

This manifesto presents the evolving ideas (circa 1970) of Colin Rowe and his graduate students in the Cornell University Urban Design Studio with regard to building in the context of the city. Their reappraisal of modern urbanism called for an end to the destruction of center city areas by new construction, and proposed an alternate strategy of "contextualism," a term coined by the students to describe Rowe's theory. Thomas Schumacher, one of Rowe's students, recently recollected:

In fact, the term originally used by Steven Hurr and Stuart Cohen was *Contextualism*, a conflation of *Context* and *Texture*. We were interested in urban texture, what Italians call the *tessuto urbano* (more literally "Urban Fabric"), and urban form. We were not interested in style....our representative projects sought to reconcile modern urbanism with the traditional city....the inadequacies and problems of modern architecture are *urban*, not *stylistic*....It is possible to make good cities using modern architecture, as the Amsterdam School proved back in the 1930s.<sup>1</sup>

This article is one of the first statements of the principles of Rowe's "collage city" approach, which Schumacher lays out prescriptively. One of the most important ideas is that both urban solids (building masses) and voids (the spaces of street and square) can be figural. The use of analytical figure/ground plan diagrams made clear the significance of the form of public spaces in creating the character of the city. European cities are characterized by well defined, figural public spaces including streets and squares, while American cities tend to have open, unbounded planes, like greens, malls, and commons.

A second important component of contextualist theory is the idea of the "differentiated building." Schumacher acknowledges a debt to Robert Venturi's *Complexity and Contradiction* for the development of this notion; he refers no doubt to Venturi's statement that the building should

accommodate difficult conditions without concealing the accommodation. The "differentiated building" synthesizes ideal and circumstantial, deforming to the conditions of the site, and accommodating many pressures without losing its Gestalt "imageability."

Contextualism offers a middle-ground position between an unrealistically frozen past with no future development permitted, and urban renewal with the total loss of the urban fabric. Schumacher presents the traditional city's compositional strategy of gradual accretion as an alternative model to the massive bulldozing and new construction of the 1950s and 1960s. The collage city model has been extremely influential in American schools of architecture including the Institute for Architecture and Urban Studies, where Rowe was a Fellow from 1967 to 1969.

1. Thomas L. Schumacher, unpublished statement, May 1995.

THOMAS L. SCHUMACHER

## CONTEXTUALISM: URBAN IDEALS AND DEFORMATIONS<sup>1</sup>

The time is ripe for construction, not foolery.

Le Corbusier, 1922

We can work it out.

The Beatles, 1966

If one momentarily puts aside most of our urban problems (overcrowding, transportation, economics, etc.), if one places himself in the unlikely position of abstracting a small aspect of reality, he can examine the shape of the modern city independent of its many functions. The twentieth-century town is physically a combination of two simple concepts: the traditional city of corridor streets, grids, squares, etc., and the city-in-the-park. The traditional city is primarily an experience of spaces defined by continuous walls of building which are arranged in a way that emphasizes the spaces and de-emphasizes the building volumes. It is an experience which can be thought of as resulting from a subtractive process in which spaces have been carved out of solid masses. By contrast, the city-in-the-park (a phenomenon most clearly articulated by Le Corbusier as the "Ville Radieuse"), is compositionally the reverse of the traditional city. Composed of isolated buildings set in a parklike landscape, the city-in-the-park presents an experience which emphasizes the building volumes and not the spaces which the buildings define or imply.

Although the division of urban form into two types is somewhat arbitrary, it approximates reality. Because the twentieth-century town is an unhappy combination of the traditional city and various misconceptions of the Ville Radieuse, contextualism has attempted to resolve this dilemma and made the city as we find it a viable form in a future which promises enormous expansion. Faced with the reality that orgies of construction at economically

From *Casabella* no. 359-360 (1971): 79-86. Courtesy of the author and publisher.

