the same object, can provide an analytical study of that object which the spectator then fuses into one again in his mind. The representation does not necessarily have to be in the closed manner of a stereometric drawing; colored planes, through their direction and relative position, can bring together the formal scheme without uniting in closed forms.⁴⁸

This freedom of bringing together elements 'without uniting in closed forms' seems to be one of the fundamental preconditions of the idea of phenomenal transparency, and it has to be assumed that either Rowe or Slutzky knew Kahnweiler's remarks on Cubism. Instead, they quote Kepes in length, who established:

If one sees two or more figures partly overlapping one another, and each of them claims for itself the common overlapped part, then one is confronted with a contradiction of spatial dimensions. To resolve this contradiction, one must assume the presence of a new optical quality. The figures are endowed with transparency: that is, they are able to interpenetrate without an optical

⁴⁶ Gyorgy Kepes, *Language of Vision*, Chicago: P. Theobald, 1944.

⁴⁷ Daniel-Henry Kahnweiler, *The Rise of Cubism*, New York: Wittenborn Schultz, 1949 (*Der Weg zum Kubismus*, Munich: Delphin-Verlag, 1920; written 1915).

⁴⁸ Kahnweiler, *Rise of Cubism*, 12.

destruction of each other. Transparency however implies more than an optical characteristic; it implies a broader spatial order. Transparency means a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity. The position of the transparent figures has equivocal meaning as one sees each figure now as the closer, now as the further one.⁴⁹

In order to illustrate this understanding of an 'interpenetration without optical destruction', Kepes uses Picasso's portrait of Kahnweiler, Amedée Ozenfant's 'Purist Still Life', a photograph of a house by GF Keck and a 'Space Construction 1930' by Laszlo Moholy-Nagy. But, according to Rowe and Slutzky, Kepes is unable to fully understand his own interpretation in translating it into architecture. They prepare for their intellectual blow by almost maliciously saying that Kepes

appears to consider that the architectural analogue of these [Braque, Gris and Léger] must be found in the physical qualities of glass and plastics, that the equivalent of carefully calculated Cubist and post-Cubist compositions will be discovered in the haphazard superimpositions provided by the accidental reflections of light playing upon a translucent or polished surface.⁵⁰

And their *coup* is to pull, out of their hat, like magicians, Le Corbusier's Villa Stein/de Monzie in Garches as being phenomenally transparent, while this building shows almost no elements of the literal transparency that for example Gropius' Bauhaus in Dessau does. This could be understood as a serious intellectual short circuit: it is not surprising to be able to analyze someone's work according to his own rules – because that is, simply said, what Rowe and Slutzky are doing: identifying that Le Corbusier's architecture is achieving what he set out, with Ozenfant, to do in painting. It seems therefore that their real trick lies in leaving out not only Kahnweiler's *The Rise of Cubism*, but much more importantly, the link between Cubism and modernist architecture: Jeanneret's and Ozenfant's technique of Purism, and particularly Le Corbusier's own paintings. But then, mention of this might well have diminished the impact of their carefully orchestrated essay.

Despite this trick, it has to be said that their observations mark a real discovery which helps Rowe to specify the elements of the 'conflicting strategies' that he had found in Le Corbusier's Villa Stein/de Monzie and described in 'Mathematics'. Thus Rowe establishes the foundation of his later interpretations of spatial ambivalence. As Rowe and Slutzky describe the Villa Stein/De Monzie,

throughout this house, there is a contradiction of spatial dimensions which Kepes recognizes as characteristic of transparency. There is a continuous

⁴⁹ Kepes, *Language of Vision*, 77.

