

The CIAM Discourse on  
Urbanism, 1928–1960

Eric Mumford

The MIT Press Cambridge, Massachusetts London, England

The CIAM Discourse  
on Urbanism

## Introduction

Floating somewhere between socialism and social welfare there was always the upward line pointing towards the future.

—Aldo Van Eyck on CIAM, 1981<sup>1</sup>

I began this book when I discovered that there was no detailed narrative history of the Congrès Internationaux d'Architecture Moderne (International Congresses of Modern Architecture), or CIAM. In the course of my training and practice as an architect I had occasionally encountered mention of CIAM, but like many architects in the United States I had only a vague sense of its significance. Founded in Switzerland in 1928 by a group of European architects, CIAM, which refers both to the organization and the series of congresses, was a major force in creating a unified sense of what is now usually known as the Modern Movement in architecture. Many of its members and ideas were well known in the world of architecture, yet few coherent accounts of its history existed. It was known to be closely connected in its early years to new housing initiatives in Europe, which by the 1950s, when transplanted to Britain and the United States, had resulted in disastrous high-rise slab housing projects. Coexisting with this was the idea that CIAM was an extension of the approach to architecture and urbanism of Le Corbusier (1887–1965), parts of which became known as the “International Style” after the Museum of Modern Art exhibition of that name of 1932.

In the process of tracing the complex history of CIAM, I discovered that its members had almost no direct involvement in North American high-rise public housing projects, although CIAM ideas as developed and promoted by Le Corbusier were certainly influential in making this kind of housing appear to be a rational urban solution. At the same time, largely through the energetic proselytizing of Le Corbusier and of the CIAM secretary-general, the Swiss art historian Sigfried Giedion (1888–1968), the ideas of CIAM had a more direct and usually less destructive in-

fluence on architecture and urbanism in many other parts of the world, an influence especially evident in the planned capitals of Brasília and Chandigarh.

CIAM was deliberately intended to create an avant-garde within the new, anti-traditionalist architecture that began to develop in the early twentieth century. Its innovations had historical links to many earlier efforts to reform society through architecture. Its overall inspiration can best be understood in relation to the ideas first put forward by Count Claude-Henri de Saint-Simon (1760–1825), a French philosopher and student of society, in the early nineteenth century. Saint-Simon believed that developments in industry and in the scientific understanding of human history and society were making possible a new social system based on universal human association. A former soldier, Saint-Simon argued that artists, whom he defined broadly as “men of imagination,” would serve society as its “avant-garde,” the forward part of an advancing army. Saint-Simon’s influential combining of scientific analysis with political and artistic radicalism inspired many later “avant-gardes,” including CIAM.<sup>2</sup> In recent decades, efforts to resurrect a “neo-avant-garde” in art and architecture have made the significance of the term debatable.<sup>3</sup> Nevertheless, the idea is profoundly important in the early development of CIAM. Whether “avant-garde” is defined as an attack on aristocratic and bourgeois art institutions like the Ecole des Beaux-Arts, or, as Manfredo Tafuri has suggested,<sup>4</sup> as a set of defamiliarizing formal strategies originally intended to change society, the founding of CIAM was connected to both.

Twenty years ago, CIAM’s history would probably have been seen as important mainly for illuminating the origins of the modern architectural avant-garde, the obscured early history of what had become the mainstream of architectural discourse in much of the developed world. Such a motivation lies behind what is still the only detailed study of CIAM, Martin Steinmann’s *CIAM Dokumente 1928–1939*, a collection of early CIAM documents published in 1979 with German commentary.<sup>5</sup> Not long after the publication of this work, which has not been translated into English, the Italian historian Giorgio Ciucci questioned the idea that CIAM represented the formation point of a unitary “Modern Movement” in architecture, and instead called attention to the variety of discourses represented in its early Congresses.<sup>6</sup> Ciucci suggested that investigating the early history of CIAM was important not only for establishing what CIAM included, but also for understanding how it eventually excluded certain positions, such as that of the German organicist architect Hugo Häring. To some, Ciucci’s interpretation of the formation of CIAM indicates that the whole notion of a “Modern Movement” in architecture is a historical fiction, which, as one historian recently put it, makes it possible to draw “imaginary connecting lines” in order to give modern architecture a “center of gravity.”<sup>7</sup>

In 1983, two years after Ciucci’s article, the Dutch architect Auke van der Woud provided a brief narrative account of the entire history of CIAM from a differ-

ent point of view. Van der Woud recounted for the first time the history of CIAM after 1947, and included material about the formation of the group of CIAM “youth members” that became Team 10. Writing in the heyday of what is often loosely called “postmodernism,” Van der Woud viewed with skepticism CIAM’s claim that its primary function was to provide urbanistic doctrines for the world to follow, and instead suggested that its main purpose was to enhance the celebrity and to satisfy the emotional needs of its members. He also questioned CIAM’s claims of originality for some of its doctrines, and showed how many of these had originated before CIAM in the housing reform and Garden City movements that had developed in the nineteenth century.<sup>8</sup>

Ciucci’s and Van der Woud’s texts, along with a 1992 issue of *Rassegna*, edited by Dario Matteoni, on various postwar CIAM national groups and a few other scattered sources, comprise most of the scholarship on CIAM in English.<sup>9</sup> Taken together, most of these sources seem to suggest that CIAM overstated its claims to being the representative organization of modern architecture, that its urbanistic ideas were derivative, and that its members’ motivations were mainly self-serving.