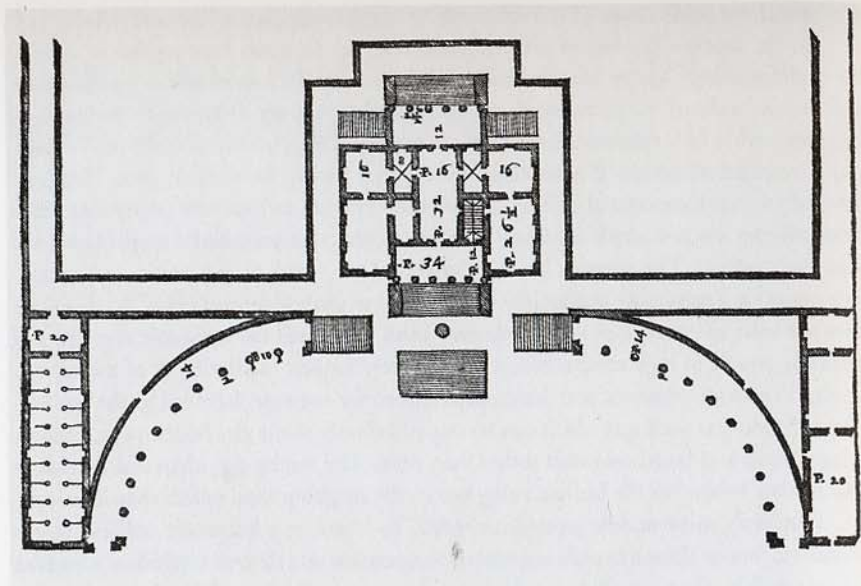


ripe times have made a mess of our urban life, it seems imperative to stop and reflect.

So far, modern theories of urbanism and their applications have tended to devalue the traditional city.<sup>2</sup> Yet we have not broken our ties to it. We respect and enjoy the charm and human scale of the picturesque medieval town, while we destroy—in the name of progress—what little traditional urbanism we possess. The criterion of economic obsolescence overrides all others. If a building doesn't keep paying for itself, it goes. "Big ball" renewal projects have created a chasm between the existing and the new preventing either from offering any reasonable amenity.<sup>3</sup> Modern architecture promised a utopia fashioned after the machine. The promise hasn't been kept. One could, at this point, understandably argue for a revisionist philosophy and a return to traditional city ideas. Yet this alone does not solve so many of our real problems. Land values and the economic necessities of grouping people in high concentrations have greatly limited the flexibility of the capitalist city. Economic pressures and design preferences, for example, have led to the typification of housing as packages which can be assembled only as the city-in-the-park, endlessly repetitious and based on profit rather than need. The results are urban configurations which relate neither to the human being nor to the neighborhood which they interrupt.

Obviously some middle ground is needed. To retreat to a hopelessly artificial past is unrealistic, but to allow a brutalizing system to dominate and destroy traditional urbanism is irresponsible. Contextualism, professing to be a reconciliation of the above ideas, has attempted such a middle ground. But before any specific discussion of these ideas can be made, it is necessary to state a few of the basic assumptions which have formed the groundrules for this approach to solving urban problems. Very briefly, the argument might be stated as follows: because form need not follow function, building programs and uses need not be expressed in the configuration of buildings and towns. This renders out-of-context comparisons feasible. Hence a church plan and a housing block can be rationally compared. The manipulation of forms at large scale relates directly to the organizational patterns of buildings. Such smaller scale works serve as analogue models for larger projects. Thus, urban form is seen as possessing a life of its own, irrespective of use, culture, and economic conditions. Formal continuities transcending periods therefore become an important consideration.<sup>4</sup> Moreover, the communicative nature of architecture as a mimetic art is given new importance. This attitude depends upon the proposition that the modern-movement concept of utility and economy of means as expressed in functionalist theory is inadequate to cope with the complexities of modern experience, and that an "overplus" of communication is a necessary constituent of both buildings and cities.<sup>5</sup> Thus, "...the various forms of architecture...are above all structures or representation; which means in actual terms that architecture, like every other art, is both reality and representation."<sup>6</sup>

The validity of these assumptions cannot be tested. While they do not appear to relate directly to the solution of so many of our urban problems, it can be argued that those problems cannot be solved by architecture (or urban design) as a medium of direct communication but more likely by a social and economic process of which architecture is only a part. One is not arguing against social relevance. One "is" arguing that after a certain point in the planning process other criteria surface which allow us to make judgments about the final form of our cities. And although it is just as easy to leave out this phase (indeed, today it is always left out), it is the application of such criteria (either consciously or unconsciously) which give many cities their particular ambiances.



Andrea Palladio, Villa Badoer.

A building is like a soap bubble. This bubble is perfect and harmonious if the breath has been evenly distributed from the inside. The exterior is the result of the interior.

