

RUDOLPH M. SCHINDLER - THEORY AND DESIGN

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by

AUGUST ERNST SARNITZ

Submitted to the Department of Architecture on August 6, 1982, in partial fulfillment of the requirements for the degree of Master of Science (unspecified).

ABSTRACT

The work of Rudolph M. Schindler has been subject to criticism, disregard and misunderstanding. Attempts have been made to characterize Schindler as a cubist architect, a constructivist architect, an expressionist architect, and a Californian architect, but no one named him for what he regarded himself throughout his lifetime: as space architect. The notion of space-architecture was of intrinsic importance to Schindler, since for him architecture was not a question of style, but a question of space formed through materials.

This contextual investigation of Schindler will outline his architectural training and the cultural environment of Vienna. The relationship of Schindler to the three architects Otto Wagner, Adolf Loos, and Frank Lloyd Wright is of key interest in understanding the work of Schindler.

The theoretical investigation is based on the published and unpublished articles written in the years 1912 to 1950. By virtue of Schindler's theoretical concepts his position within modern architecture will be discussed. The persistence of Schindler's involvement with architecture as a cultural issue is central to all his writings.

Four case studies are presented as evidence to document the importance of his theoretical concepts by means of a detailed analysis of the selected projects. Each case study represents a contextual framework; the meaning of space architecture is revealed through characterizing the appearance, materials, technology, spatial conception, relationship to the given site, and the position of the project within the larger context of modern architectural history.

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UXORI MANIBUSQUE  
PARENTUM  
D.D.D. AUCTOR

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## TABLE OF CONTENTS

Abstract	3
Acknowledgement	5
Table of Contents	7
Abbreviations	9
Introduction	11
CHAPTER I	
1. Rudolph M. Schindler - The Historical Context	15
1.1. R. Schindler, Biographical Notes	17
1.2. The New Architecture in Austria around 1900	21
1.3. The School of Otto Wagner	27
1.4. R. Schindler and Frank Lloyd Wright	43
CHAPTER II	
2. Rudolph M. Schindler - The Theoretical Writings	57
2.1. Schindler's Manifesto of 1912	59
2.2. "Care of the Body" - Toward a New Perception of Living in Architecture	74
2.3. "Space Architecture"	91
2.4. Schindler's Idea of Prefabrication	103
2.5. Schindler's Postwar Writings	109
CHAPTER III	
3. Application and Case Studies	115
3.1. The Schindler House at Kings Road, Hollywood 1921	117
3.1.1. Introduction	117
3.1.2. Analysis	118
3.2. The Lovell Beach House at Newport Beach, California 1926	143
3.2.1. Introduction	143
3.2.2. Analysis	145



3.3.	House for J. J. Buck, Los Angeles 1934	175
3.3.1.	Introduction	175
3.3.2.	Analysis	178
3.4.	House for Adolphe Tischler, Bel Air 1949	201
3.4.1.	Introduction	201
3.4.2.	Analysis	202
4.	Conclusion	223
CHAPTER IV		
5.	Appendixes	229
5.1.	Footnotes	231
5.2.	Writings by R. Schindler	264
5.3.	Selected Writings on R. Schindler	266
5.4.	Illustrations	269
5.5.	Selected Bibliography	272

## ABBREVIATIONS

UCSB-SA	University of California, Santa Barbara, Schindler Archive
Architects:	
AL	Adolf Loos
RMS	Rudolph Michael Schindler
OW	Otto Wagner
FLW	Frank Lloyd Wright
Architectural Periodicals:	
<u>AaE</u>	Architect and Engineer (San Francisco)
<u>AF</u>	Architectural Forum (Boston)
<u>ARec</u>	Architectural Record (New York)
<u>AR</u>	Architectural Review (London)
<u>DA</u>	Der Architekt (Vienna)
<u>DBZ</u>	Deutsche Bauzeitung (Berlin)
<u>JSAH</u>	Journal of the Society of Architectural Historians (Philadelphia)
<u>PP</u>	Pencil Points (New York)
<u>T-Square</u>	T-Square Journal of Philadelphia (Philadelphia)
Architectural Books:	
<u>A Testament</u>	Frank Lloyd Wright, <u>A Testament</u> , New York: Horizon Press, 1957
<u>Five California Architects</u>	Esther McCoy, <u>Five California Architects</u> , New York: Praeger Publications, 1975, first published 1960
<u>Manifestos</u>	Ulrich Conrads, <u>Programs and Manifestos on 20th century Architecture</u> , Cambridge: MIT press, 1970
<u>Saemtliche Schriften</u>	Adolf Loos, <u>Saemtliche Schriften</u> , Wien: Herold, 1962
<u>Schindler</u>	David Gebhard, <u>Schindler</u> , Santa Barbara and Salt Lake City: Peregrine Smith, 1980 first published 1971

The Interational Style

Henry-Russell Hitchcock, Philip  
Johnson, The International Style:  
Architecture since 1922,

New York: Norton & Company, 1932

Vienna to Los Angeles

Esther McCoy, Vienna to Los Angeles:  
Two Journeys, Santa Monica: Arts and  
Architecture Press, 1979

Writings and Buildings

Frank Lloyd Wright, Writings and  
Buildings, selected by Edgar Kaufmann  
and Ben Raeburn, Cleveland and  
New York: Meridian Books, 1960

Only if we are capable of dwelling,  
only then can we build.

Martin Heidegger

## INTRODUCTION

This thesis is a contextual investigation of the theory and design of Rudolph M. Schindler (1887-1953). Schindler was one of the most outstanding and interesting architects of the Modern Movement in the United States. Born in 1887 in Vienna, he was trained under Otto Wagner at the Academy of Fine Arts, under Adolf Loos in the Bauschule, and under Frank Lloyd Wright working in his studio in Oak Park and Taliesin.

The architectural design of Schindler reflects not only the influence of his teachers but also had a lasting influence on the modern architecture in the United States. Although Schindler did not teach extensively at architectural schools, his articles and buildings were published throughout the United States and Europe. Schindler's personal background is unusual since although he was trained in Austria, he spent the rest of his life in the United States without ever returning to visit Europe. He left Europe before the First World War and maintained no direct relationship with architects and artists of the Russian Constructivism, Dutch Cubism, German Bauhaus, or Italian Futurism, and, living in the United States, he also was never confronted with the cultural policy of the German Third Reich and the notion of Entartete Kunst. Most modern architects from Austria and Germany left their countries during the time of the fascists.<sup>1</sup> Schindler was in a unique position. Since he remained in the United States after World War I, he was spared the fate of his contemporaries. Throughout his life, Schindler was very much isolated from the so-called International Style, and as a result he gave his body of work a very personal interpretation.

During his thirty-two years (1921-1953) as a practicing architect, Schindler transformed himself from a talented student of the "Wagnerschule" into one of the important architects of the Modern Movement in America.<sup>2</sup> He received his architectural training at the Imperial Technische Hochschule in Vienna, and the Academy of Fine Arts in Vienna, holding degrees from both schools. Schindler himself said, that "Modern architecture starts with Mackintosh in Scotland, Otto Wagner in Vienna, and Louis Sullivan in Chicago."<sup>3</sup>

The work of Schindler includes such different buildings as the Kings Road house (1921), the Lovell Beach house (1926), the Buck house (1934), the Manola Court apartment building (1926-40), and the Tischler house (1949). Perhaps the diversity of these buildings induced the contradictory comments of the architects and art-historians who have discussed Schindler's work since his death in 1953.<sup>4</sup> Schindler's controversial and individual position in the Modern Movement raises numerous questions; it is the intention of this study to illustrate the situation and the context in which he was trained and in which he built. This research program focusing on the theory and design of Schindler will examine his origin in the Austrian architectural environment around 1910, and the architectural culture Schindler found upon arriving in the United States. The study will examine the economic, social, and cultural situation of that time in order to present an account of possible influences impinging on Schindler. Presenting a contextual investigation does not imply a deterministic historical attitude which explains works of art, but rather discusses possibilities and constraints architects and artists experience in their cultural environment. One may quote an author from the same cultural setting; Robert Musil in The Man without Qualities says

"If there is such a thing as a sense of reality, there must also be a sense of possibility... So the sense of possibility might be defined outright as the capacity to think how everything could 'just as easily' be otherwise, and to attach no more

importance to what is than to what is not. It will be seen that the consequences of such a creative disposition may be remarkable. Unfortunately such a disposition not infrequently makes the things that other people admire appear wrong, the things that other people prohibit permissible, or even both appear a matter of indifference. Such possibilarians live, it is said, within a finer web, a web of haze, imaginings, fantasy and the subjunctive mood." 5

The methodological approach to this investigation on Schindler refers to the "scientific research program" of Imre Lakatos, constituting an internal and an external history. 6

"Thus in constructing internal history the historian will be highly selective: he will omit everything that is irrational in the light of his rationality theory... One of the most interesting problems of external history is to specify the psychological, and indeed social conditions which are necessary (but, of course, never sufficient) to make scientific progress possible; but in the very formulation of this 'external' problem some methodological theory, some definition of science is bound to enter." 7

In this research program the hard core consists of the following two chosen assumptions:

- the permanence of history
- the semi-autonomy of art and architecture, the pursuit of the artist's own ideas, without being completely determined by the socio-economic situation 8

In this research program the auxiliary hypotheses consist of:

- the influence of different cultural environments
- the influence of the ecological settings, and the economic situation
- the problems of the social conditions between architect and client

The study is divided into three parts, first, the cultural and historic background of Schindler, second, the theoretical writings of Schindler and their position in architectural history, and third, a case study of four houses built by Schindler in the years 1921-1949. These four houses, the Schindler-Chase house at Kings Road, Hollywood (1921), the Lovell Beach house at Newport Beach (1926), the Buck house in Los Angeles (1934), and the Tischler house in Bel Air (1949) will serve as examples for the changing attitude of Schindler articulating the architectural design problem. After visiting most of the buildings of Schindler these houses were chosen for their significance and quality within the greater body of work of the architect, and also to serve as examples for studying the design process for didactic purpose. These case studies were chosen to exemplify theoretical concepts, and to demonstrate their validity as outstanding examples of residential architecture.