More recently, another line of criticism has taken almost the opposite view of CIAM. Without questioning the motives of its membership or deconstructing the unitary nature of its positions, the anthropologist James Holston has asserted that the “CIAM model” of the master-planned city represents the ultimate expression of modernist, future-oriented planning. Holston states that this is true of such planning even when its “derivation from the CIAM model is unrecognized” and when its “use has nothing to do with its social agenda, as is often the case, for example, in the United States.”<sup>10</sup> As Van der Woud has already shown, much of the CIAM approach to urbanism derives from earlier planning concepts, some of which developed quite differently in the United States without any CIAM involvement. Nevertheless, Holston is correct in emphasizing that CIAM’s urbanistic methods, as well as Team 10’s subsequent critique of them, have continued to be pervasive in the world of architecture, even if the source of the ideas is no longer always obvious.

Given the worldwide significance of CIAM ideas, it is surprising that no book-length history of the organization has been published. To some extent this may be the result of the common and partially accurate perception that CIAM’s ideas derive for the most part from those of Le Corbusier, its most influential member, whose work and career have been the subject of extensive scholarship and vehement criticism. A number of other CIAM members, including Walter Gropius (1883–1969), Richard Neutra (1892–1970), José Luis Sert (1902–1983), Mart Stam (1899–1987), André Lurçat (1894–1970), Charlotte Perriand (b. 1903), Alison and Peter Smithson, and Aldo Van Eyck (1918–1999) have received varying degrees of scholarly attention, but neither their specific roles nor Le Corbusier’s in CIAM have been examined in the context of the larger history of the organization.

Pierre-André Emery (1903–1982), another CIAM member, wrote in 1971 that “only an exhaustive analysis of CIAM’s various activities, its declarations, its publications . . . can allow us to form a clear opinion of its influence on architecture and town planning throughout the great part of the 20th century.”<sup>11</sup> Because such a detailed historical analysis of CIAM’s urbanistic discourse has not been carried out, its contribution to what might be called the intellectual genealogy of modern architecture and town planning is not well understood. A detailed history begins to reveal how CIAM’s attempt to combine utopian future-oriented collective politics with specific new architectural approaches went through several distinct shifts. This narrative clarifies both the constructed nature and the continuing influence of its combining of architecture and politics.

A difficult problem emerged, however, in producing a history of CIAM: on close examination CIAM turned out to have had neither a relatively stable membership nor explicit, well-documented standards for admission of members. For much of its membership its importance lay in its value as a symbol of the Modern Movement, which meant that they often saw no distinct boundaries between CIAM and modern architecture in general.<sup>12</sup> Although certain members, notably Le Corbusier and Giedion, played major roles in creating the organization and in selecting many delegates, most CIAM members probably knew little about the group’s inner workings. For them, a history of CIAM would be identical to the history of modern architecture, and would document the triumph of a righteous cause over many obstacles. Providing such a history is not the intention of this book. My intent instead is to trace the development of CIAM’s urbanistic discourse. I use “discourse” both in its ordinary sense of a discussion of a topic, such as what occurred at most CIAM meetings, and in the more specialized sense of a way of speaking that determines the formation of concepts.<sup>13</sup> I have done so by examining this discourse in CIAM’s somewhat propagandistic illustrated books, in articles and news items about CIAM congresses and exhibitions in architectural journals, and most extensively in the available documentation in various CIAM archives.<sup>14</sup> The bulk of this material is in the CIAM Archives at the Institute for the History and Theory of Architecture (gta) at the Swiss Federal Polytechnic (ETH) in Zurich. There is also a significant amount of CIAM material in the Van Eesteren Archive at the Netherlands Architecture Institute, in the Josep Lluís Sert collection at the Harvard School of Design, and in the various archives of individual CIAM members.

Where possible I have also attempted to relate this discourse to the varying historical circumstances of CIAM’s development. As a result, the CIAM effort to link collective social transformation with its approach to architecture and urbanism can be understood in a new way. Instead of simply accepting or rejecting CIAM’s polemics, one can begin to see how CIAM defined a new and perhaps overly ambitious socially transformative role for architects and architecture by combining cer-

tain design strategies with a passionately held conviction that architecture should serve the many and not the few.

In shaping this narrative, I found that interpreting CIAM as a kind of vanguard party of modern architecture, directed by a party “Central Committee” (the CIRPAC), was helpful in understanding CIAM’s declarations, for these documents were efforts to set out a clear “party line” on urbanism and the relation of architecture to society. This does not mean, however, that CIAM was a Communist organization, even though some of its members were Communist party members. Much of the text is closely based on CIAM documents and statements of doctrine, but because of the complex relationship of CIAM to politics I have also tried to take into account how the particular circumstances and personalities of its members determined CIAM’s direction, as revealed by the accessible documentary and anecdotal evidence.

The political stance of CIAM as an organization resists simple categorization. While many of its members were leftists across the changing twentieth-century political spectrum, others were Fascists, and a few willingly worked for Hitler’s National Socialist regime, though it barely tolerated modern architecture. In addition, some of CIAM’s most important members emigrated to very different political environments in the United States and elsewhere in the 1930s. Many members with strong leftist political allegiances continued to be involved in CIAM throughout its history, but CIAM never identified itself with a distinct political position. The precise effects of individual members’ local political commitments on the overall direction of CIAM need to be explored in more depth in future studies of CIAM national groups.