Le Corbusier, *Towards a New Architecture*, 1923

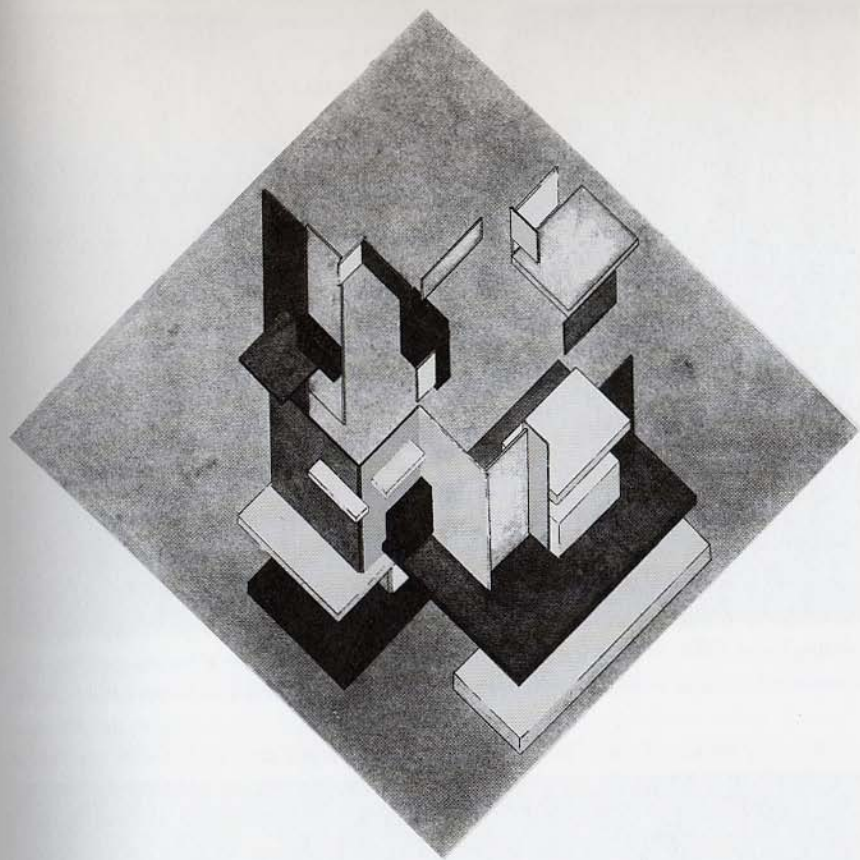
In contrast to frontalism, born out of a static conception of life, the new architecture will reach a great richness by developing an "all-sided plastic" way in space and time.

Theo van Doesburg, "24 Points of the New Architecture," 1924

The above statements typify an attitude toward architectural form which, while it gave modern architecture and urbanism some of its important peculiarities as a style, also created many of the problems we face today in the siting of buildings and the design of cities. The concept that a building should exist in the round, isolated from its neighbors, multi-sided and without preferential faces, is of course not new.<sup>7</sup> What was new for modern architecture was the insistence that this type of configuration be typical for all building types rather than special to particularly important building uses.

The development of Renaissance architecture is generally described as the historical progression from the Loggia degli Innocenti of [Filippo] Brunelleschi to the Tempietto of Bramante. This progression is presented as the continuing refinement of motifs from inscribed forms to real forms—from surface to volume—culminating in a cylindrical temple capped by a dome. Independent of context, round and idealized (almost without function) this little pavilion represented an ideal scarcely attainable in buildings with only slightly more complicated programs and site conditions. Allusions to the perfection





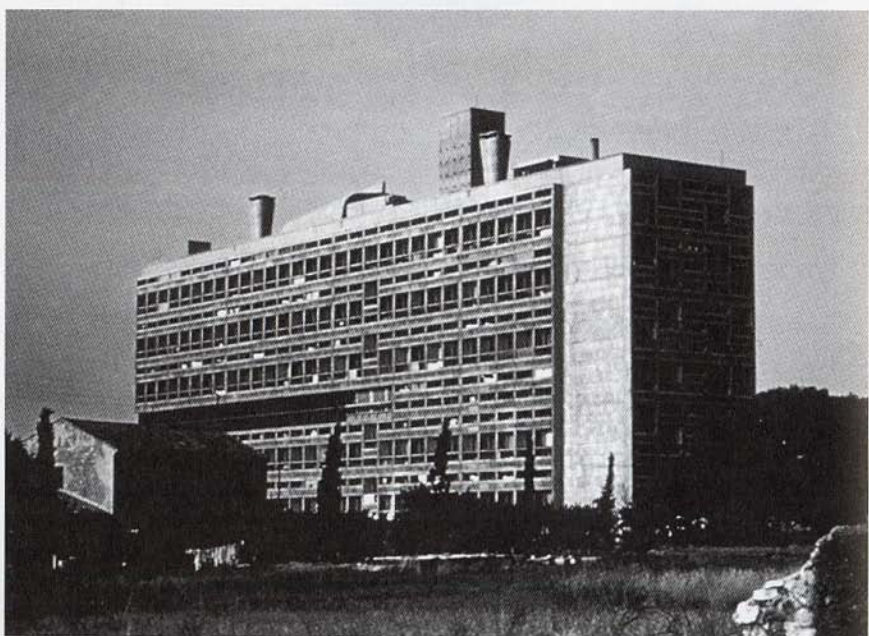
T. van Doesburg, C. van Eesteren, Project for a Private House.