As primary sources the whole spectrum of architectural drawings, preparatory sketches, working drawings, presentation drawings, and contemporary photos will be considered, as well as the architect's collection of architectural magazines, clippings, and notes. In addition to its special focus on drawings and collected reference material, the study will examine the information given in the correspondence between the architect and his clients. Perhaps the best introduction to the body of work of Schindler is to cite his own concerns about architecture, presented in a lecture in 1930:

"An architect is an artist. Architects must realize another thing, that their buildings throw out the background of the person who builds them. Try and see what is behind the form of the building. This sounds abstract but is really very simple." 9

CHAPTER I

RUDOLPH M. SCHINDLER - THE HISTORICAL CONTEXT

Sine arte sine amore non est vita.

Artis sola domina necessitas.

(Otto Wagner, 1841-1918)





## 1. CHAPTER I

### RUDOLPH M. SCHINDLER - THE HISTORICAL CONTEXT

#### 1.1. RUDOLPH SCHINDLER - BIOGRAPHICAL NOTES

Rudolph Michael Schindler was born in Vienna, Austria on September 5th 1887, and died of cancer on August 22nd 1953 in Los Angeles. <sup>1</sup>

His father was from Prague, came to Vienna as a child and was trained as a craftsman in wood and metal. He had spent a year in New York in the 1880s, before returning to Vienna and going into the import-export business. Schindler's mother was Maria Hertl; she worked as a milliner. The family background could thus be described as lower middle-class. The Schindlers' had two children; Rudolph attended the Realgymnasium in Vienna and at the age of 19 in 1906 he enrolled as a student at the k.k. Technische Hochschule (Imperial Technical University) to train as an engineer. He graduated from this school in 1911. <sup>2</sup> No information is currently available about Rudolph's younger sister. From 1910 to 1913 Schindler was an architectural student at the Academy of Fine Arts in Vienna, the famous school of Otto Wagner. During the year 1911, Schindler therefore attended both academic schools. After three years he graduated from the Academy of Fine Arts in June 1913, his thesis was a "Totenfeld fuer eine fuenf-Millionen Stadt" (cemetery and chapel for a city with five million inhabitants). <sup>3</sup>

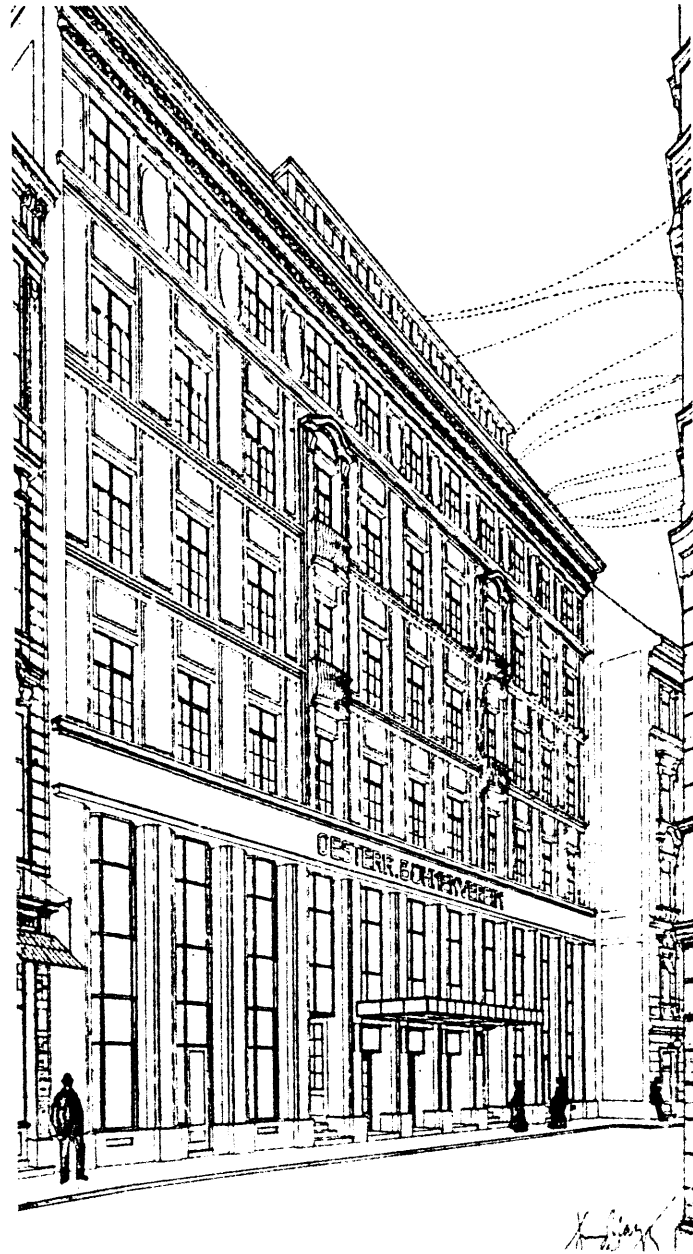
From September 1911 to February 1914 Schindler worked for the office Hans Mayr and Theodor Mayer, where in 1913 he was in charge of the design and construction of the building for the "Oesterreichischen Buehnenverein" (Austrian Actors' Club). <sup>4</sup>

Mr. Mayr gave Schindler full credit for this project, which was published in 1913 in the magazine Der Architekt. <sup>5</sup> Mayr described the building as a "very complicated technical problem of construction", and continued, it "was handled with unusual skill." <sup>6</sup> (fig. 1)

In the fall of 1913 Schindler answered an advertisement for a three-year contract for a draftsman for the Chicago firm of Ottenheimer, Stern, and Reichert. Ottenheimer, Stern, and Reichert were of German origin and in general European architectural schools were in those times considered superior to those in the United States.

On March 7th 1914 Schindler arrived in New York <sup>6</sup> at the age of twenty-six. From March 1914 until 1917 he worked for Ottenheimer, Stern, and Reichert. In 1917 Schindler started to work for Frank Lloyd Wright, though it is said he approached Wright about the possibility of working with him as early as 1916. <sup>7</sup> Schindler was a sufficiently close associate that from February 14th 1918 until August 14th 1922 Wright and Schindler had a joint bank account. <sup>8</sup>

In the summer of 1919 Rudolph M. Schindler married Sophie Pauline Gibling from Evanston, Illinois. <sup>9</sup> After moving to Los Angeles in 1919 Schindler continued to work for Wright until 1922 and part time as late as 1923. <sup>10</sup> After that time Schindler established his own architectural office, which he continued for thirty years until his death in 1953.



1. Rudolph Schindler, Clubhouse for Actors, Vienna, 1912



## 1.2. THE NEW ARCHITECTURE IN AUSTRIA AROUND 1900

The historical context given here characterizes the time from 1894 when Otto Wagner was appointed professor at the Academy of Fine Arts in Vienna, until 1914 when Schindler left Vienna for Chicago.<sup>1</sup> It will focus on the architectural teachers at the Academy of Fine Arts, Friedrich Ohmann (1858-1927) and Otto Wagner (1841-1918), as well as the teachers at the Technical University (then the Imperial Technische Hochschule) Ludwig Simon (1856-1921) and Karl Koenig (1841-1915). The importance of the foundation of the Secession and the Wiener Werkstaetten must also be considered. The two contradictory architects Josef Hoffmann ("Quadratkastel-Hoffmann") and Adolf Loos represent the two most influential young teachers of that time.

Of additional interest is the influence of the English Arts and Crafts Movement, the ideas of Charles Rennie Mackintosh, and the publications of Hermann Muthesius on the contemporary English country house.

Discussing the work of the Viennese architects and artists should help to define the influences on the artistic development of Rudolph Schindler; but, being aware that it is impossible to determine every aspect of that time, I will outline only the main features. The main architectural magazines published in Vienna or of significant interest for an architectural student of the time were numerous. The following list is not complete but represents the important magazines:

- 1) Der Architekt, Vienna, founded 1895
- 2) Ver Sacrum, Vienna, founded 1897, magazine of the Secession
- 3) Das Andere, Vienna, 1903, Adolf Loos, only two numbers
- 4) Hohe Warte, Vienna, 1904
- 5) Die Fackel, Vienna, 1899-1936, edited by Karl Kraus
- 6) Deutsche Kunst und Dekoration, Darmstadt
- 7) Deutsche Bauzeitung, ("DBZ"), Berlin, founded 1868; this publication was (and is) oriented toward practical architecture.

It covered a broad range of topics, dealing with architecture, architectural engineering, civil engineering, urban design, building technology, and architectural history. The magazine covered news from nearly all countries and cities of that time, including Paris, Rome, London, Constantinople, St. Petersburg, Moscow, Cairo, and from Asia, South America, and North America.

Vienna, the city of Karl Kraus, Franz Kafka, Robert Musil, Arnold Schoenberg, but also the city of Sigmund Freud, Alfred Adler, and Arthur Schnitzler was at the turn of the century a city with a long tradition of a complicated system of cultural rules. The history of Viennese architecture according to Friedrich Achleitner

"is a history of influences and their assimilation, a pluralist history of coexistence, conformation and juxtaposition of different languages and mentalities, a history of the synthesis of combination of contradictory elements. It is not by chance that this history reaches its apotheosis in the intellectual world of historicism and that later developments could not liberate themselves from this fact." 1

By the turn of the century Camillo Sitte published his book about urban design, City Planning According to Artistic Principles (first ed. Vienna 1889), and Otto Wagner published at the age of 45 his book Moderne Architektur (1895) after doing over 100 speculative apartment buildings.