⁵⁰ Rowe and Slutzky, 'Transparency: Literal and Phenomenal', 166.

dialectic between fact and implication. The reality of deep space is constantly opposed to the inference of shallow; and, by means of the resultant tension, reading after reading is enforced. The five layers of space which, vertically, divide the building's volume and the four layers which cut it horizontally will all, from time to time, claim attention; and this gridding of space will then result in continuous fluctuation of interpretation.⁵¹

This topic of depth versus flatness is a recurring element in Rowe's writings, perhaps summed up by an undated set of four manuscript pages, in which he lists four 'postulations', the first of which is: 'A slightly bizarre but tenable proposition: that, while painting is always the simulation of three dimensions in the reality of two – more often than not – great architecture is the simulation of two dimensions in the reality of three.'⁵²

Possible sources of Rowe's 'space-talk'

What has become clear so far is that Rowe does investigate notions of spatiality in modern architecture but that these investigations are always coupled with analyses of either structural systems or of compositional or perceptual systems. Rarely, however, does he discuss the sources of his ideas, since he enjoys remaining mystical or nebulous, as he confesses in an (undated and unpublished) manuscript for a lecture on the Villa Schwob: 'Personally I like to pull things out of the hat as a surprise.'⁵³ Thus the footnote to his essay 'The Present Urban Predicament' of 1979, the introductory quote, constitutes a useful exception to the rule. In sketching the dissemination of 'space-talk' in Anglo-Saxon architectural literature, Rowe firstly names Sigfried Giedion, stating that it 'seems almost certain that space-talk made its decisive entry into the critical vocabulary of American and English architects with the publication of Sigfried Giedion's *Space, Time and Architecture* in 1941, and Nikolaus Pevsner's *An Outline of European Architecture* in 1943'.⁵⁴ Giedion's certainly is a book of central importance, for Rowe as much as it was for the general audience since Giedion introduced ways of seeing, reading and articulating the spatial characteristics of modern architecture as influenced by Cubist art and De Stijl; he introduced the concept of space-time to the wider public.⁵⁵ It may, however, surprise that Rowe should mention Nikolaus Pevsner's *An Outline of European Architecture* of 1943 as an equally significant work in this context, since although Pevsner referred to earlier buildings in terms of their spatial achievements – such as,

⁵¹ Rowe and Slutzky, 'Transparency: Literal and Phenomenal', 170.

⁵² Manuscript of four pages, Colin Rowe library, Charles-Moore Foundation, Austin/Texas.

⁵³ Manuscript on the Villa Schwob, Colin Rowe library, Charles-Moore Foundation, Austin/Texas, 6.

⁵⁴ Rowe, 'The Present Urban Predicament', footnote 18, 219.

⁵⁵ Sigfried Giedion, *Space, Time and Architecture*, London: Geoffrey Cumberledge and Oxford: Oxford University Press, 1954 (1941).

for example, Balthasar Neumann's *Vierzehnheiligen* (1743–72)⁵⁶ – even a superficial analysis of his descriptions of modernist buildings in this very book reveals that he neither properly analyzed nor really discussed their spatial formations.⁵⁷

In the introductory quote, Rowe introduces possible exceptions to the small list of three architects or writers that already had investigated the idea of architectural space in English before the 1940s. These are Bernard Berenson and Geoffrey Scott and, maybe, Rowe adds with caution, Frank Lloyd Wright.⁵⁸ In addition, Rowe more or less directly accuses Berenson and Scott of having disguised the influence of German language art historians (amongst them August Schmarsow and Adolf von Hildebrand) on their work, since these first discussed space as a phenomenon. Rowe almost casually adds: 'That Anglo-American spatial discourse became trapped by Berenson and Geoffrey Scott who, both of them relating to Vienna, kept something up their sleeves, should not be a great matter of surprise.'⁵⁹ He accuses Scott, 'whose *Architecture of Humanism* still makes no reference to Vienna, no reference (so far as my patience is aware) to Hildebrand, Lipps, Schmarsow.'⁶⁰ Rowe may have been too impatient to remember that Scott indeed mentioned Theodor Lipps in his *Architecture of Humanism*, and that he, Rowe, had himself read and marked important passages from this volume, particularly Scott's following sentence: 'The whole of architecture is, in fact, unconsciously invested by us with human movement and human moods.'⁶¹ Scott further explained: 'So, too, by the same excellent – because unconscious – testimony of speech, arches "spring", vistas "stretch", domes "swell", Greek temples are "calm", and baroque facades "restless". Here, then, is a principle complementary to the one just stated. We transcribe architecture into terms of ourselves.'⁶² These lines by Scott point at a crucial intellectual source that is Theodor Lipps and the idea of *Einfühlung*.

Wöfflin via Giedion?