of the Tempietto are common in buildings up to the twentieth century. Certainly Santa Maria della Consolazione in Todi approaches this condition. But in most cases architects have been required to soften the ideal and conform to both use and the situation.<sup>8</sup> The Villa Badoer of Palladio is an example of the alterations made to an "ideal," multi-sided form in order to accommodate the attendant functions housed in the wings. This building still lacks the site restrictions which promote the elaborate formal disguises that urban buildings do often possess.

By comparison, [Theo] van Doesburg's and [Cornelis] van Eesteren's project for a private house, 1922, represents an intent similar to that of the Tempietto, and can be contrasted to the Villa Badoer. Van Doesburg's construction is a multi-sided figural building which is dependent upon separation from its context. But aside from being figural (like the Villa Badoer), it is also "non"-frontal. Lacking any plane of reference as face and thereby lacking flanks, this project approaches the state of idealization of the Tempietto. Like the Tempietto this project is a prototype. Such idealization of buildings has been a



Giorgio Vasari, Uffizi, Florence.



Le Corbusier, Unité d'Habitation, Marseille.



constant imperative of modern architecture either as a purely formal preference like the *de Stijl* prospects, or as representing a functional unit or a program, as in the Bauhaus projects and buildings. The image of the building as an object in the round is so much a part of the modern architect's vision that he is prone to see all ages of building in these "sculptural" terms. Hence the modern architect is often disappointed in the buildings he visits which do not reflect this pre-conception.

The notion that some ideal forms can exist as fragments, "collaged" into an empirical environment, and that other ideal forms can withstand elaborate deformations in the process of being adjusted to a context have largely eluded the modern architect. This attitude was recognized and deplored by Robert Venturi who called for elements which were "...hybrid rather than 'pure,' distorted rather than 'straightforward,' ambiguous rather than 'articulated'..."<sup>9</sup>

It is precisely the ways in which idealized forms can be adjusted to a context or used as "collage"<sup>10</sup> 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.

To return to the question of the city as solids "in" voids and voids "in" solids, a comparison of the Uffizi in Florence and the Unité d'habitation in Marseilles, provides a useful analogy. The Unité is a rectangular prism, oblong and solid. The Uffizi is a rectangular prism, oblong and void. Both may be seen as "figures" surrounded by a "ground," and each represents a way of looking at the city. An archetypal void seen as a figure in plan is a conceptual ambiguity since figures are generally thought of as solid. Yet when a void has the properties of a figure it is endowed with certain capabilities which "ground" voids lack. While the Piazza Barberini in Rome, a "ground" void, functions well as a distributor of traffic but not as a collector of people, the Piazza Navona, a figural void, collects pedestrians easily.

In an unpublished masters thesis at Cornell University,<sup>11</sup> Wayne Copper has explored the nature of void as figure and solid as ground. "Once it is recognized that figure and ground are conceptually reversible, it follows quite naturally that their roles are interdependent." To consider a famous urban space without the back-up solid which provides its "ground" is to render an incomplete picture. Obviously the Piazza San Marco in Venice owes much of its vitality as a figural space and collector of people to the densely packed areas around it which feed it people and provide the contrast of solid to its void. When seen reversed in an all black and white drawing, the ambivalence of solid and void is obvious, and the tension created by the equality of the visual "weight" poses some interesting questions: does a regular space require irregular back-up solids? Can any norm of size relationships between streets and squares be abstracted from examining such spaces? But mainly, is this all simply irrelevant since building heights vary and the actual surfaces which define space "really" give urbanism its particular ambience? (The old idea that the Sistine Chapel is simply a barn without its painted-on architecture comes to mind here). Yet, as Copper argues, "...it would be absurd to attempt to analyze midtown Manhattan with only one level of plan...although with Rome, it would not." Obviously this abstraction does not provide the whole story, and for New York this is almost meaningless. As a tool of analysis, however, the figure-ground drawing does involve us immediately with the urban structure of a given context.