Pluralism in architecture was indigenous to Vienna since the political and cultural situation was highly influenced by the different ethnic, economic, and intellectual spheres of the "Kronlaender" (the several ethnic and cultural regions joined in the Austro-Hungarian Empire). The "Ringstrasse" in Vienna reflects not only the historicism of the 19th century, but also describes the architectural situation in the Empire: half the leading architects of the Ringstrasse were not Austrians or had been

trained abroad: Gottfried Semper (Hamburg, 1803-1879), studied law and mathematics (Gauss) at Goettingen and architecture in Munich (Gaertner); Heinrich Foerster (Vienna, 1838-1900), student at the Academy in Berlin; Friedrich von Schmidt (Frickenhofen, Wuerttemberg, 1825-1891), studied architecture in Stuttgart (Mauch, Breyman) and Cologne (Zwirner); and Theophil Hansen (Copenhagen, 1813-1891), studied at the academy in Copenhagen (Hetsch) and in Germany (Berlin, Dresden, Munich, Prague) and in Italy (Verona, Venice). And even after 1900 a great number of the important architects practicing in Vienna did not originally come from Vienna: Max Fabiani (from Kobjil Yugoslavia, 1865-1962), Joseph Maria Olbrich (Troppau, Czechoslovakia, 1867-1908), Adolf Loos (Brno, Czechoslovakia, 1870-1933), Josef Hoffmann (Pirnitz, Moravia, 1870-1956), and Josef Plečnik (Laibach, Yugoslavia, 1872-1957).

In order to present a chronological survey of Viennese architecture it is necessary to start with the oft-cited "Secession" as Austria's contribution to the Art Nouveau.<sup>3</sup> Schindler's architectural development must be seen as a reaction against the "Secessionstil", a reaction against the floral-linear design of the decorative arts. The center of the decorative art was the Wiener Werkstaetten (Viennese Workshops) founded in 1903,<sup>4</sup> where Josef Hoffmann and Kolo Moser were the most outstanding designers.<sup>5</sup> Josef Maria Olbrich, architect of the Secession building (1898) left Vienna in 1899 for the "Darmstaedter Kuenstlerkolonie." His absence from Vienna and his early death in 1908 (in Duesseldorf) made Olbrich more important for the German architectural development than for the Viennese.<sup>6</sup>

Otto Wagner was the central figure of Viennese modernism. For his intrinsic importance, and also as he was a teacher of Schindler, Wagner will be discussed separately in the next chapter. Otto Wagner's Postal Savings building (Vienna, 1904-06) with its linear, rectangular, and machine-like character contrasts with the Art Nouveau buildings of the same time.



Other than Wagner, Adolf Loos had the greatest influence on Schindler in Vienna.<sup>7</sup> The revolt against Art Nouveau took place in Vienna in the confrontation between Hoffmann and Loos. The revolt was based upon a kind of rationalism and upon the preference for neo-classicism and the "Biedermeier-style" in Austria. The puritanism of Loos' reaction was described in his articles "Ornament und Verbrechen" (Ornament and Crime), where he attributed sexual perversion to those who employed ornamentation, and "Architektur" (Architecture) published two years later.<sup>8</sup> Loos' notion of the "Raumplan" was his most important contribution toward a new spatial idea.<sup>9</sup> The appearance of the moral tone in Loos' articles also was to characterize the writings of the Twenties and Thirties.<sup>10</sup> In an evolutionary but pseudo-scientific way Loos, in "Ornament and Crime", gives an account of the development from societies with ornament to those free of ornament:

"The human embryo goes through the whole history of animal evolution in its mother's womb, and when a child is born his sensory impressions are those of a puppy. His childhood takes him through the stages of human progress; at the age of two he is a Papuan savage, at six he is level with Socrates, and at eight with Voltaire. At this age he learns to distinguish violet, the color that the eighteenth century discovered - before then violets were blue and tyrian was red. Physicists can already point out colors that they have named, but that only later generations will be able to distinguish. Children are amoral, and so, for us are Papuans. If a Papuan slaughters his enemies and eats them, that doesn't make him a criminal. But if modern man kills someone and eats him, he must be either a criminal or degenerate. Papuans tattoo their skins, decorate their boats, their oars - everything they can get their hands on. But a modern man who tattoos himself is either a criminal or a degenerate. Why, there are prisons where eighty per cent of the convicts are tattooed, and tattooed men who are not in prison are either latent criminals or degenerate aristocrats. When a tattooed man dies in liberty, it simply means that he hasn't had time to commit his crime. The urge to ornament oneself, and everything else within reach, is the father of pictorial art. It is the baby talk of painting. All art is erotic.

...

But what is natural to children and Papuan savages is a symptom of degeneracy in modern man. I have evolved the following maxim, and present it to the world: The evolution of culture marches with the elimination of ornament from useful objects." 11

This polemical performance, expression of the new purist tendencies had a tremendous impact on the Loos-students and the modern movement. 12 Re-reading these articles, Reyner Banham described them as a result of café-Freudianism and café-anthropology.

"This is 'Schlagobers-Philosophie', that whisks up into an exciting dish on the café table, and then collapses as you look at it, like a cooling soufflé. It is not a reasoned argument but a succession of fast-spielung double-takes and non-sequiturs holding together a precarious rally of clouds of witness - café-Freudianism, café-anthropology, café-criminology. The testimonies of these various witness don't really support one another, but they must have appeared convincing at the time, partly because they were all new and hot, ..." 13

As for many pioneers of architecture, so also for Loos America was the promised land of science and technology. They saw the prosperous economy of America, the rationalization of building technology, the disappearance of ornamentation (mainly as a result of economic restrictions), but they did not see the other side of the coin: the black slums of the northern cities, the poverty of the working-class immigrants in the booming cities, based on a radical "laissez-faire" capitalistic entrepreneurial society. But for the young architectural Loos-students America must have represented the "future-land", the "only modern country." Loos' stories about America profoundly influenced Schindler's intentions to go to the United States. 14



### 1.3. THE SCHOOL OF OTTO WAGNER

In 1894 Otto Wagner was appointed as professor at the Academy of Fine Arts in Vienna, succeeding Karl von Hasenauer (1833-1894).<sup>1</sup> In the same year Wagner was also appointed as artistic consultant to the "Kommission fuer die Wiener Verkehrsanlagen und die Donau-Regulierungskommission" (commission for the Viennese public transportation organization and the commission for the Danube river regulation).

Wagner himself was trained at the Academy of Fine Arts from 1861-1863; his professors were August von Siccardsburg and Eduard van der Nuell. From 1860-1861 Wagner had spent one year studying at the Royal Building Academy in Berlin. At the time Wagner was appointed, he was considered a conservative architect, whose architectural principles were rooted in the classical tradition. His commissions until 1894 were actually rather conservative,<sup>2</sup> with the exception of the "Laenderbank" banking office.<sup>3</sup>

From 1894 until 1912 (1915) Wagner was the professor of the Academy of Fine Arts and during this time "190 Meisterschueler" (students of the master architect) coming from all provinces of the former Austro-Hungarian Empire and from several foreign countries were trained under him.<sup>5</sup> The school of architecture at the Academy was taught in the academic tradition of the Ecole des Beaux-Arts, and was regarded as a graduate school requiring a residence of three years.

Nevertheless, the "Wagnerschule" could best be described as a very liberal, open-minded academic institution where new ideas could develop.<sup>6</sup> Between 1898 and 1907 (see illustrations), Wagner's school turned into one of the leading architectural schools of Europe. When Rudolph M. Schindler entered the school in 1910,<sup>7</sup> the reputation of the "Wagnerschule" was well established through its work as represented in a number of publications from 1898 until 1910.<sup>8</sup> Through these publications it can be assumed that Schindler was informed about the architectural standards and progress in the "Wagnerschule". His decision to attend the

Academy seems almost a logical consequence for a talented young architectural student who wanted to complement the technical background he had received from the Imperial Technische Hochschule. For one year Schindler attended both academic schools. In 1911 he graduated from the Imperial Technische Hochschule and in June 1913 he graduated from the Academy of Fine Arts. Not too much is known about the daily working exercise at the "Wagnerschule." Wagner used to give studio critiques and discussed with his students new book publications and magazines. These discussions were part of the architectural training, since it was here that students were confronted with Wagner's opinions of other architects' work. It must have been during these discussions, that Wagner talked also about Frank Lloyd Wright. Referring to Wright's work Wagner told his students, "Meine Herren, das ist ein Architekt, der kann mehr als ich".<sup>9</sup> To fully appreciate this statement of Wagner about Wright, one has to remember that Wagner was not only the most important Austrian architect at that time, but was also member of the art-committee of the cultural and educational department of the Austro-Hungarian Empire which represented the official "Kulturpolitik" (cultural politics). The relationship between Otto Wagner and his students, as well as the relationship between the students, seems of great importance for the further development of Schindler's architectural career. Since there were only up to twelve students accepted each year by Wagner, the relationship to his scholars was cordial and close. During Schindler's time at the Academy, Wagner built a number of important buildings, the apartment house at Neustiftgasse 40, the second part of the "Postsparkasse" (postal savings bank), the "Lupusheilstaette," the apartmenthouse at Doeblergasse 4, and the second Wagner residence at Huettelbergstrasse 28. Besides these commissions, Wagner worked on several projects, including the new Academy of Fine Arts, a project for the new library of the University of Vienna, a project for a hotel on the Ringstrasse, and a hotel on the Karlsplatz, as well as a city development-project for the 22nd district of Vienna.

In 1911 Wagner published his book Die Grosstadt which included the project for the development of Vienna. In the preceding years Wagner had built a number of very important commissions like the "Stadtbahn" (a city railroad, combination of subway and elevated), the "Kaianlagen am Donaukanal" (Quai- design for the Danube canal), the "Wehr- und Schleussenanlage Nussdorf" (weir and lock buildings near Nussdorf), and he had published in 1895 his book Moderne Architektur which he later named Moderne Baukunst (the art of building) in the 1914 edition. Through his buildings and publications Wagner can be described as a metropolitan architect, since he recognized new problems of the future cities. He accepted the challenge of progress and he was prepared to teach his students how to solve these new architectural problems.