A further exception to not mentioning sources can be found in the 1973 addendum to 'The Mathematics of the Ideal Villa', where Rowe calls his approach to the

⁵⁶ Nikolaus Pevsner, *An Outline of European Architecture*, London : Thames and Hudson, 2009 (1943), 145–6.

⁵⁷ It should also be kept in mind that Rowe and Pevsner cannot have been on too friendly terms, particularly after Rowe had provoked the German émigré writer with his criticism of Gropius' architecture in 'Transparency: Literal and Phenomenal', so that, in turn, Pevsner apparently rejected the publication of the essay, as Werner Oechslin in his Introduction to *Transparenz*, 10.

⁵⁸ Wright indeed needs to be treated with caution here, following Cornelis van de Ven who asserts that Wright only began to describe space and depth in 1928, long after he had worked with it, possibly influenced by the contemporary European writings on this topic. Cf. Cornelis van de Ven, *Space in architecture*, Assen: Van Gorcum, 1987, 236.

⁵⁹ Rowe, 'The Present Urban Predicament', footnote 18, 219.

⁶⁰ Rowe, 'The Present Urban Predicament', footnote 18, 220.

⁶¹ Geoffrey Scott, *The Architecture of Humanism. A Study in the History of Taste*, London: Constable, 1914 (quoted from Rowe's 1924 edition, 213).

⁶² Scott, *The Architecture of Humanism* (in Rowe's 1924 edition), 213.

comparison of Palladio's and Le Corbusier's villas 'Wölfflinian'.⁶³ This makes sense since it is the formal principles that he investigates in this famous piece, even if the comparison between the two 'ideal' villas has less to do with spatial analysis than with the analysis of composition in terms of proportions and rhythm. In Rowe's essays belonging to the volume *The Mathematics of the Ideal Villa*, there is a distinct interest, maybe even infatuation, with Sigfried Giedion's work leading back to the writings of Heinrich Wölfflin. In many of these essays he takes Giedion as the starting point of his own investigations, at times to expand on them, at other times to take them as a basis for contradicting and arguing alternative viewpoints. Anthony Vidler has recently pointed out that in contrast to Giedion who saw baroque and cubist precedents for modern architecture as 'in some post-Hegelian sense, genetic or formative', Rowe would have read such precedents 'as in some ways homologous, structural, and parallel – paradigmatic formal *procedures* allowing for deeper interpenetration of difference and similarity.'⁶⁴

Rowe directly references Wölfflin's method when he describes his own set up of his formal analysis of Palladio's Villa Malcontenta and Le Corbusier's Villa Stein/de Monzie in Garches:

A criticism which begins with approximate configurations and which then proceeds to identify differences, which seeks to establish how the same general motif can be transformed according to the logic (or the compulsion) of specific analytical (or stylistic) strategies, is presumably Wöl[f]flinian in origin; and its limitations should be obvious. It cannot seriously deal with questions of iconography and content.⁶⁵

This critical reflection on his own use of Wölfflin's methods, written 26 years after the publication of the 'Mathematics' essay, is noteworthy as an admission, since in 1956 he had criticized Giedion for exactly this. In *Space, Time and Architecture*, Giedion compares Daniel Burnham's Reliance Building in Chicago (1894) and Mies van der Rohe's project for a glass skyscraper at Friedrichstrasse, Berlin (1921), calling the Reliance Building 'an architectonic anticipation of the future'.⁶⁶ Rowe criticizes Giedion's concern with the similarities of the two buildings since he sees it as a Wölfflinian tendency 'to ignore problems of content (implying that roughly identical forms suppose roughly approximate meaning)'.⁶⁷ This seeming contradiction – on the one hand an acknowledgement of his own use of Wölfflinian methods, on the other hand the rejection of Giedion's use of such techniques – raises the question of to what degree Rowe consciously used elements of Wölfflin's analytical methods despite their methodological problems. Clearly, he was

⁶³ Rowe, 'The Mathematics of the Ideal Villa', 16.

⁶⁴ Vidler, 'Mannerist Modernism', 62–3.

⁶⁵ Rowe, 'The Mathematics of the Ideal Villa', 16.

⁶⁶ Giedion, *Space, Time and Architecture*, 386.