The abstraction of ideas via the concept of figure-ground and figure-ground reversal (or ambivalence) proceeds to the examination of ideal forms which have become "classic urbanism" as well as to the contexts into which these ideals are placed. The ideal city of the Renaissance, for example, begins as a medieval town containing a collection of idealized buildings and culminates as a geometric abstraction devised to accept all forms of individually idealized structures. Between the two is the reality of the Renaissance city, a medieval town which both deforms and is deformed by the Renaissance buildings it hosts. The "città ideale" of Peruzzi should be contrasted to the siting of the Palazzo Rucellai. The palace is in a narrow street where it is impossible to ever achieve a frontal view of the facade. While this is contrary to Renaissance intentions for the city, it is necessary to accept the condition and allow oneself the luxury of his perceptual ability to "lift" the building out of context.

In a constricted environment, the siting of culturally important buildings for which specific deformations are created is important to note. S. Agnese in Piazza Navona is perhaps the quintessential example. The basic parti is that of a centralized cross surmounted by a dome (not unlike S.M. della Consolazione), a basically figural building. The insistently flat facade of the Piazza implied the need for a building which adhered to the existing geometry, contrary to the ideal parti type. S. Agnese is both. The facade of the Piazza is maintained and at the same time is warped in such a way that its integrity is not broken while the dome is perceptually thrust forward into the prominence it requires as a symbol. The deformations of a particular building parti which maintain a reading of the building as an ideal form is not solely a function of the pressures exerted by a tight context. The differentiation of the faces of completely figural buildings is also of interest. Colin Rowe has stated that the absolute idealization of any useful building is logically impossible because, if no other pressures influence its design, at least entrance and orientation must act as deforming pressures.

The deforming pressures of an entry sequence may be seen in Le Corbusier's Pavillon Suisse which has been widely misconceived and emulated as a nonhierarchical, two-faced slab. It is in fact a two-sided slab, but it has a clearly defined front and back, which are treated as differently as possible within the limits of a flat surface. The entrance facade is prefaced by two curved surfaces, one rough and one smooth, that heighten the flatness of the block itself which is basically solid. The "garden" facade, by contrast, is a transparent flat curtain wall.

If the Pavillon Suisse is an example of a building "distorted" by a relatively loose context, an example of the opposite (an undistorted building within a tight context) is the CBS building of Eero Saarinen. Confined within the tight grid of New York City and placed at the end of a block, the CBS tower takes no account of the fact that its four facades face different conditions. The two streets, the wide avenue, and the adjacent buildings have in no way been recognized. Indeed, the site pressures have been so well camouflaged that the entrances to the building are almost impossible to find. The interaction of the idealized parti with its environment may be further seen in a small scale analogy, a detail in the Palazzo Farnese of Antonio da Sangallo the younger. In the entry sequence, the central aisle of a three-aisled entrance, is the width of the typical bays of the courtyard arcade. The side aisles, however, are narrower, thus leaving a discrepancy where they meet the courtyard. This is accommodated by a fan-like forced perspective

band at the inner courtyard facade. Here the two conflicting forms are brought together in a resolution that not only solves an otherwise awkward intersection, but also does not completely disguise the existence of the problem. It is a kind of "75% solution" to a compositional problem that, through its incompleteness, enriches the entire composition.

Although this example is not literally a microcosm of problems of urban form (particularly plan problems), the nature of the solution is analogous and contextualism attempts to create a milieu in which abstractions of this kind and great jumps in scale can be useful tools for breaking sets.

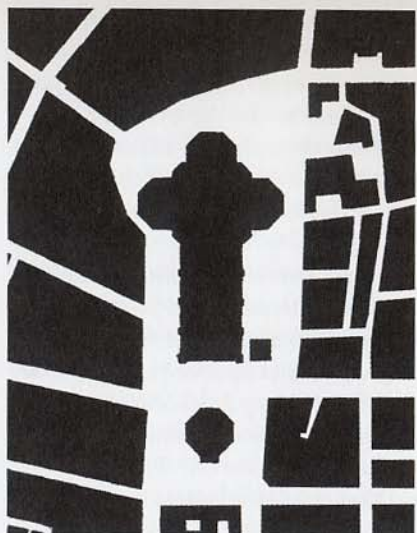
At a larger scale, the siting of the Palazzo Borghese and the adjustments made to it in order to accommodate a complex condition explain the urban implication of Sangallo's moves in the Palazzo Farnese. This sort of adjustment differs from that of S. Agnese in the way the configuration and building are more complicated and in the way more responses are made to site pressures. Here the archetypal renaissance cortile is embedded in an oddly shaped configuration. The geometric inconsistencies are resolved by the addition of new geometries which "collect" and absorb the odd directions.