Wagner's buildings and projects were most likely discussed by his students, and the early projects of Schindler bear witness that he was much influenced by his teacher. Schindler worked on a school project "Hotel Rong" in 1912,<sup>10</sup> which gives evidence of his admiration for Wagner.

#### The "Problembewusstsein" der Wagnerschule

Discussing the atmosphere of the Wagnerschule the notion of the "Problembewusstsein" is most important. The fact that the process of being concerned about the new architectural problems is seen more as a problem solving attitude rather than a solution, justifies the term "Problembewusstsein" instead of architectural theory. Wagner speaks in the introduction of his book published in 1889 Some Sketches, Projects, and Buildings about the "caricature of the architectural styles." His new attitude is conveyed through the slogans "artis sola domina necessitas" and his notion about "Zweck, Konstruktion, Poesie" (purpose, construction, poetry).<sup>11</sup> Wagner used the ancient Vitruvian term adjusting it for his own intentions. Coming out of a humanistic education Wagner used the word poetry (greek: poiesis) instead of beauty. Much of the

aesthetics written in the 19th century used the word poetry as a general term for art. For Wagner the word poetry indicates the existence of art in architecture, which transcends the practical considerations of purpose and construction.

A student of Wagner, Karl Maria Kerndle, describes the attitude of the "Wagnerschule" in the publication Wagnerschule 1902-03 and 1903-04

"Von diesem modernen Geist des steten Fortschrittes sind die Arbeiten in der Wagnerschule geleitet ... Zweck der Wagnerschule ist es, sich im Schauen, Wahrnehmen, Erkennen der menschlichen Beduerfnisse zu ueben und die so gefundene Aufgabe kuenstlerisch zu loesen ... Doch liegt es nicht in ihrer Absicht, durch diese Studien etwa einen Typus zu schaffen, auf diesem Weg einen 'modernen Stil' zu suchen ..." 12

The attitude of Wagner and his students corresponds to a theoretical functionalism which regards the architectural design as a question of functional, rational, and mechanical process, where the "artistic component" is a variable. In contradiction to Wagner, Adolf Loos denies the presence of art in architecture with the exception of the tomb and the monument. 13

#### Form and Construction in the "Wagnerschule"

Two components indicate the projects in the Wagnerschule:

- 1) geometric reduction of formal elements
- 2) structural elaboration and significance

Looking at the projects (see illustrations) of the students' work, it is evident that geometric reduction is the leading design principle. The use of "pure forms" and formal composition goes beyond a stripped down classicism, but creates new formal abstractions without any reference to the Beaux-Arts tradition (figs. 2, 3, 4). Although a great number of projects are still committed to a "classical Beaux-Arts order" (a very rough characterization would include the notions of symmetry, axiality, and closed form), a considerable number of projects introduced

compositional elements in their design. One example is W. Deininger (fig. 4) designing a number of country villas; other students were Frenzl, Schoenthal, and Lichtblau. Schindler designed in 1912 a project called "Hotel Rong"<sup>14</sup> (fig. 5), which goes beyond the aesthetic principles of Wagner's apartment house at Neustiftgasse 40 (1909-1910) (fig. 6). David Gebhard writes,

"... that this design relies heavily on the work of Wagner is apparent. Its basic forms resemble Wagner's house on Dobergasse (sic) of 1909-1911."<sup>15</sup>

The basic form may resemble Wagner's apartment house, but the aesthetic principles are very different and reveal some intentions of Schindler's future work. The exterior is clothed with a modular panelling, the elevations lack any form of ornament. The first two floors have a glass sheeting very similar to other Wagnerschule projects (fig. 7), and buildings by Wagner (Neumann department store, 1895; Ankerhouse office building, 1895; apartment building in the Linke Wienzeile, 1898-1899). The differences lie within the overall formal composition and the horizontality suggested by the balconies and the balcony-railings. The corner is defined by a single line; the flatness and emptiness of the elevation anticipate the image of Italian rational architecture of the 1930s. Even the drawing technique is very different from that of Otto Wagner (fig. 8).

The structural articulation of the Wagnerschule had nothing comparable in Europe at its time. The design for airports, sporting facilities, memorial churches, peace congress-centers, world exhibition buildings are projects of huge dimensions, so that the question of structure and technology is insistent. Concrete structures provide the basis for a 600 foot tall lighthouse for an airport (fig. 9), and for a covered riding school measuring 100 foot in width and 450 foot in length. Christoph Stumpf, a student of the "Wagnerschule" from 1901-1902 until 1903-1904, and



designer of the 600 foot tall lighthouse writes in 1902-03:

"Die moderne Technik gibt gegenwaertig dem Architekten die Mittel an die Hand, Konstruktionen, welche frueher die innere und aeussere Gestalt eines Bauwerkes in ganz bestimmte, durch die Notwendigkeit hervorgerufene Formen gebracht haben, in jeder beliebigen Form und in beliebiger Dimension auszufuehren." 16

The "Wagnerschule" was aiming at a new conceptual approach to architecture, with its attitude toward construction as being its most distinct characterization.

We shall see later that this confidence in modern technology and construction led Schindler to two remarkable constructive architectural interpretations: the entry project for the League of Nations, Geneva 1926, and the beach house for Dr. P. Lovell at Newport Beach in 1925-26.

#### Historical significance of the "Wagnerschule"

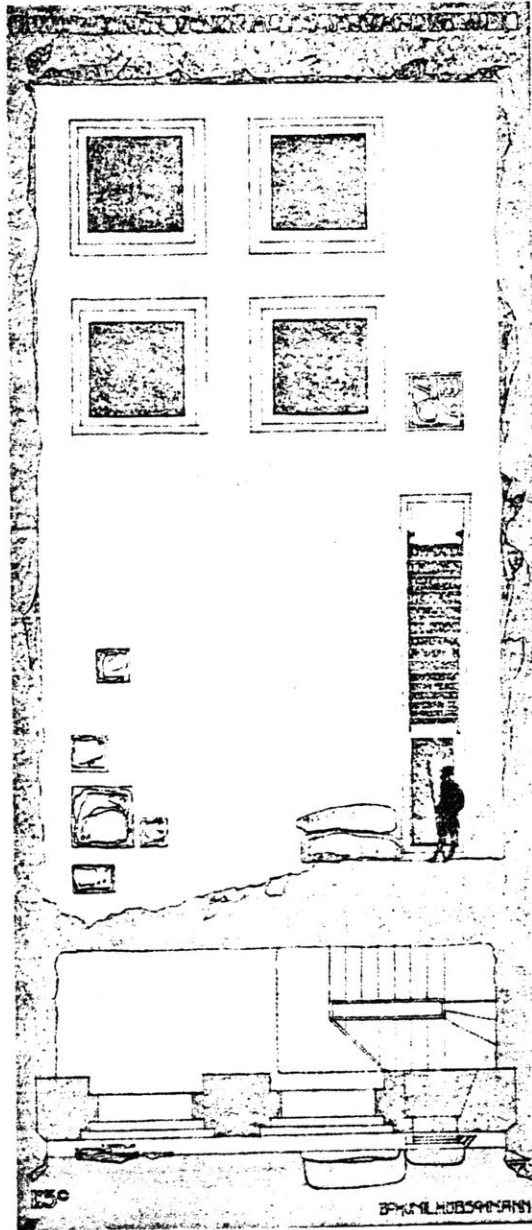
"It is now necessary to define more carefully the conditions of intellectual work in general at the moment of formation of the modern bourgeois ideologies and at the moment these ideologies are overcome. Ultimately the problem is that of evaluating the significance given in the early part of our century to 'utopia as a project'.

Without such an analysis the sense of the entire cycle of modern architecture is incomprehensible. Why is it that all the 'tragedy' of the great nineteenth-century 'Kultur', and all the utopia of Weimar, could not survive except by seeking complete domination over the future? The unproductiveness of intellectual work was the crime that weighed upon the conscience of the cultural world of the nineteenth century, and which advanced ideologies had to overcome." 17

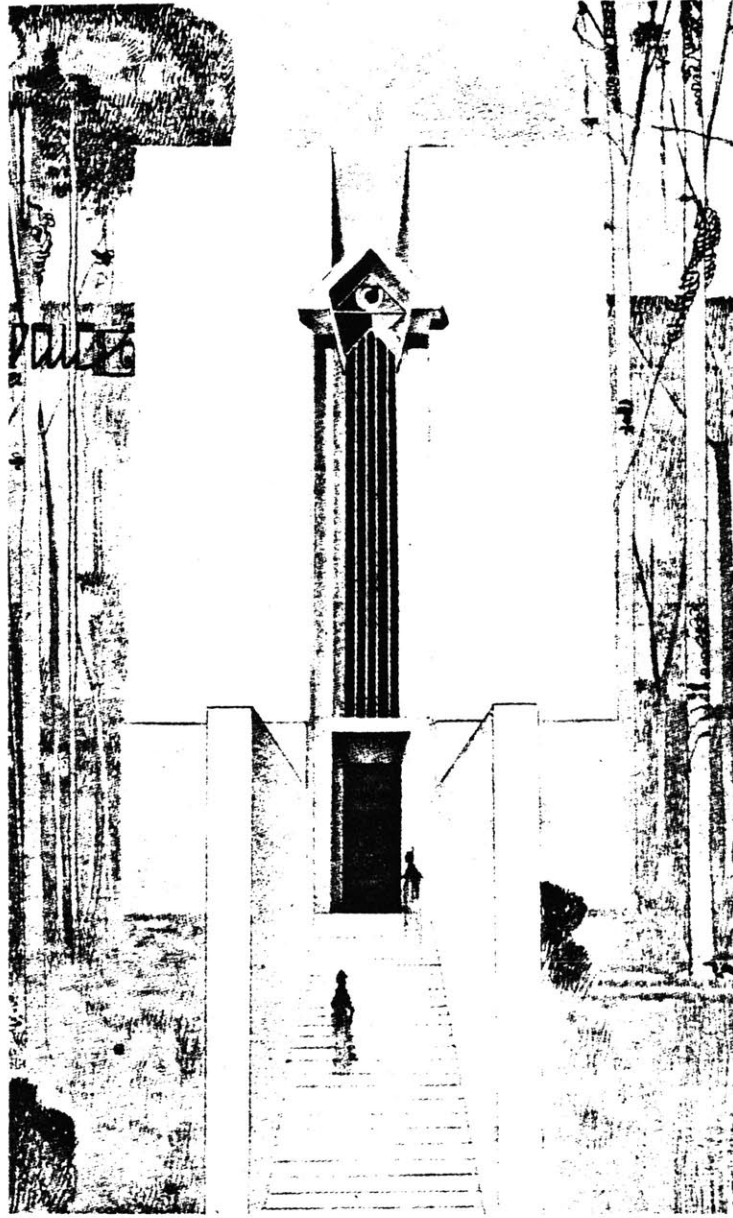
The historical position of the "Wagnerschule" has to be seen in the nineteenth century context of architecture and engineering, as two appearingly independent developments. The engineer-architects<sup>18</sup> like Paxton, Eiffel, Perret, and the School of Chicago are opposite to the artist-architects<sup>19</sup> like Morris, Mackintosh, Van de Velde, Behrens, Berlage, Muthesius, and Wagner.