This book, a general narrative history of CIAM, is organized into five sections. The first four roughly correspond to distinct periods in CIAM’s history. The first chapter traces its relatively well-known early history as a major propaganda instrument of the new architecture. By the early 1930s, as world economic conditions worsened, CIAM began to promote an approach to the design of the built environment meant to bring into being more equitable urban patterns, the focus of the second chapter. Instead of continuing previous methods of city building, CIAM appropriated aspects of new urban patterns already well advanced in the United States. Joining these to a quasi-scientific comparative analysis of existing cities, CIAM concluded that new urban development should be guided by the CIAM four functional categories of “dwelling, work, transportation, and recreation,” the basic components of the CIAM “Functional City.”

As political and cultural conditions changed rapidly in the worldwide Depression, however, the agenda of collective social transformation that initially inspired CIAM became detached from the new architecture. CIAM’s equation of the academism of the Ecole des Beaux-Arts with the triumph of bourgeois individualism over

collective interests was called into question by Stalin's imposition of neoclassicism in the Soviet Union. At this same time, the new architecture was to some degree accepted in Fascist Italy, and was promoted in the United States without any linkages to a political agenda. In these changed political conditions, which gave rise to the shift from politically activist "Neues Bauen" (New Building) to apolitical "International Style" in the early 1930s, CIAM's avant-garde role was called into question and the "inevitable" connection between left politics and the new architecture was shattered, as discussed in the second chapter.

During this period, CIAM's most famous member, Le Corbusier, glorified elites, was suspicious of parliamentary democracy, and tried to bring into being a more collectivized future society based on the "real needs" of life. He saw no conflict in attempting to work for a variety of "authorities" ranging from wealthy private patrons to governments of both the right and left, including the Soviet Union, the Second Spanish Republic, Fascist Italy, the Brazilian dictatorship of Getúlio Vargas, the French Popular Front government of Léon Blum, and eventually the Vichy regime. He was prescient at this time in realizing that in the future the operations of large corporations would have many similarities to bureaucratic regimes of both the left and the right. As Le Corbusier saw it, for an urban designer what mattered most in a client was simply the power to override opposition to reconfiguring the metropolitan environment according to his directives. By the mid-1930s Le Corbusier and other CIAM members were making CIAM into a kind of syndicalist political party of architects, devoted to the goal of furthering modern architecture and oriented toward winning over any suitable modernizing "Authority" to the cause, regardless of political orientation. As I discuss in detail in the second chapter, this direction for CIAM came only after some of its members, including Ernst May, Mart Stam, Hannes Meyer, Hans Schmidt, and eventually André Lurçat went to work as foreign technicians in the Soviet Union in the early 1930s.

In the third chapter, after the near dissolution of CIAM at the outbreak of the Second World War in 1939, I examine the period of efforts by Giedion and Sert to promote CIAM in the United States with the publication of *Can Our Cities Survive?* in 1942 and the establishment of the New York CIAM Chapter for Relief and Postwar Planning in 1944. These inconclusive efforts overlapped with Le Corbusier's unsuccessful attempts to work for the collaborationist Vichy regime in France, after which he became in 1943 an opponent of the German occupation.

In the immediate postwar environment, the ideas of Le Corbusier and CIAM began to gain widespread acceptance, evident in his and other CIAM members' involvement in the design of the United Nations Headquarters in 1947. This seeming triumph was followed by the first three postwar congresses, in which CIAM sought to find new issues that linked collective interests with the architectural approach of CIAM's members. The most notable of these congresses was CIAM 8, "The Heart of

the City," which focused on an issue of great interest both to CIAM's postwar president, José Luis Sert, and to Le Corbusier and his associates, as they began to design Chandigarh, a new provincial capital under the patronage of the Indian Congress Party government of Jawaharlal Nehru. Though CIAM reached its greatest popularity at this time in the early 1950s, it was also perceived as having lost its avant-garde position as the related architecture of Mies van der Rohe instead achieved greater worldwide influence.

The fourth chapter traces subsequent efforts to revitalize CIAM in the 1950s, which culminated in the creation in 1954 of a group of younger members called "Team 10." This group, which included the Dutch architects Jacob Bakema (1914–1981) and Aldo Van Eyck, attempted to renew the connections between collective social transformation and an avant-garde architecture while retaining the goal of urbanism as the "creation of order through form," as Alison and Peter Smithson put it in 1954.<sup>25</sup> Bakema believed this could be achieved by combining the disciplines of architecture and planning. Instead of using the rigid functional categories developed earlier by CIAM to reorganize urban life for the collective good, Bakema's Team 10 "architect-urbanist" would use Team 10 concepts like "human association," "cluster," and "mobility" to find built counterforms to anthropologically observed patterns of human life. Although these concepts enriched the urbanistic methods of modern architecture, by the 1960s they began to be subsumed by the emerging fascination with verbal and visual imagery detached from any clear social referent.