The above examples, S. Agnese in the Piazza Navona and the Palazzo Borghese, represent configurations in which fragmentary responses are made to appear as part of the parti. A second type of urban configuration, where buildings are put together with elements which relate directly to the context and only haphazardly to the building itself, is seen in the complex of S. Giovanni in Laterano. Growing slowly over many centuries and responding to specific pressures, the Lateran complex (an urban "megastructure" of moderate scale) exhibits the characteristics of a collage. The principle facade relates to the portal of S. Giovanni, the benediction loggia relates to the Via Merulana (the Sixtus V axis from Santa Maria Maggiore), and the Palazzo Laterano relates to the Piazza S. Giovanni. All of the elements are tacked on to the body of the church which does "not" respond to their pressures but remains internally the archetypal basilica almost without deformation.

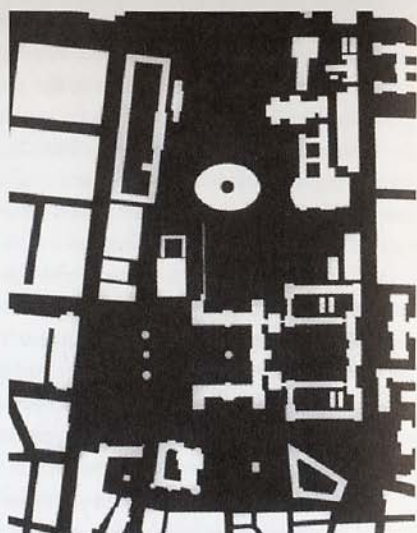
Similar to S. Giovanni in its local accommodation of context is the Cathedral of Florence. Here the concept of building as both figure and ground is exploited. The major façade serves as ground to the Baptistry which is totally figural and to the Piazza S. Giovanni. The rear of the Cathedral acts as a figure which intrudes into and activates the Piazza del Duomo. It is this sort of differentiated building which can respond to many pressures created by a context without losing its imageability as a Gestalt. This type of building is rare in modern architecture ([Alvar] Aalto's Pensions Institute in Helsinki is a noticeable exception, as are many of Le Corbusier's works). It is different from the typical picturesque modern building which "...separates function into interlocking wings or connected pavilions."<sup>12</sup>

If we relate the urban pressures recognized in the aforementioned examples to the concept of idealization through programmatic requirements (i.e., if we deform Le Corbusier's soap bubble), we can arrive at a logically balanced "contextual" building. The office building type, although most often idealized as a point block, can assume any number of functioning shapes. A beautiful example of this flexibility is [Erik] Gunnar Asplund's 1922 competition for the Royal Chancellery in Stockholm. Produced at the same time that Le Corbusier was creating his "Ville Contemporaine," Asplund's project presented an opposite point of view. In the "Ville Contemporaine," the office building