Common to all these architects was the knowledge of classical Beaux-Arts tradition, and their design reflects this historical continuity. The second group of architects articulated a new architectural language by virtue of negating historicism,<sup>20</sup> and using formal reduction for their architectural design.

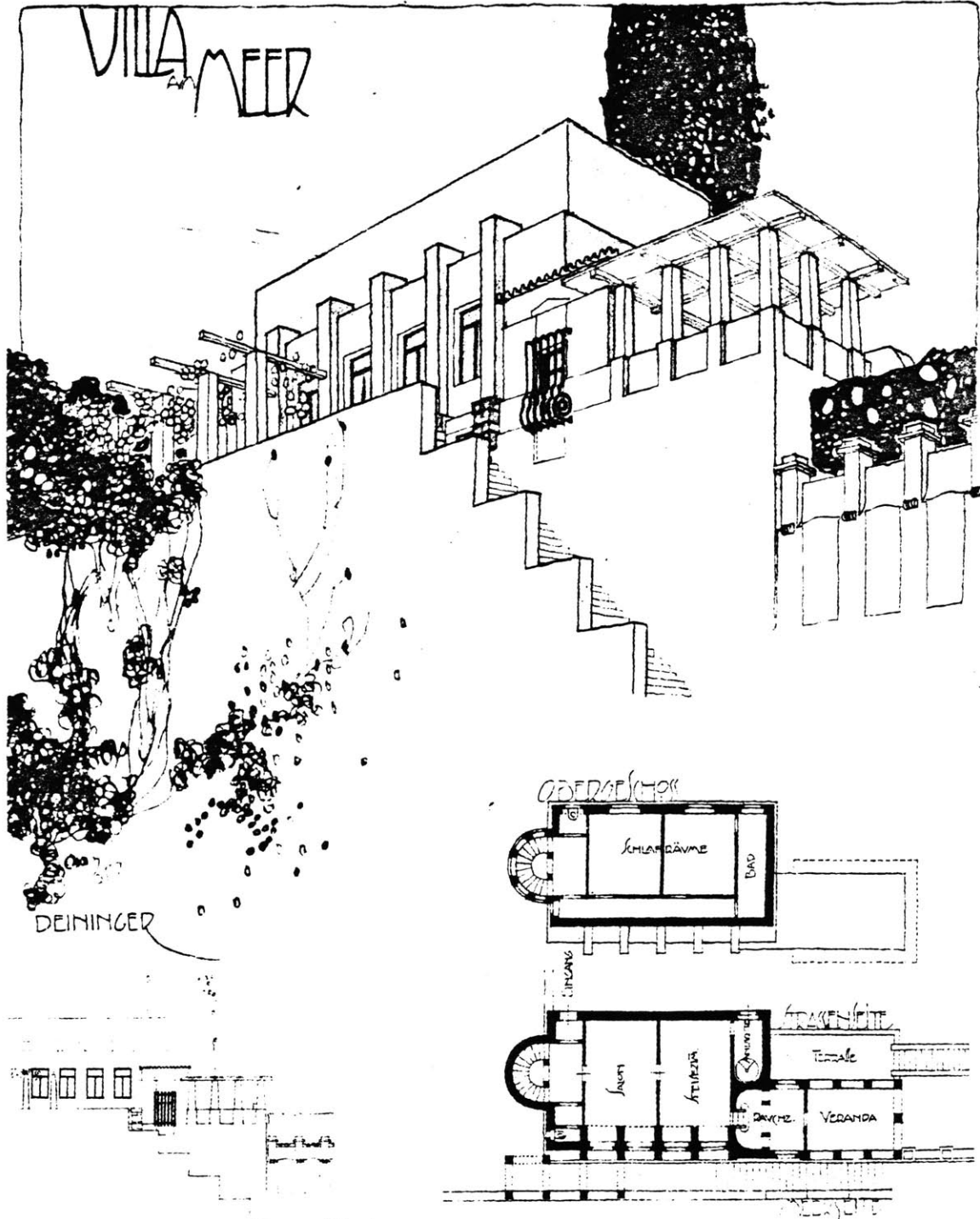




2. Huebschmann, monument, 1903, (project)



3. Kerndle, chapel and mausoleum, 1903, (project)



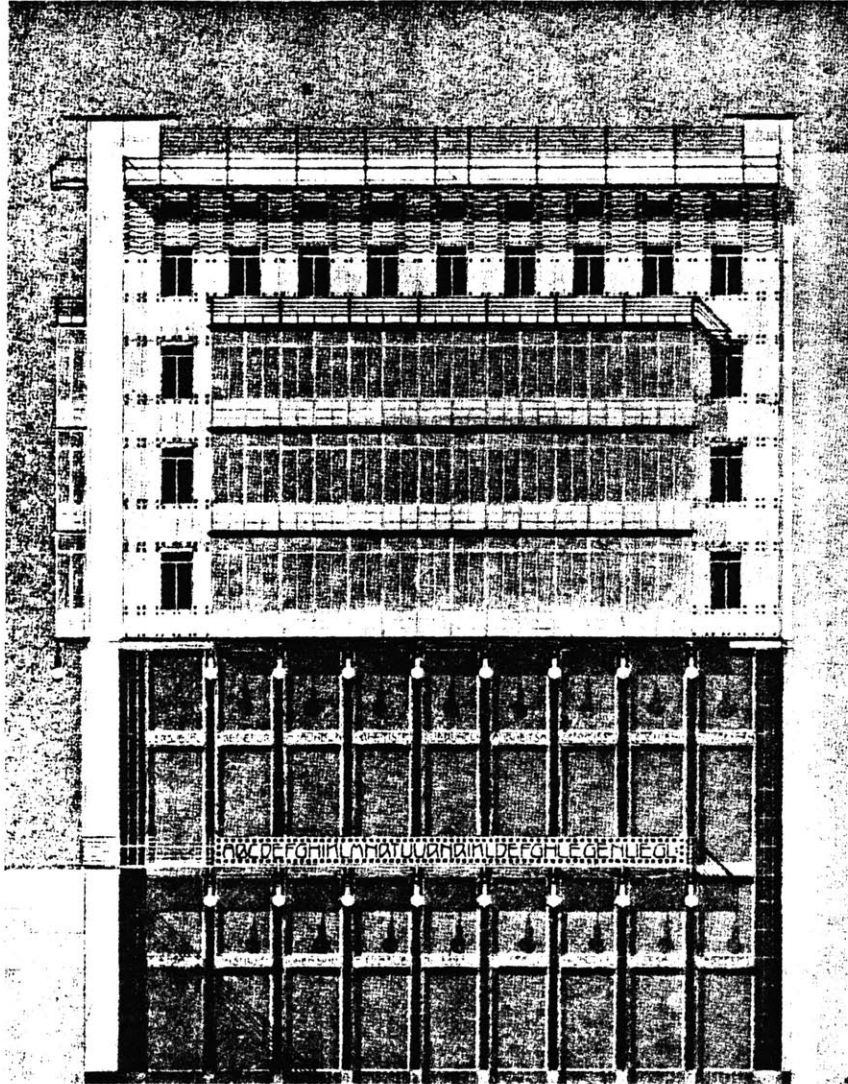
4. Deiningen, house, 1903-1904, (project)