⁶⁷ Colin Rowe, 'Chicago Frame', 105.

convinced of the 'efficacy of an immediate *visual* analysis that was primary to perception and any iconographic or historical framing.'⁶⁸

It should go without saying that, more directly, Rowe adopted his method of analysis in 'The Mathematics of the Ideal Villa' from his supervisor Rudolf Wittkower. Along with his letter to Louis Kahn of 1956, Rowe sent Kahn a copy of *Architectural Principles in the Age of Humanism*, adding that 'I chose the Wittkower book [...] because of the influence it has had upon me'.⁶⁹ Through Wittkower and, indirectly, through Aby Warburg's position, Rowe would have found the basis to brush history against the grain. He may have shocked Wittkower with his comparison of Palladio with Le Corbusier, as he stated in the foreword to the German translation of the *Mathematics* volume.⁷⁰ But somehow, Wittkower should not have been too surprised about this *jeu d'esprit*, as Rowe himself thought it to be; after all, Wittkower had defined three definitive subjects in his teaching at the Warburg Institute: the first consisted of the search for the immutable, eternal rules of architecture that could be deduced from Vitruvius and classical models; the second was that of identifying the creative aspect, independent of rules and canons; and the third that of showing how Michelangelo transformed the classical legacy into his own personal architectural language.⁷¹

One less obvious title should be introduced as possibly having created a resonance with Rowe. Gustav Adolf Platz, *Die Baukunst der neuesten Zeit* of 1927 constitutes one of the very few German language titles in Rowe's library.⁷² This review of contemporary architectural theory and practice contains a chapter entitled 'Die Gesetze der architektonischen Komposition' – the laws of architectural composition. But rather than being a handbook for the correct application of compositional rules as other contemporary sources might have been, Platz discusses compositional aspects such as static versus dynamic form, proportion, symmetry and rhythm. In particular, the underlying proportional scheme of Peter Behrens' design for the Oldenburg exhibition of 1905 is contrasted with Le Corbusier's Villa Schwob in La Chaux-de-Fonds of 1916.⁷³ It seems that Colin Rowe could have arrived at his idea of comparing Palladio with Le Corbusier through precedents like these, in conjunction with his learning from Rudolf Wittkower.

Investigating Bauhaus schemes such as the ones by Farkas Molnar of the early 1920s, Rowe presents them as 'complete illustrations of the Giedionesque

⁶⁸ Vidler, 'Mannerist Modernism', 62–3.

⁶⁹ Rowe, Letter to Kahn of 7 Feb '56. Rudolf Wittkower, *Architectural Principles in the Age of Humanism*, London: Warburg Institute, 1949.

⁷⁰ Colin Rowe, *Die Mathematik der idealen Villa*, Basel: Birkhäuser, 1998, foreword, 8.

⁷¹ Francesco Benelli, 'Rudolf Wittkower e Colin Rowe: continuità e frattura' in Marzo, *L'architettura come testo e la figura*, 236.

⁷² Gustav Adolf Platz, *Die Baukunst der neuesten Zeit*, Berlin: Propyläen-Verlag, 1927.

⁷³ Platz, *Die Baukunst der neuesten Zeit*, 146–7. Platz, of course, discusses Hendrik Petrus Berlage's *Grundlagen und Entwicklung der Architektur*, Berlin: Bard, 1908, a book that Le Corbusier possibly used for the development of his own *tracés régulateurs*.

concept of space-time for which the Bauhaus is justly so famous.⁷⁴ He quotes Giedion in saying that they are 'compositions which "the eye cannot sum up... at one view"; which "it is necessary to go around [...] on all sides, to see... from above as well as from below"'.⁷⁵ To this, Giedion adds in the source text: 'This means new dimensions for the artistic imagination, and unprecedented many-sidedness.'⁷⁶ Building on Giedion, Rowe has distinctively changed the historiography of modern architecture through his search for the unsettling, the enriching, and the collagist aspects of modern architecture. In that sense, he certainly prepared the post-modern understanding of *Complexity and Contradiction in Architecture*, as Robert Venturi titled his book of 1966.⁷⁷ Where other writers might have sought to identify simplicity or a standardization of interpretation, as Hitchcock and Johnson had attempted in their christening of the International Style,⁷⁸ Rowe searched for the complex nature of modern architecture, and he did so in analyzing plan, elevation and spatial organization. Following his analysis of the Bauhaus building, he says:

In this idea of disturbing, rather than providing immediate pleasure for the eye, the element of delight in modern architecture appears chiefly to lie. An intense precision or an exaggerated rusticity of detail is presented within the bounds of a strictly conceived complex of planned obscurity; and a labyrinthine scheme is offered which frustrates the eye by intensifying the visual pleasure of individual episodes, in themselves only to become coherent as the result of a mental act of reconstruction.⁷⁹

The 'frustration of the eye' and 'visual pleasure' become apparent as observational motifs of Rowe's visual analysis. The observer seems to be invested with powers to switch between the observation of the plan and the interior of the building. Giedion, on his part, interpreted the Bauhaus building as follows:

The ground plan lacks all tendency to contract inward upon itself; it expands, on the contrary, and reaches out over the ground. In outline it resembles one of those fireworks called 'pinwheels', with three hooked arms extending from a center. The impression one receives from it is similar to that produced by the glassed staircase in Gropius' exhibition building of 1914: it suggests a movement in space that has been seized and held.⁸⁰

⁷⁴ Colin Rowe, 'Mannerism and Modern Architecture', in: Rowe, *The Mathematics of the Ideal Villa*, 44.

⁷⁵ Rowe, 'Mannerism and Modern Architecture', 44.

⁷⁶ Giedion, *Space, Time and Architecture*, 493.

⁷⁷ Robert Venturi, *Complexity and Contradiction in Architecture*, New York: Museum of Modern Art, 1966.

⁷⁸ Hitchcock and Johnson, *The International Style*.

⁷⁹ Rowe, 'Mannerism and Modern Architecture', 45.

⁸⁰ Giedion, *Space, Time and Architecture*, 493.

Giedion's and Rowe's ways of reading the architecture of the Bauhaus building are very closely related in terms of the metaphors used and in their shifting between analysis and taking the perspective of the observer, as far as the comparison between *Space, Time and Architecture* and 'Mannerism and Modern Architecture' of 1950, is concerned. However in 'Transparency: Literal and Phenomenal', written six years later, Rowe almost completely reverses his admiration for Gropius' achievement, criticizing him for the adherence to 'literal transparency', indirectly distancing himself from Giedion, while celebrating Le Corbusier's technique of creating phenomenal transparency, in the simultaneity of opposing ways of reading architectural figure or space. 'Transparency' is one of the few co-authored essays in Rowe's career and indeed a central one. Maybe a third author should have been mentioned, even if he was not directly part of the writing as such. It seems that architect Bernhard Hoesli was involved in the discovery and interpretation of architectural phenomenal transparency from the start, and that this involvement led to a historiographic complexity that still needs to be disentangled.⁸¹ What is clear so far is that Rowe's perception of space changed and possibly became more complex through his proximity to Slutzky and Hoesli during his Austin years.

The potential intellectual short circuit in 'Transparency' as discussed above needs to be picked up because it points in two directions: Rowe's is the approach of an intellectual eye, and there is a close similarity between Le Corbusier and Rowe, in terms of style and content, and, to take this further, it could be claimed, that there would be no Rowe without Le Corbusier.⁸² The various instances discussed all indicate that his writing is not concerned with space as a void, perceived by the spectator standing inside – such as one could imagine experiencing the Pantheon – but that he appreciates the artistic and intelligent manipulation of forms in order to arrive at double readings. These double readings can take place as reading of flatness versus depth on the façade of the Ca d'Oro or the Villa Schwob, or they appear between façade and volumetric development, as in the Villa Stein/de Monzie.

They also happen in urbanism, as Rowe's interpretation of the Manica Lunga on the Quirinale in Rome demonstrates. The reader may allow the slight digression into urban questions: Rowe's examination of the Manica Lunga has always been overshadowed by its much better known brother idea, the comparison of the Uffizi with the Unité. But where the Uffizi-Unité pairing is a very obvious dichotomy of figure and ground, Rowe's attention to the Quirinale reveals his interest in spatial complexity: in order to demonstrate how the shortcomings of Le Corbusier's Unité – Rowe speaks of 'its own emphatic isolation' – could be addressed in terms of urban space, he decides to more closely address the Palazzo del Quirinale:

⁸¹ This will have to remain the subject of another paper which is currently under development.