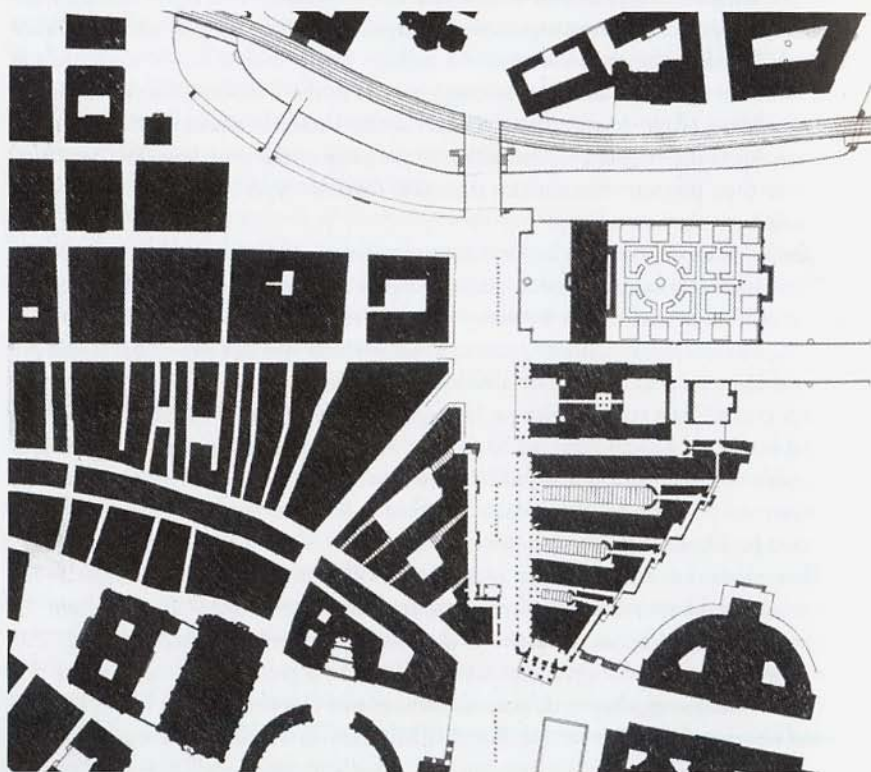




Florence Cathedral. Wayne Copper, "The Figure-Grounds."



Stuttgart. Wayne Copper, "The Figure-Grounds."



Gunnar Asplund, Royal Chancellery, Stockholm. Wayne Copper, "The Figure-Grounds."



was idealized as a cruciform tower—a collection of concepts about a building type—presented in almost cartoon fashion. To Asplund, the specific symbolic impact of the building type was subordinate to the relationship of the building and site. The resulting parti ties the building inextricably to the context in a manner that tends to disguise the limits of the actual building lot. Here the relative symbolic importance of the complex in the town is accomplished locally, by the placement of the entrance portico of the major axis. This portico functions in a manner similar to the benediction loggia of S. Giovanni in Laterano. The chancellery configuration begins to imply a strategy of “progressive substitution” in which successive elements relate directly to the adjacent elements. Although the building complex responds to its site context, it is by no means a simple catalogue of site pressures. On the contrary, Asplund’s scheme is in the best tradition of Venturi’s idea of “Both-And.” It is both responsive and assertive, both figure and ground, both introverted and extroverted, and both idealized and deformed.

A further jump in scale leads to the study of “zones” and “fields”<sup>13</sup> within particular city plans. When abstracted, these are obvious organizing devices for further development as well as conceptually prototypical schemes for buildings in deformations. The plans for Stuttgart and Munich exhibit the presence of zones generally related to certain periods of development. The figure-ground abstractions show how accident, important buildings, and major spaces tend to section the city into a series of phenomenally transparent fields, the organizations of which are not unlike those of a cubist painting. “Within cubist painting,” Copper asserts, “pictorial space has been shattered into an endless collage of overlapping elements rarely complete in themselves,” which “find their organization via reference to larger elements often superimposed over them...” In urban groupings, “...a field of objects would be seen as a unit when they are defined by some dissimilar means of organization, or when, via some idiosyncrasy of form, polarize themselves into a cogent grouping.”

As in cubist painting, when the organizational geometries do not reside in the objects themselves, the possibilities of combining various buildings within a system of order which attributes to each piece a bit of the organization become almost infinite. To limit the range of possibilities the use of the grid systems has been traditional. The interaction of grids and diagonals and curved systems has been explored in the Urban Design Department at Cornell University under the direction of Colin Rowe. In the plan for the Buffalo waterfront prepared by students under Professor Rowe’s guidance, the existing city grids of Buffalo have been exploited, and moves have been made to bring the grids into a condition of spatial overlap in order to facilitate movement and “sense of place.”<sup>14</sup> The plan represents a careful use of cubist-like order and specific deformations of idealized buildings. The system works almost as a straight line process. Fields are identified through the abstraction of the town via figure-ground drawings. Those considered useful in terms of activity and location are reinforced and clarified. The areas of collision are brought into sharp focus as needing resolution. In this case the city hall area was taken as the focus of two major grid systems, one of which relates to the waterfront, and the other of which relates to the existing town. These are brought together through the use of overlapping zones and geometrically multi-functioning buildings.