The final chapter considers some of the aftereffects of CIAM following the last CIAM Congress at Otterlo, The Netherlands, in September 1959. These include the activities of CIAM members that in various ways continued its discourse, the vehement rejection by Jane Jacobs and others of early CIAM strategies as they were bureaucratically applied in the United States, and the built outcomes of CIAM ideas at Brasília, Chandigarh, and elsewhere.

Understanding the urbanistic discourse of CIAM remains important today, as many subsequent approaches to shaping the built environment by architects and planners still seem connected to CIAM ideas. Some of these approaches, such as the recent "New Urbanism" in the United States, have held up the Modern Movement and CIAM's Functional City solutions as the antithesis of what they propose, yet they too have tended to combine an appeal to future communal transformation with specific urbanistic forms and methods. This linking of architectural form with positive urban social change intentionally or unintentionally retains some aspects of the CIAM synthesis of architecture, urbanism, and social transformation even on the part of those who most vehemently claim to reject it.

## Modern Architects' Congress, 1928

CIAM (Congrès Internationaux d'Architecture Moderne) was founded at the Château of La Sarraz, Switzerland, in June 1928. This first meeting was organized in Paris by Le Corbusier and Gabriel Guévrékian, and in Zurich by members of the Swiss Werkbund and the art historian Sigfried Giedion. From the beginning, CIAM was conceived of as an instrument of propaganda to advance the cause of the new architecture that was developing in Europe in the 1920s. The congress was attended by twenty-four architects from eight European countries, who signed a joint Declaration during the event.<sup>1</sup> Sponsored by Madame Hélène de Mandrot, a French-Swiss noblewoman, with the cooperation of Karl Moser, a leading Zurich architect and teacher, CIAM was intended to create an international avant-garde of modern architecture. It was to be an elite new structure of association for architects to advance their cause against the then-dominant neoclassicism of the academies of architecture, which its founders hoped would place the new architecture into its "true economic and social environment."<sup>2</sup>

After La Sarraz, the tireless publicizing of modern architecture and the name of CIAM by Le Corbusier, Giedion, and other members gave the event a mythic quality, often remembered as the point where various avant-garde movements coalesced into what came to be known as the "Modern Movement." More recently, this interpretation has been challenged by historians who see the early history of CIAM as a series of disconnected episodes, with shifting participants whose positions were not always clearly defined, and whose goals were often in conflict. While this view provides a necessary counterbalance to the overstated claims of unity by CIAM's members, the formation of CIAM does appear to be a defining moment in the formation of a new approach to architecture.

CIAM's initial direction was shaped by the interaction of Le Corbusier and other mostly French-speaking proponents of a new architecture with the mostly German-speaking representatives of a leftist and technocratic approach to

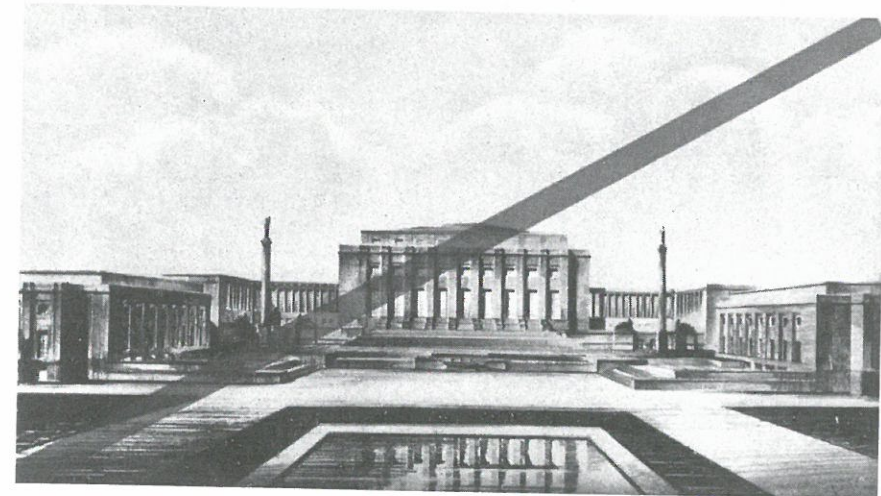
architecture and social organization. In the changed social and political conditions in Europe after the First World War, the limited prewar efforts to make a more socially responsive architecture took a new and decisive turn. Shortly after the La Sarraz "preparatory congress," Giedion, the newly appointed CIAM secretary, wrote to the Dutch architect and town planner Cornelis van Eesteren (1897–1988)<sup>3</sup> that the goals of CIAM were:

- a) To formulate the contemporary program of architecture.
- b) To advocate the idea of modern architecture.
- c) To forcefully introduce this idea into technical, economic and social circles.
- d) To see to the resolution of architectural problems.<sup>4</sup>

Insofar as a common agenda can be said to have existed, CIAM was intended both to define the basis of the new architecture and to vigorously promote it to official clients and the public at large.