5. R. Schindler  
'Hotel Rong',  
Vienna, 1912,  
(project)

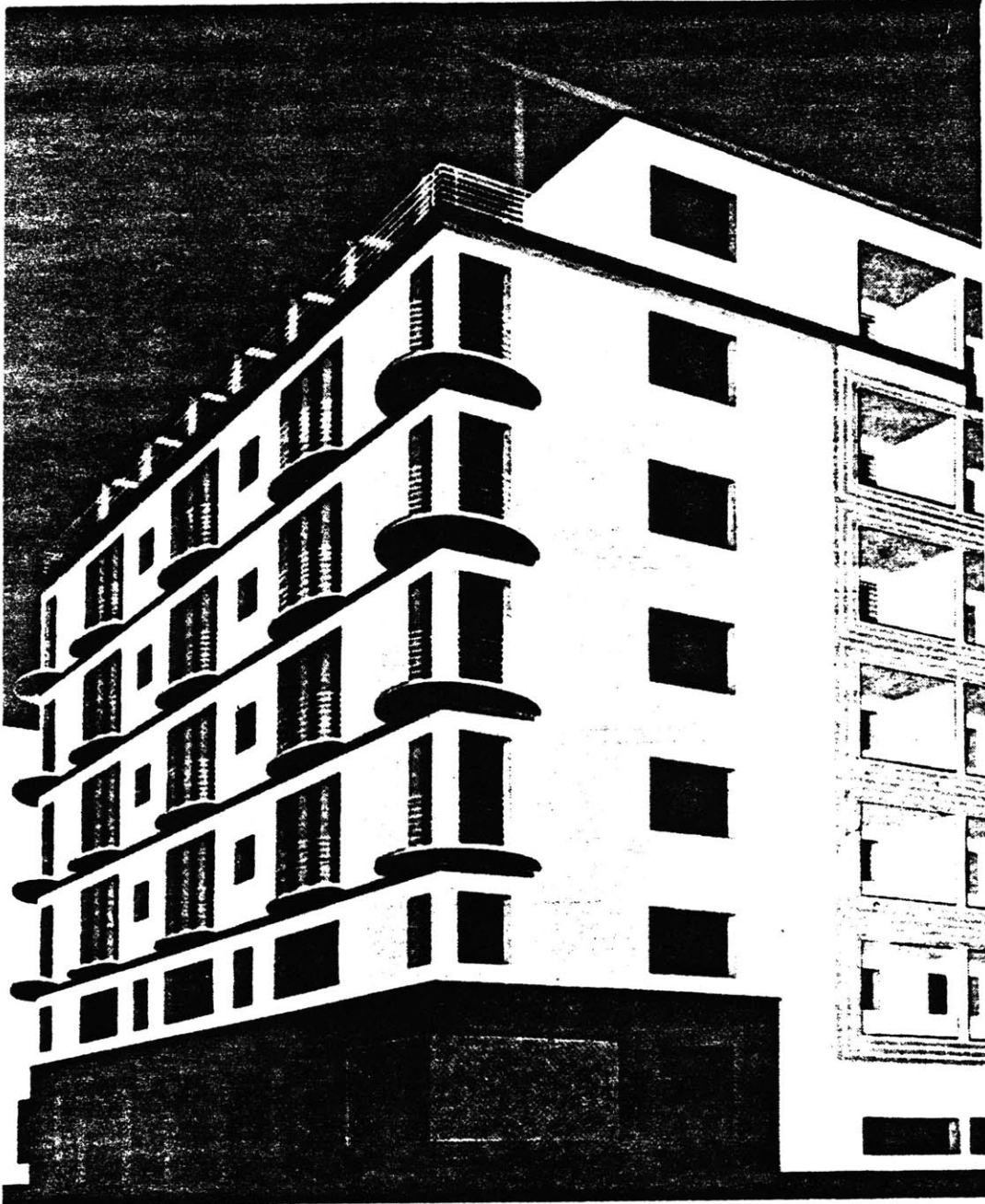


6. Otto Wagner  
Apartmenthouse  
Neustiftgasse 40,  
Vienna

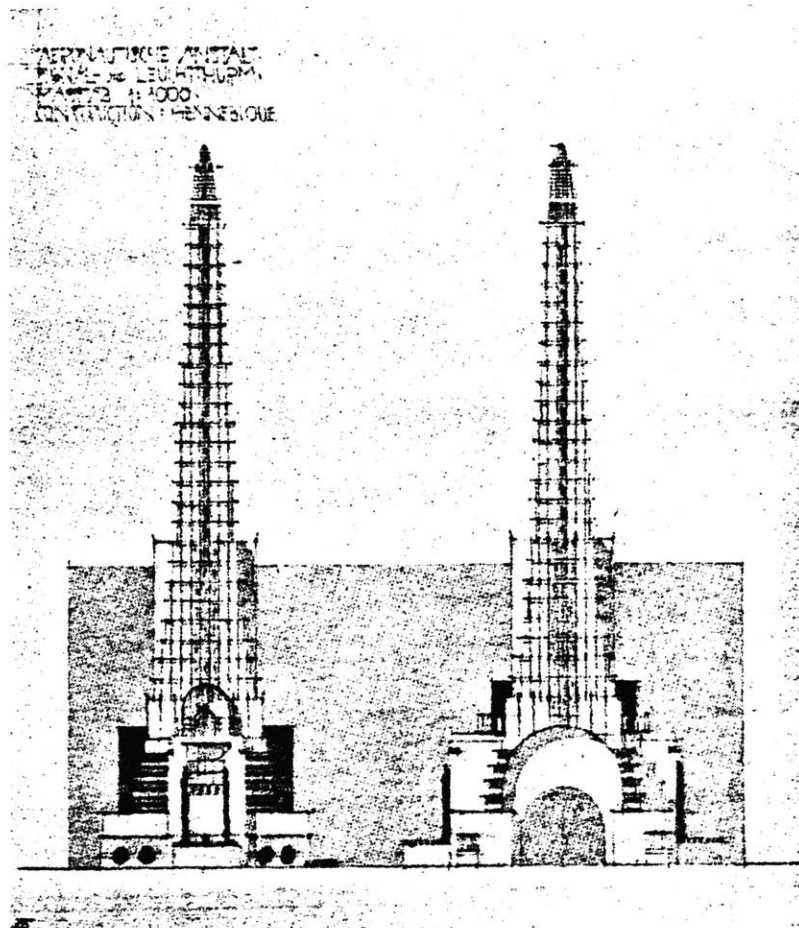


7. Chalusch, office and apartmenthouse, 1906, (project)





8. Ridolfi, apartmenthouse in Rome, 1931, (project)



9. Stumpf, airport tower, 1904, (project)



#### 1.4. RUDOLPH M. SCHINDLER AND FRANK LLOYD WRIGHT

"Rudolph was a patient assistant who seemed well aware of the significance of what I was doing. His sympathetic appreciation never failed. His talents were adequate to any demands made upon them by me. Several years later he persuaded me to take on his friend Neutra and his family. Neutra arrived at Taliesin from Berlin about 1923-24. About a year later the two friends set up a shop in Los Angeles and I lost track of them until they began exhibiting their work alongside mine under the title 'The Work of Three Internationally Known Architects.' What they have done since is better known to others than to myself." 1

(F. L. Wright on R. M. Schindler, in 1954)

As early as 1910 or 1911 Schindler came to know the architecture of Frank L. Wright through the Wasmuth portfolio, published in Berlin in 1910,<sup>2</sup> which gave a distinctive presentation of Wright's oeuvre. Very shortly after recognizing Wright's work, Schindler wrote his manifesto (1912); it is during this time that Schindler must have resolved to go to Chicago to study in the studio of Wright. Since Schindler worked with Wright for six years,<sup>3</sup> this time is of great importance for his artistic-architectural development.

A concise outline of Wright's position will indicate the parallels, similarities, and disjunctions of the relationship. Frank Lloyd Wright (1867-1959) was of English origin on his father's side and Welsh on his mother's.<sup>4</sup> He was exposed during his education to the Froebel Kindergarten system. Later his reading of such architectural theorists as John Ruskin (1819-1900) and Viollet-le-Duc (1814-1879) seems to have had great influence on him.<sup>5</sup> Before working in the office of Silsbee in Chicago he spent two years studying engineering at the University of Wisconsin.

Throughout his life Wright gave testimony of his preference for the agrarian and rural lifestyle, his special attitude toward nature, and the "nature of materials."<sup>6</sup> In 1888 Wright entered the office of Louis Sullivan (1856-1924) the greatest American

architect of that time. In 1893 Wright broke with Sullivan and established his own office, after constructing his own house in Oak Park, Illinois, in 1889.

The first special issue of an architectural magazine devoted to Wright was published in 1900 by Robert C. Spencer Jr.<sup>7</sup>

Spencer was a close friend of Wright and an architectural critic of no mean ability. He remarks that "few architects have given us more poetic translation of material into structure than Frank Lloyd Wright."<sup>8</sup> What Spencer calls "poetic translation" reveals Wright's architectural concept.

The word "poiēsis" has been used since Plato to describe the bringing-forth of the underlying structure of materials through "form."

"Every occasion for whatever passes over and goes forward into presencing from that which is not presencing is poiēsis, is bringing-forth."<sup>9</sup>

And Martin Heidegger outlines the importance of "physis" and "poiēsis" as they reveal the truth:

"Physis also, the arising of something from out of itself, is a bringing-forth, poiēsis. Physis is indeed poiēsis in the highest sense. For what presences by means of physis has the bursting open belonging to bringing-forth, e. g. the bursting of a blossom into bloom, in itself (en heautōi). In contrast, what is brought forth by the artisan or the artist, e. g., the silver chalice, has the bursting open belonging to bringing-forth not in itself, but in another (en allōi), in the craftsman or artist."<sup>10</sup>

To contrast these notions of poetry and physis with Wright's own ideas, his comment on "What is architecture" reads as follows:<sup>11</sup>

"So architecture I know to be a Great Spirit. ... Architecture is the great living creative spirit which from generation to generation, from age to age, proceeds, persists, creates, according to the nature of man, and his circumstances as they change. That is really architecture."<sup>12</sup>

Before talking about Wright's early projects, the influence of the Frederick Froebel educational system has to be explained. The idea of geometric forms and geometric patterns were part of Wright's childhood and of his architectural work. The "ornaments" (figs. 10, 11) of Wright not only give evidence of Sullivan's influence but also the Froebel system. Wright writes in A Testament:

"Taken East at the age of three to my father's pastorate near Boston, for several years I sat at the little Kindergarten table-top ruled by lines about four inches apart each way making four inches squares; and, among other things, played upon these 'unit-lines' with the square (cube), the circle (sphere), and the triangle (tetrahedron or tripod) - these were smooth maple-wood blocks. Scarlet cardboard triangle (60° - 30°) two inches on the short side, and one side white, were smooth triangular sections with which to come by pattern - design - by my own imagination. Eventually I was to construct designs in other mediums. But the smooth cardboard triangles and maple-wood blocks were most important. All are in my fingers to this day.