A further development of this approach, but in a more rigid context, was the Cornell team’s Harlem plan, part of an exhibit sponsored by the Museum of Modern Art:

"New Cities, Architecture and Urban Renewal."<sup>15</sup> The scheme dealt with the particularities of the Manhattan Grid. Virtually without hierarchy, the grid offers no inherent possibilities for specific important building sites or centers of activity. Nor are any particular intersections given real prominence over others. This has the opposite effect of that in a medieval town. Because all streets are the same, initial orientation changes and becomes disorientation. No sense of "place" occurs because no place is different from any other place. The medieval town is, of course, the reverse. Initially impossible to fathom, it ultimately offers total orientation with familiarity. In the case of Harlem, the uneven terrain and the diagonal of St. Nicholas Avenue provide the only resources for enlivening the grid. Furthermore, the intrusion of vast wastelands of housing, all rather poor examples of concepts abstracted from the Ville Radieuse, provided clues as to how to approach redevelopment of the area. From this viewpoint it appeared obvious that some attempt should be made to make the many housing projects appear as if they were designed to co-exist with each other and with the context. This was accomplished by either "springing loose" the projects into zones of predominate void and defining these zones with hard edges, or by "wrapping up" the projects in order to give them back a context. The areas of great activity, where important new spaces were created, adjusted themselves to the existing context via multi-functioning buildings. The complex of buildings on the major east-west axis of 125th Street adheres on one side to the blocks opposite and on the other side reacts almost violently to various pressures on its "garden" facade which front an immense plaza.

These schemes have assumed a level of abstraction which permits the idealization of buildings either as particular urban symbols or as building programs. There is, therefore, a reliance on certain modern architecture parti-types. Although in many instances at the Urban Design Studio at Cornell buildings have been given functions roughly relating to their form type, it should be emphasized that the primary intention has been to create a formal "shorthand" which explains site pressures to an imaginary project architect. Thus, when presented with a design problem against which to measure the pre-deformed shapes given as the urban design exercise, the individual architect is in possession of an input which shows him how to start making decisions. The process can function only if the designer is willing to recognize the ultimate flexibility of any program and its ability to imply any number of partis. The process is also aided by the designer's knowledge of parti-types for traditional building programs.

- 1 This approach to urban design is the result of collaboration of graduate students at Cornell University under the guidance of Colin Rowe, between 1963 and the present. Professor Rowe is responsible for many of the points made in this paper. The term "Contextualism" was first used by Stuart Cohen and Steven Hurtt in an unpublished masters thesis entitled "Le Corbusier: The Architecture of City Planning."
- 2 The assumption of the Modern Movement was that existing Western forms had to be completely replaced. Van Doesburg's *Europe is Lost* and Le Corbusier's *There Can be No New Architecture Without New City Planning* are but two examples among many.
- 3 See Robert A.M. Stern, *New Directions in American Architecture* (New York: George Braziller, 1969).
- 4 This approaches the theories of Julien Guadet. See Colin Rowe, "Review of Talbot Hamlin's *Forms and Functions of 20th-Century Architecture*," *Art Bulletin* (May 1953). Also see Reyner Banham, *Theory and Design in the First Machine Age* (1959).



- 5 See Christian Norberg-Schulz, "Meaning in Architecture," in Charles Jencks and George  
Baird, eds., *Meaning in Architecture* (New York: George Braziller, 1969).
- 6 Luigi Moretti, "Form as Structure," *AA Journal Arena* (1967).
- 7 Alberti discusses the siting of temples separated from their surroundings, as does Palladio.
- 8 Sitte has shown how, in the nineteenth century, of 225 churches in Rome, only 6 were  
free-standing. Camillo Sitte, *City Planning According to Artistic Principles*, Collins, trans.  
(New York: Random House, 1965), 26.
- 9 Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of  
Modern Art), 22.
- 10 Literal urban collage is probably a semantic impossibility, except in an instance like the  
placing of a Claes Oldenburg lipstick in an urban landscape. For my purposes here, collage  
is taken to mean the placement of formally disparate elements in a given context.
- 11 Wayne Copper, *The Figure-Grounds* (Ithaca: Cornell University Press, 1967).
- 12 Venturi, *Complexity and Contradiction*, op. cit., 38.
- 13 See Cohen and Hurr, "Le Corbusier," op. cit., 22.
- 14 Buffalo Waterfront Project: Colin Rowe, Werner Seligmann, Jerry Alan Wells, critics;  
Richard Baiter, Richard H. Cardwell, David W. K. Chan, Wayne Copper, Harris N. Forusz,  
Alfred H. Koetter, Maketo Miki, Elpidio F. Olimpio, Franz G. Ozwald, student  
collaborators.
- 15 *The New City: Architecture and Urban Renewal* (New York: Museum of Modern Art, 1967).