The growth of the new architecture in the 1920s, with architects in Germany, the Netherlands, and Belgium especially active in its development, was a major contributing factor in the creation of CIAM. Equally important, however, was the rejection of the entry by Le Corbusier and his cousin Pierre Jeanneret (1896–1967) in the League of Nations competition in Geneva the previous year. The nine-member jury of H. P. Berlage of the Netherlands, Victor Horta of Belgium, Josef Hoffmann of Austria, Karl Moser of Switzerland, Ivor Tengbom of Sweden, Charles Lemaesquier of France, C. Gato of Spain, Sir John J. Burnett of Britain, and A. Muggia of Italy had been unable to agree on a single winner from the 377 projects submitted. Although favored by Moser, Berlage, Hoffmann, and Tengbom, the Le Corbusier and Jeanneret entry was disqualified on a technicality by the French juror, Lemaesquier, a powerful figure at the Ecole des Beaux-Arts and enemy of modern architecture, who had the support of the French government. Le Corbusier and Giedion, the young Zurich art historian and architectural critic,<sup>5</sup> then began an international campaign to have this verdict overturned. One result was their participation in CIAM, which they saw from the outset as a valuable instrument of propaganda for their cause.

There were other forces leading to the formation of CIAM as well. A group of architects involved in designing the demonstration dwellings at the German Werkbund's Weissenhof Siedlung in Stuttgart, planned under the direction of Ludwig Mies van der Rohe (1886–1969), met there in 1927. These meetings seem to have been connected in part to conflicts between Hugo Häring (1882–1958), secretary of the Berlin "Ring" of radical architects,<sup>6</sup> who initiated them, and the efforts of Mies and of Walter Gropius (1883–1969), then director of the Bauhaus and presi-



1.1 Nénot, Flegenhaimer, Broggi, Vago & Lefèbvre, winning scheme for the Palace of the League of Nations, Geneva, 1931, as presented by Alberto Sartoris in 1932. The slash mark was a device used by the Swiss ABC group to indicate architectural works it considered incorrect.

dent of the National Association of German Architects, to "purify" the new architecture of Expressionist and other divergent tendencies.<sup>7</sup> In a letter to the Dutch architect J. J. P. Oud, Giedion indicated that he thought the hidden agenda of the Stuttgart meetings was to respond to Mies's directive that the nascent Modern Movement "must be cleaned up." According to Giedion, this "secret cleansing" would be carried out by Gropius, Mies, Le Corbusier, Oud, Van Eesteren, the Dutch architect Mart Stam (1899–1986), and Hans Schmidt (1893–1972), who represented the "Swiss collective."<sup>8</sup> The links between these meetings and the first CIAM in the next year are not entirely clear, but many of the same architects were also invited to La Sarraz.

Schmidt had worked with students of the Zurich architect Karl Moser in completing a "demonstration apartment" in Mies's Weissenhof apartment building under the sponsorship of the Swiss Werkbund.<sup>9</sup> Led by Schmidt and Max Ernst Haefeli (1901–1976), the participants in this effort included Karl Moser's son Werner M. Moser (1896–1970), Rudolf Steiger (1900–1982), Karl Egender, and Hans Hoffmann. The secretary of the Swiss Werkbund, Friedrich Gubler, met with Gropius in Stuttgart at this time and suggested that Madame de Mandrot, an important patron of the Swiss Werkbund, might be interested in sponsoring the first meeting of the proposed international group of modern architects at her château at La Sarraz.<sup>10</sup>

After Gubler had discussed this proposal with Gropius and Häring in Stuttgart, de Mandrot herself raised the idea with Le Corbusier in Paris, where she lived part of the year. According to an account he wrote after her death in 1948, it

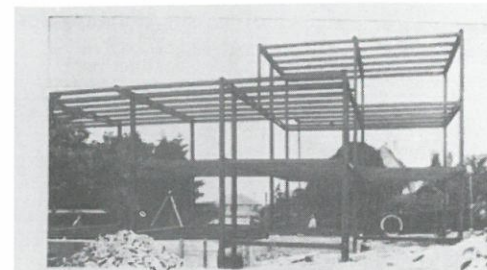


was she who raised the topic of his participation in the midst of a conversation about his rejected League of Nations design.<sup>11</sup> As she was a joint heiress to the land that was to be sold for the proposed League headquarters site, he was hoping she could bring pressure to overturn the rejection of his project. According to this account, he at first refused to participate in the proposed congress, but finally agreed on the condition that a work program with issues for discussion be printed up in advance, probably aware that otherwise the proceedings would be dominated by Schmidt, Stam, and the other Swiss and German participants.<sup>12</sup>

These architects published *ABC: Beiträge zum Bauen* (Contributions to building), edited by the Rotterdam-born Stam and the Basel architect Schmidt. Stam had worked in Switzerland for Karl Moser in 1924 before founding the Basel-based journal, which was inspired by El Lissitzky's Russian-German-French journal, *Veshch Gegenstand Objekt*.<sup>13</sup> After the successful establishment of what Hannes Meyer called the "functionalist-collectivist-constructivist" *ABC*, which played a significant role in publicizing the new architecture in Switzerland, Stam and Schmidt also took part in the efforts to create an international equivalent of the German "Ring" of architects, which culminated in the founding of CIAM.<sup>14</sup> In 1927 their efforts had converged with Giedion and Le Corbusier's, with Stam writing a piece in *izo* defending Le Corbusier's League of Nations entry.<sup>15</sup>

The first CIAM Congress was the result of these efforts from several directions, which most significantly included the international campaign in favor of Le Corbusier's League of Nations design, and the Weissenhof meetings involving members of the Berlin Ring and the Swiss Werkbund in 1927. Beyond these immediate causes were earlier efforts of El Lissitzky (1890–1941) and others to promote an international association of avant-garde architects, efforts which had led to the formation of numerous avant-garde journals across Europe.<sup>16</sup> As Jacques Gubler has noted, the techniques of these avant-garde groups were primarily literary, typographic, and iconographic, but by the late 1920s "more highly structured events were organized,"<sup>17</sup> and the first CIAM Congress was one of these. Stated abstractly, the various forces leading to the foundation of CIAM can be seen as, first, the effort to link certain new formal and technical strategies (and not others) to a program of collectivist social transformation through architecture and city and regional planning; second, the effort to promote these strategies to official clients like the League of Nations and to municipal governments then constructing housing; and third, although less directly, efforts to "purify" this new architecture, efforts that remain somewhat mysterious.