In outline the square was significant of integrity; the circle - infinity; the triangle - aspiration; all with which to 'design' significant new forms. In the third dimension, the smooth maple blocks became the cube, the sphere, and the tetrahedron; all mine to 'play' with. To reveal further subordinate, or encourage composite, forms these simple elemental blocks were suspended from a small gibbet by little wire inserts at the corners and whirled. On this simple unit-system ruled on the low table-top all these forms were combined by the child into imaginative patterns. Design was recreation!" 13

The last sentence, "design was recreation" leads directly to the ornamental design and his early architectural work. Since Wright was unhampered by the Beaux-Arts tradition of the schools, he was able to develop remarkably rich and complex aspects of architectural compositions. Sullivan's study of nature, its most rigid and subtle geometry, as well as its most voluptuous freedom, is the source to which Sullivan has always gone for inspiration. In a very similar way nature and ornament for Wright was the source of his architectural composition. But in the work of Wright there is no mere applied ornament. The building is conceived as a perfect

and complete organism. There is a direct relationship between ornament and material, between surface decoration and decorated surface. For Wright the ornament was part of the surface, not applied on the surface. <sup>14</sup>

The floorplans and the early projects have a close affinity to the geometric ornaments and patterns: the Winslow house in River Forest, Illinois (fig. 12, 13), <sup>15</sup> the Martin house in Buffalo (1904, fig. 14), <sup>16</sup> the Unity Temple in Oak Park, Illinois (1906, figs. 15, 16), <sup>17</sup> and the Robie house in Chicago (1908, figs. 17, 18) <sup>18</sup> with its highly geometrized window patterns.

When Schindler came to Chicago in March 1914 he did not immediately start working for Wright. The Chicago architectural firm of Ottenheimer, Stern, and Reichert, offered Schindler a three-year contract and also provided funds for sailing to America. Henry Ottenheimer, the chief partner of this office, was a successful Chicago architect. <sup>19</sup> He had studied at the Ecole des Beaux-Arts in Paris and had been a draftsman in the office of Adler and Sullivan. Schindler found the atmosphere of Ottenheimer, Stern, and Reichert far from congenial. During his time working in this office, he designed and supervised several buildings and projects. <sup>20</sup>

Schindler's intention was not to stay in the United States. After his three-year contract he wanted to work for Wright, travel through the United States and then return to Vienna to work for Loos.

Three events changed his plans:

- 1) In 1917 America entered into the First World War, and Schindler found himself an enemy alien.
- 2) In 1919 Schindler married Pauline Gibling.
- 3) The post-war scene in Europe was very unfortunate and the prospect for work in Vienna was discouraging.

The situation and the circumstances of Schindler's cooperation with Wright are difficult to reveal.

"He (Schindler) applied to Wright for work several times but with no success. Then with the declaration of war, Schindler became an enemy alien and he was forbidden to walk over or near a bridge. A rumor that he had hidden guns in the concrete piers of the Buena Shore Club amused him, but also gave him an uncomfortable feeling. Since the future seemed so uncertain, Schindler again went to Wright and this time offered his services on any terms. Wright could not afford another draftsman but took him on without salary in the beginning. The association with Wright seemed to him to be ample payment; he managed to live by turning out sketches and working drawings for friends." 21

Schindler worked for Wright from 1917 until 1923 the two last years only part time. <sup>22</sup> On February 15, 1918, Wright moved his office and staff from Oak Park (where he had worked since 1895) to Taliesin, to prepare the working drawings of the Imperial Hotel. <sup>23</sup> Taliesin is the place where Wright established himself in the country after his return from Europe in 1911.

"I began to build Taliesin to get my back against the wall and fight for what I saw I had to fight." 24

Although Taliesin was destroyed twice by fire (the first time on August 15, 1914, when a paranoic servant set fire and killed seven persons) it has risen for the third time. It is a house which approaches the completeness and qualities an architect wants to realize as an example, as an utopia. The place was built around the hill - and not on top of the hill as Wright pointed out. The amalgamation of the house and nature was fulfilled in Taliesin. Schindler described Taliesin as a house "where free nature streams through." <sup>25</sup>

In August 1919 Rudolph Schindler and his wife Pauline spent their honeymoon at Wright's studio at Taliesin. Pauline remembers these days as she writes:

"At ten o'clock in the morning Mr. Wright would come into the studio from his apartment, and the draftsmen would gather round him as he quietly contemplated the work in hand. ...



Although the projects (Imperial Hotel and Hollyhock House) were of magnitude, and for weeks at a time the staff might be small, the mood at Taliesin was unhurried. Some Sunday morning Mr. Wright might suggest a drive through the countryside in the ancient surrey, a picnic basket stowed under the seat, with Mr. Wright driving perhaps over to the other side of the valley to the Hillside School." 26

The impact on Schindler's own architectural design can best be seen in his house at Kings Road, Hollywood. Influenced by Ralph Waldo Emerson, Jean-Jaques Rousseau, Henry David Thoreau, Louis Sullivan, and Frank Lloyd Wright, for Schindler "nature" became part of his ideas on architecture. Nature and architecture were not two different aspects of human life, but rather buildings were part of nature.

From 1916 until 1922 Wright was commissioned to build the Imperial Hotel in Tokyo. This is one of the most complex spatial and formal buildings ever designed by him. In many ways the Imperial Hotel can be seen as the masterpiece of Wright's first architectural period. Parallel to his commission in Japan, Wright designed the Hollyhock house for Aline Barnsdall on Olive Hill, Hollywood. Schindler had been working on the working drawings of the Imperial Hotel, but Wright asked him to go to the West Coast to supervise the construction of the Hollyhock art community center. In December 1920 the Schindlers' left for California.

"When things were in readiness for the construction of Residence B, Wright invited RMS to come to California to superintend the building. Together we considered the drastic step, which would mean leaving Oak Park studio where we had first lived, and beloved Taliesin itself. ... The day after our arrival Mr. Wright took us for our first view of Olive Hill. As we looked toward the thirsty hillside it was the fresh green of the Wisconsin landscape we longed for." 27

For Schindler the Barnsdall project was of great importance, although Wright blamed in his autobiography Schindler and his son Lloyd for difficulties in this project. He calls Schindler his "sympathetic" but "untried superintendent...too smooth ever to learn to be serious." 28

Wright devotes ten pages of his autobiography to the Barnsdall project, the house was important to him, and asking Schindler to supervise construction must be seen as a distinction and honor for him. Miss Aline Barnsdall was the heiress to an Oklahoma oil fortune and had purchased the 36-acre square block named Olive Hill at Vermont Avenue and Hollywood Boulevard, Hollywood. She intended to create an art community center.<sup>29</sup> Speaking of Aline Barnsdall, Wright says:

"My client, I soon found, had ideas and wanted yours but never worked much nor long at a time, being possessed by incorrigible wanderlust that made me wonder, sometimes, what she wanted a beautiful home for - anyhow, anywhere. Later, I came to see that that was just why she wanted one. I would hear from her when I was wandering about in the maze of the Imperial Hotel in Japan while she was in Hollywood. She would get my telegram or letters in Spain when I eventually got to Hollywood. And I would hear from her in New York while I was in Chicago or San Francisco. Or hear from her from some remote piney mountain retreat in the Rockies when I was sea-sick out on the Pacific Ocean." 30

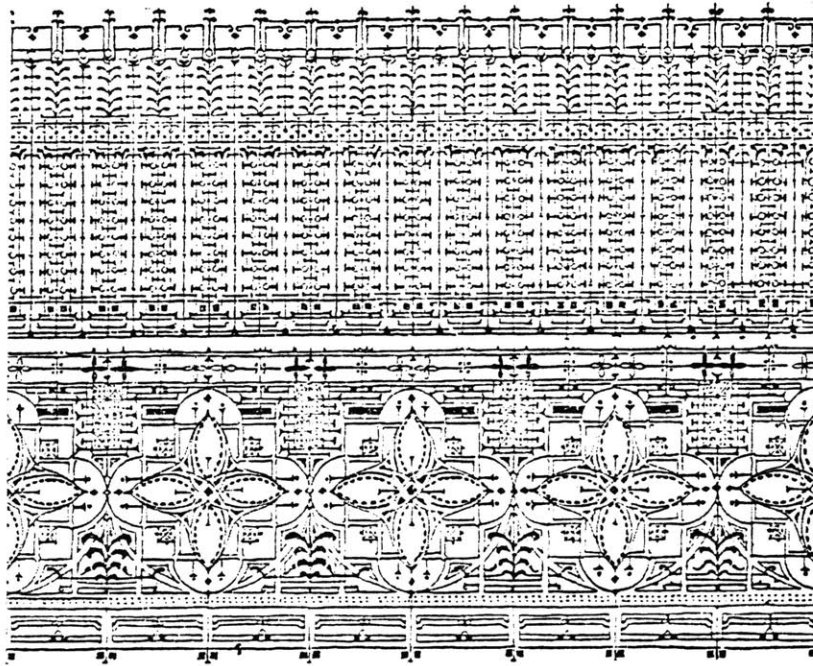
Schindler must have felt uncomfortable mediating between Wright, Aline Barnsdall, and the contractor. Since he spent most of his time in Japan, Miss Barnsdall felt Wright betrayed her in giving too little attention to her project. As the cost of the project rose, the relationship between architect and client became worse. The director's house for Olive Hill was designed by Schindler for Wright. Schindler made all preliminary sketches, finishing designs, and working drawings (fig. 19). The exterior design reveals a strong prairie-style influence, the roof cantilevers widely over the window to protect against the sunshine. The interior with its two-story living room and the different floor-levels is reminiscent of the "Raumplan" of Adolf Loos, the general form of the floorplan is T-shaped, yet the two-story living-room also corresponds to a number of Wright's prairie schemes. The open fire-place with the staircase and the bathrooms are in the center of the house, with the other rooms arranged around. The bedrooms on the second floor are completely glazed. The elevations of the director's house are

symmetrical disregarding the complex interior spatial concept. When Wright returned from Japan to America in the early 1920s he built four concrete-block houses in the Los Angeles area, the Mrs. George Madison Millard residence, "La Minatura" in Pasadena (1923), the John Storer residence in Hollywood (1923), the Samuel Freeman residence in Los Angeles (1923), and the Charles Ennis residence in Los Angeles (1923).