⁸² As indicated in Christoph Schnoor, 'Drawing with words: Colin Rowe's imaginative historiography', in: Michael Chapman and Michael Ostwald (eds.), *Imagining. Proceedings of the 27th International Conference of the Society of Architectural Historians Australia and New Zealand (SAHANZ)*, Newcastle, Australia, 2010, 359–64.

In its extension, the improbably attenuated Manica Lunga (which might be several Unités put end to end), the Quirinale carries within its general format all the possibilities of positive twentieth century living standards (access, light, air, aspect, prospect, etc.); but, while the Unité continues to enforce its isolation and object quality, the Quirinale extension acts in quite a different way.⁸³

That is, as Rowe explains: 'Thus, with respect to the street on the one side and its gardens on the other, the Manica Lunga acts as both space occupier and space definer, as positive figure and passive ground, permitting both street and garden to exert their distinct and independent personalities.'⁸⁴

In an unpublished sketch for a paper on the Villa Schwob as found in his personal papers in Austin/Texas, Rowe returns to his fascination with surface and depth, as explored in 'Transparency: Literal and Phenomenal'. In comparing the Ca d'Oro in Venice to the façade of the Villa Schwob, he lucidly points out the architect's sophisticated manipulation of surface and the idea of spatial depth:

But it is in Venice where a third dimension can only be hinted at, where almost nothing is free standing and where one surface has to do for all, that what I am talking about seems to climax. For in Venice we are confronted with perforations which present themselves as surface and surfaces which announce themselves as depth. [...] At the Ca d'Oro the ambiguities of surface are very apparent; but, in the end, the ambiguities of depth are not any less assertive. Real depth is presented in the loggie and is then advertised as surface treachery. Real surface is presented in the flanking areas and then systematically dissimulated.⁸⁵

This passage might almost be taken as a direct continuation to Wölfflin's chapter on 'Plane and Recession' in his *Principles of Art History*. Wölfflin had developed the language and categories that Rowe was able to use, the comparisons between the planar and the development of depth in façade and interior.⁸⁶ It is only one example of Rowe's fascination with the dialectics between flatness and depth that are revealed within a façade, i.e. the interplay between surface and spatial depth. It seems as if, using elements of Wölfflin's language and intellectual categories, he was testing the possibilities of Le Corbusier's and Ozenfant's purist paintings over and over again. And it seems to be this space of illusion that he is indeed interested in, rather than in the idea of space as an articulated void.

⁸³ Rowe and Koetter, *Collage City*, 79.

⁸⁴ Rowe and Koetter, *Collage City*, 79.

⁸⁵ Manuscript on the Villa Schwob, Colin Rowe library, Charles-Moore Foundation, Austin/Texas.

⁸⁶ Heinrich Wölfflin, *Principles of Art History. The Problem of the Development of Style in Later Art*, New York: Dover, 1950 (*Kunstgeschichtliche Grundbegriffe*, 1915), 115ff.

One last element needs to be brought in, only hinted at so far: One of the most important means of interpreting space for Rowe seems to be the idea of movement implied in buildings. While in many instances he examines space by analyzing object-qualities and the object's compositional properties, in his analysis of 'International Style Space' he gets much closer to space as a phenomenon. Having summarily stated that 'the charm of Mies's spaces at this date lay in their peculiarly limpid quality, in their lyrical sensitiveness to the most expensive materials', he compares Mies' 'vertical planes [that] trail out suggestively, 'peripherally', into the landscape', as already quoted above, with Le Corbusier's solutions that bring together an outward movement with inward containment:

[Le Corbusier] had always been predisposed to internalize the peripheric incident – as, for instance, at Garches, where all the long walls which contribute a rotary, pinwheeling movement to Mies's buildings are condensed into the compass of a single block within which they acquire an explosive, emphatic, enriched quality, completely distinguished from the relaxed Miesian serenity.⁸⁷