The arrangements for the La Sarraz meeting were entrusted by Le Corbusier to a friend of de Mandrot, the Istanbul-born architect Gabriel Guévrékian (1900–1970), formerly the chef d'atelier for Rob Mallet-Stevens. Le Corbusier made



**Technische und wirtschaftliche Resultate eines Wohnhausbaues (1927).**

Architekten Artaria & Schmidt, Basel.

Der Bau hatte die Grundrisseanforderungen des üblichen Wohnhauses zu genügen. Obgleich es sich um einen Versuchsbau handelte, durfte die wirtschaftliche Grenze der ortsgewohnten Bauweise auf keinen Fall überschritten werden. Es mussten sich also beim Rohbau Einsparungen ergeben, die gewisse, sehr erwünschte Erweiterungen des üblichen Hauses (reichliche Fenster, 15 eingebaute Wandschränke) auszugleichen hatten. Das Haus kam inklusive Architektentonorar, aber ohne Umpflichtungs- und Kanalarbeitsarbeiten auf rund Fr. 12,000.— pro m<sup>2</sup> imbauteilten Raumes rund Fr. 60.— zu stehen.

Das Eisenblech wurde aus Normalprofilen zusammengesetzt (Stützen 2 x C 20 P 16, Längserlöge 2 x C 20 P 24, die Balkenlagen NP 16 in die Längserlöge eingewebelt). Das Ganze bildet ein System von steifen Rahmen bei einer Normalblechdicke von 4,19 mm bei 3,22 m und wurde in 10% Arbeitslagen aufgestellt.

Die Ausfachung erfolgte in gebleichten Hirschenbrettern von handelsüblichem Format (28 x 33 cm). Die Aussenwände bestehen aus 2 Hirschenbrettern von je 8 cm Dicke mit einem Zwischenraum von 2 cm, die Zwischenbänke, das Flachdach und die Trennwände aus demselben Material. Der äussere Putz erhielt einen Oelfarbanstrich, das Dach einen Asphaltputz auf Hirschenbrettern. Die Ausfachung konnte ohne besonderes Gerüst von innen heraus vermauert werden.

Die Wirtschaftlichkeit der verwendeten Konstruktion ergibt sich aus folgender Vergleichsrechnung pro m<sup>2</sup> Aussenwand mit der üblichen Mauerkonstruktion (auch bei weitem) werden muss, dass eine einsetzende Vereinfachung der Eisenkonstruktion und eine Übertragung auf grössere Objekte zu einer weiteren Verbilligung führen würden:

1. Balken tragende Umfassungswand in Backstein:
  - 1 Stein starke Backsteinwand . . . per m<sup>2</sup> Fr. 15.—
  - Hintermauerung in Schlackplatten per m<sup>2</sup> . . . 4.—
  - per m<sup>2</sup> Fr. 19.—
2. Eisenstützen und Ausmauerung mit Hirschenbrettern:
  - Stützen . . . . . per m<sup>2</sup> Fr. 8.—
  - Doppelte Hirschenbretterwand . . . per m<sup>2</sup> . . . 10,80
  - per m<sup>2</sup> Fr. 18,80

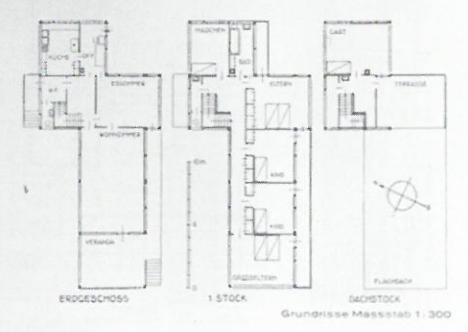
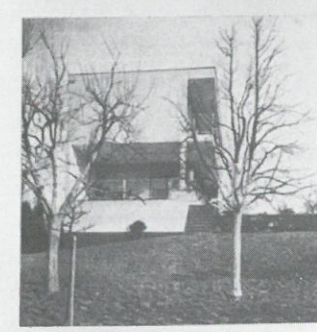
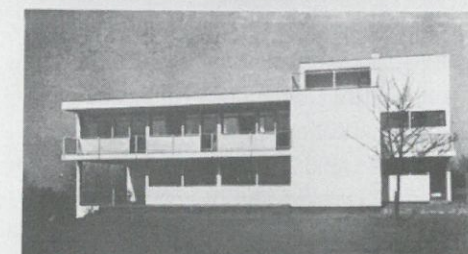
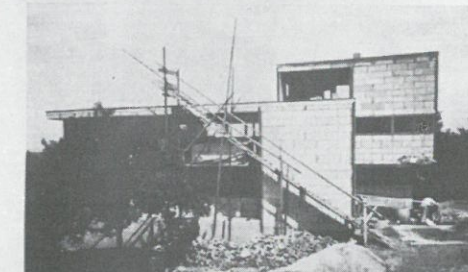
Der Preis pro Flächenmetre bezieht sich auf die gesamte Umfassungswand bei einer Erhöhung der Stützen von 100 mm.