Whereas above the emphasis lay in the comparison of the horizontality of Mies' architecture versus Le Corbusier's verticality, charged with tension, here it needs to be observed that verbs like 'trail', and adjectives as 'peripheral', 'rotary', 'pinwheeling', even more so 'explosive' as opposed to 'relaxed' are used to express not only movement, but also to imply forces perceived behind the movement: tension and pressure; an organic energy. These qualifications remarkably activate or energize the built elements and illustrate what both a visitor to the spaces might feel, and what the designer himself might have felt while drawing this element of the building: 'invisible forces' that offer and negate possibilities.⁸⁸

As alluded to above, this technique goes back to Wölfflin and to Theodor Lipps, the 'father' of the theory of *Einfühlung*. On the one hand Lipps' writings informed Geoffrey Scott's *Architecture of Humanism*; and on the other hand, the idea of *Einfühlung*, taken into Heinrich Wölfflin's *Prolegomena of a Psychology of Architecture* from Robert Vischer and Hermann Lotze, lies behind Wölfflin's analyses of the baroque in his *Principles of Art History*, which was in Rowe's possession. It is suggested here that Rowe, even if unwittingly, used analytical methods and categories closely related to Wölfflin's comparison of *Renaissance and Baroque* in their relation to position and movement. In the section on the 'Linear and Painterly' in his *Principles of Art History*, Wölfflin says: 'Of course, all architecture [...] reckons with certain suggestions of movement; the column rises, in the wall, living forces are at work, the dome swells upwards, and the humblest curve in the

⁸⁷ Rowe, 'Neo-“Classicism” II', 144.

⁸⁸ Peter Eisenman may have been able to develop his interest in implied movement in his analytical *The Formal Basis of Modern Architecture* in his PhD thesis of 1963 through Colin Rowe's influence.

decoration has its share of movement, now more languid, now more lively.⁸⁹ And the idea of movement is clearly expressed in *Renaissance and Baroque*:

Massiveness and movement are the principles of the baroque style. It did not aim at the perfection of an architectural body, nor at the beauty of 'growth', as Winckelmann would have put it, but rather at an event, the expression of a directed movement in that body. [...] Rather did the baroque concentrate the whole strength of the building at one point, where it breaks out in an immoderate display while the rest remains dull and lifeless. The functions of lifting and carrying, once performed as a matter of course, without haste or strain, now become an exercise of violent and passionate effort.⁹⁰

Giedion's and Rowe's analyses of modernist buildings sound as if infused with this quality of Wölfflin's analyses of the Baroque.

Is it at the end, that Rowe combines van Doesburg with Wölfflin via Giedion and his interpretation of Mannerism? Space is not described and analyzed as experiential. Since Rowe argues at times with Gestalt theories, it may be seen as perceptual, but only in the abstract sense of an analytical perception, an intellectual way of seeing rather than an immediate, sensory perception. Rowe's architectural space might be the well-composed space of illusion and multi-layered perception, the interplay between flatness and depth or between surface and space, combined with a sense of *Einfühlung* into the movement and energy embodied in the elements of architecture: column, wall and floor; and all this mostly found in and explored through the work of Le Corbusier.

Christoph Schnoor is Associate Professor in Architecture at Unitec Institute of Technology in Auckland, NZ; Programme Director for the Master of Architecture (Professional) from 2007–09; forthcoming chapter 'Space and the body: Concepts of the corporeal in Le Corbusier's work', in: Kirsten Wagner und Jasper Cepl (eds.): *Körperbilder in der Architektur / Images of the Body in Architecture*, Berlin: Wasmuth, 2012; authored book *La Construction des villes. Le Corbusiers erstes städtebauliches Traktat von 1910/11*, Zurich: gta 2008; current research on Colin Rowe in the larger context of the analysis of spatial and formal principles in modern architecture.

Dr.-Ing. Christoph Schnoor
Unitec Institute of Technology
Auckland, New Zealand

cschnoor@unitec.ac.nz

⁸⁹ Wölfflin, *Principles of Art History*, 63.

⁹⁰ Heinrich Wölfflin, *Renaissance and Baroque*, London: Collins, 1964 (*Renaissance und Barock*, 1888), 58.