Der größte Teil des Eisens ist aus dem Preis der grössten Eisenkonstruktion zu entnehmen.

In Paris der Witterung sind die verschiedenen Konstruktionen zur Bestimmung der Stützen- und zur Veranschaulichung der Vorzüge eingehend untersucht.

Die Fenster wurden auf Einheiten von rund 1,00 m gebracht und als seitliche Schiebefenster mit je einem festen Flügel und klappbarem oberen Lüftungsfügel ausgebildet. Hier den Fenstern der Süd- und Ostseite wurde mit dem Risiko der Schmutzwasserbildung versuchsweise von der üblichen Doppelverglasung abgesehen (eine rationale luftdicht arbeitende doppelte Glasscheibe war bis heute nicht zu beschaffen). Im Durchschnitt entfällt auf den Raum eine Fensterfläche von 1/3 der Bodenfläche (hauspolitische Mindestforderung 1/4).

Die Beheizung des Hauses hat erwiesen, dass mit einem gut isolierenden, relativ trocken versetzten Wandmaterial auch bei sehr grossen Fensterflächen keine Überbeanspruchung eintritt. Die Zentralheizung arbeitete während der Kälteperiode des Winters 1927/28 (bis zu -20°) bei einer Heizfläche des Kessels von 2,60 m<sup>2</sup> und einer Kesseltemperatur von 75° sogar wirtschaftlicher als bei normalen Backsteinbauten, obwohl die Heizungsanlage versuchsweise für eine Aussenlufttemperatur von nur -10° statt wie üblich von -20° berechnet worden war.



1.2 Page from *ABC: Beiträge zum Bauen* 4 (1927/28): 9, illustrating Hans Schmidt and Paul Artaria's Colnaghi House, Basel, said to be the first steel-framed house in Switzerland.

two drafts of a "Work Program" for the event consisting of these six questions for discussion by the Congress:

1. Modern architectural expression
2. Standardization
3. Hygiene
4. Urbanism
5. Primary School Education
6. Governments and the modern architecture debate<sup>18</sup>

The preparation of this work program coincided with Le Corbusier's writing of two pamphlets in 1928 for the elite technocratic group Redressement Français headed by Ernest Mercier, the managing director of France's largest utilities company, not long after Le Corbusier had set out his "Five Points of a New Architecture" in a book published in conjunction with his design for two houses at Weissenhof Siedlung.<sup>19</sup> Mercier's group, whose slogan was "Enough politics. We want results," favored the creation of a government headed by experts which would use rationalized industrial production as a means of addressing social injustice, leading to the victory of "Ford over Marx." Lucien Romier, a leading spokesman of the group and soon to be a patron of CIAM, voiced the industrialists' fear that miserable dwelling conditions made the workers ripe for Communist propaganda.<sup>20</sup>

Le Corbusier was enlisted to participate on an urban study committee for this group, which was focused on the question of working-class housing in Paris. His first pamphlet for the Redressement Français, published as a supplement to their monthly *Bulletin* in February 1928, elaborated on the ideas of his Plan Voisin of 1925.<sup>21</sup> Based on technical and economic arguments, he advocated that the density of central Paris should be quadrupled, with 90 percent of the land left free for vegetation. At the same time, he made clear his hostility to the Garden City movement and its French implementation at Suresnes, and he held up Ernst May's new housing settlements in Frankfurt as a superior model. He argued for a law creating a new "authority" with unrestricted eminent domain for acquiring land for redevelopment at current market values, an authority independent of "parliamentary politics."

His second pamphlet for the Redressement Français, which appeared in their *Bulletin* in May 1928, was focused on the question of standardized housing. Illustrated with photographs of his Pessac housing settlement for Henri Frugès and his two houses at the Weissenhof Siedlung, it included what he considered detailed technical information. After the April 1928 elections the Redressement Français gained political influence, and during the summer the Loucheur Law was passed, which the Redressement claimed was the "pure and simple application of our

ideas." This law provided aid for the construction of 200,000 low-priced and 60,000 medium-priced dwellings, triggering a housing boom and giving Le Corbusier hope that his vision would soon be implemented in his adopted country.

This was the atmosphere in which he composed (possibly with the assistance of Giedion) the second draft of the Work Program for La Sarraz. In the first of the twelve points under his fourth question on "Urbanism," he emphasized that through the ages urbanism had always employed the most efficient techniques available. In the second point of this section, he identified contemporary ones: "Today, steel and reinforced concrete provide us with the most efficient means to produce an urbanism consistent with the profound economic and social revolution which is the result of the machine."<sup>22</sup> The "Urbanism" section further emphasized that these economic and social changes had put entire national territories within the scope of urbanism, but since no central body existed to direct future development, "confusion is general, chaos reigns, danger is everywhere." The solution, he proposed, was the creation in each country or region of a stable body, directed by a powerful "responsible and competent personality" able to make new laws governing development, laws which must be consistent between all cities and regions.

These laws would allow the assembly of large parcels of land for redevelopment for common use and would permit the distribution of profits from land development to the community. In some ways, this was a restatement of the ideas of Ebenezer Howard's Garden City. Unlike Howard, however, the "Urbanism" section of Le Corbusier's "Work Program," like his articles for the Redressement's *Bulletin*, asserted the importance of building at very high densities in the centers of cities while still allowing the maximum space for greenery and transportation routes, through the use of design elements such as roof gardens and streets on pilotis. The "Urbanism" section also restated the ideas of his Plan Voisin in emphasizing the need for urban "surgery" to reorganize existing cities following orthogonal principles, rather than applying the mere "medicine" of enlarging existing streets.<sup>23</sup>

To create an international elite of architects to promote these and related ideas, Le Corbusier and Giedion, whose involvement had been recommended by Karl Moser,<sup>24</sup> developed a list of architects to be invited to the proposed Congress. A number of prominent architects whom they invited indicated that they could not attend, including Tony Garnier, Auguste Perret, Adolf Loos, Henry van de Velde, Gropius, Mies van der Rohe, Erich Mendelsohn, and Oud. Somewhat surprisingly, two of the Beaux-Arts-trained architects who had jointly been selected instead of Le Corbusier and Jeanneret to design the Palace of the League of Nations, Julien Flegenheimer and Joseph Vago, asked to be invited but were refused.<sup>25</sup> By mid-June the invitation list included most of the participants who actually attended. Others invited who it appears did not actually attend were listed as Rob Mallet-Stevens, Moreux, the interior architect Djo-Bourgeois, and Jourdain, all of Paris; Krejcar and

Stary of Prague; Biaggini of Italy, Van Eesteren, and Sven Backlund, a Swedish journalist.<sup>26</sup>

### CIAM 1, La Sarraz, Switzerland, 1928

Although all shared an adherence to the new architecture, no single group or position predominated among those who attended the La Sarraz congress at de Man-



1.3 Group photograph, First CIAM Congress, La Sarraz, Switzerland. From left to right; top row: Mart Stam, M. E. Haefeli, Rudolf Steiger, Hans Schmidt, Paul Arataria, Frederich Gubler, press; second row: Richard Dupierreux, Institut Cooperation-intellectuelle, Paris, Pierre Chareau, Victor Bourgeois, Ernst May (obscured), Gabriel Guévrékian (arms folded), Hugo Häring, Juan de Zavala, Lucienne Florentin, Le Corbusier (obscured), Madame de Mandrot, Rochat (press), André Lurçat, H. R. von der Mühl, Gino Maggioni, Huibrecht Hoste, Sigfried Giedion, Werner M. Moser, Josef Frank; third row: Pierre Jeanneret (hand in pocket), Gerrit Rietveld, Alberto Sartoris (obscured behind Guévrékian); seated: Fernando García Mercadal, Ms. Weber, Tadevossian.

drot's ancestral château near Lausanne from June 26 to 28, 1928.<sup>27</sup> The largest national contingent present was Swiss: besides Stam, Schmidt, his partner Paul Arataria (1892–1959), Haefeli, Werner Moser, Steiger, and Giedion, other Swiss participants included Hannes Meyer (1889–1954), who became director of the Bauhaus later that year; another student of Karl Moser, the Lausanne architect

Henri Robert von der Mühl; the Geneva garden city architect Arnold Hoechel; the Swiss Werkbund secretary Friedrich Gubler; and several other Swiss attendees who did not sign the Declaration of La Sarraz.<sup>28</sup> The French group, in addition to Guévrékian, the French-Swiss Le Corbusier, and his cousin and associate Jeanneret,



1.4 Gabriel Guévrékian, project for a hotel for auto tourists, 1923.

was André Lurçat (1894–1970)<sup>29</sup> and Pierre Chareau (1883–1950).<sup>30</sup> Also present were the journalist Christian Zervos, founder of the Paris *Cahiers d'Art*, and Richard Dupierreux, chief of the arts section of the International Institute for Intellectual Cooperation in Paris.<sup>31</sup>

Belgium was represented by Victor Bourgeois (1897–1962), friend of Le Corbusier and architect of the concrete "Cité Moderne" housing project in Berchem-sur-Bruxelles (1922) and similar works;<sup>32</sup> and by Huibrecht Hoste (1881–1957), also a socialist Garden City advocate influenced by De Stijl.<sup>33</sup> Both Bourgeois and Hoste were members of the Groupe L'Equerre, which published the Neoplasticist journal *7 Arts*. In addition to Mart Stam, the Netherlands was represented by H. P. Berlage (1856–1934), and Gerrit Rietveld (1888–1964),<sup>34</sup> who was by this time a member of De Stijl and also an active socialist. Van Eesteren was not able to attend. The German Ring was represented only by Häring and by Ernst May (1886–1970),<sup>35</sup> the energetic municipal architect of Frankfurt-am-Main. Others present included Josef Frank (1885–1967)<sup>36</sup> from Austria, who had designed a house at the Weissenhof Siedlung, but not Adolf Loos, who was also invited. Italy was represented by the young Swiss-educated Alberto Sartoris (1901–1998), standing in for the Italian Gruppo Sette member Carlo Rava (b. 1903) who was unable to attend; and by the interior designer Gino Maggioni, a friend of de Mandrot. Spain was represented by