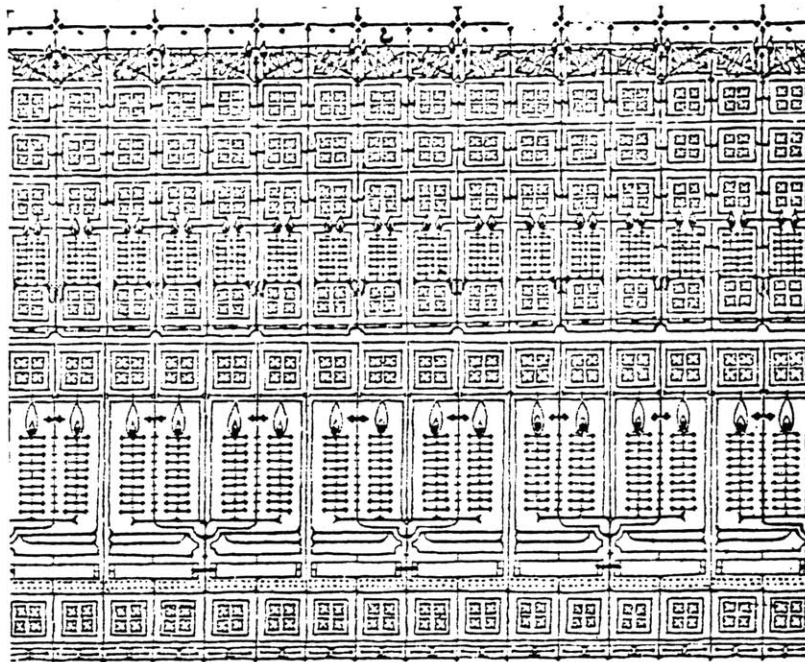
Schindler designed the furniture for the Freeman house.

Schindler's Kings Road house and the Pueblo Ribera Court project in La Jolla stand in close relationship to these concrete-block structures of Wright. The concern with new building technology continues to be part of Schindler's architectural experiences throughout the twenties.

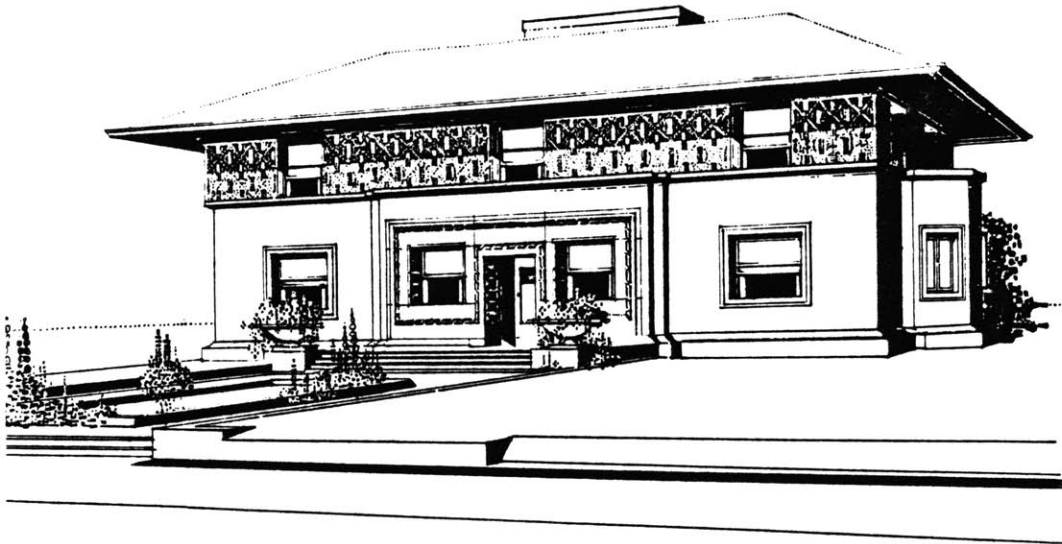
After the completion of the Barnsdall project Schindler decided to stay in California. Working partly for Wright's office, Schindler was setting up his own private architectural practice. Surprisingly Schindler's projects of the 1920s show very little Wrightian influence formally for their exteriors are more cubist and purist than Wright's buildings. The spatial organisation however, the attitude toward scale, fenestration, and materials clearly indicate the long cooperation between the two architects. These formal relations between the architecture of Frank Lloyd Wright and Rudolph Schindler will be more fully discussed in relation to specific buildings in connection with the case studies.



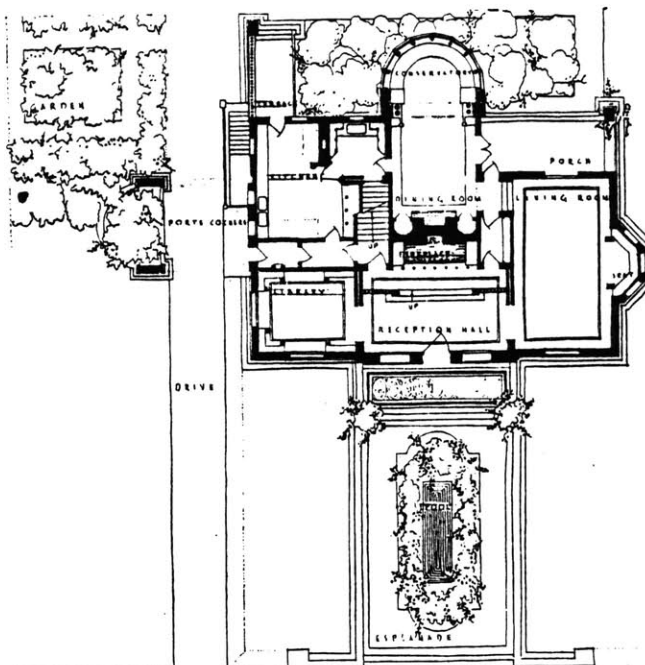
10. F. L. Wright, ornament, before June 1900



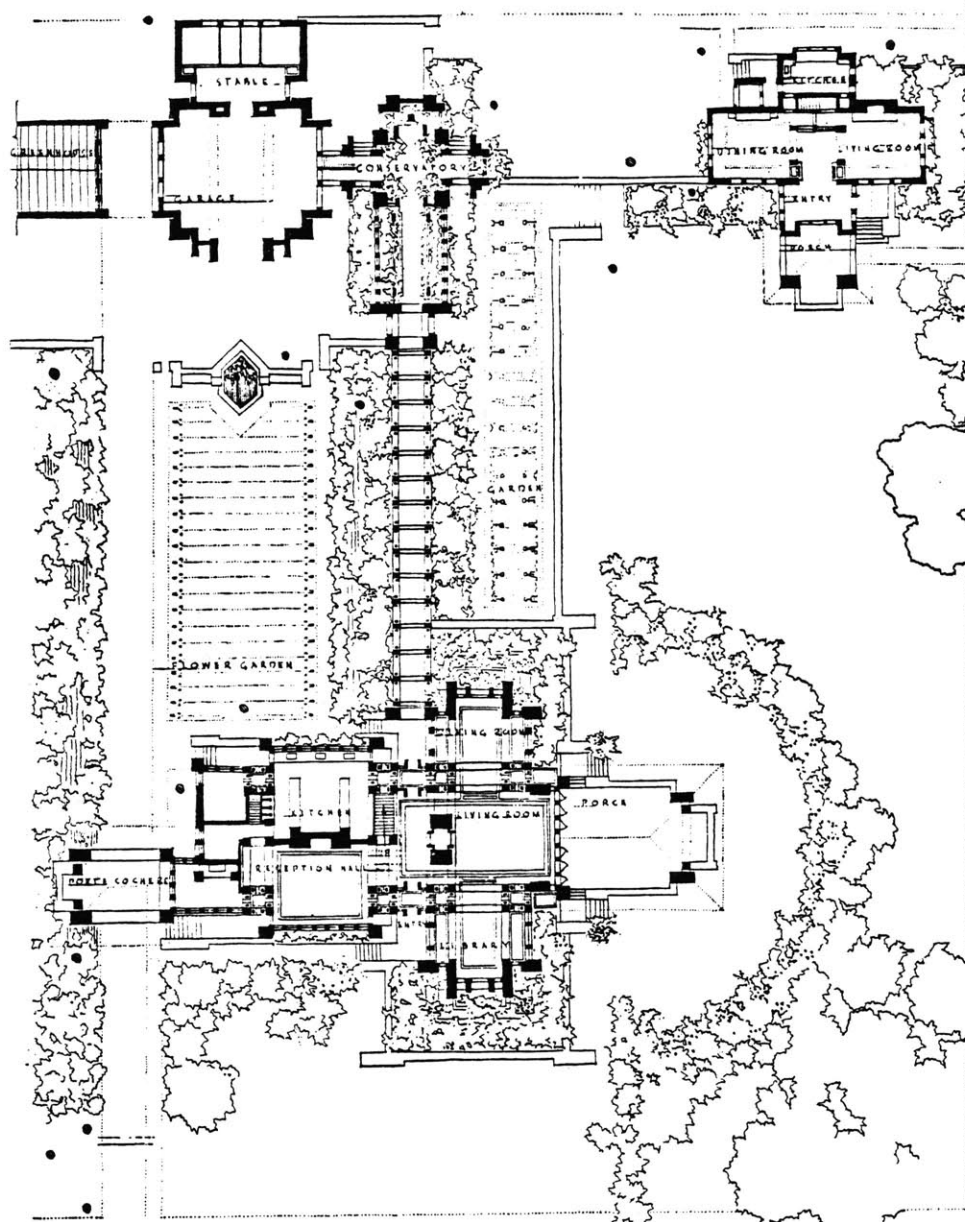
11. F. L. Wright, ornament, before June 1900



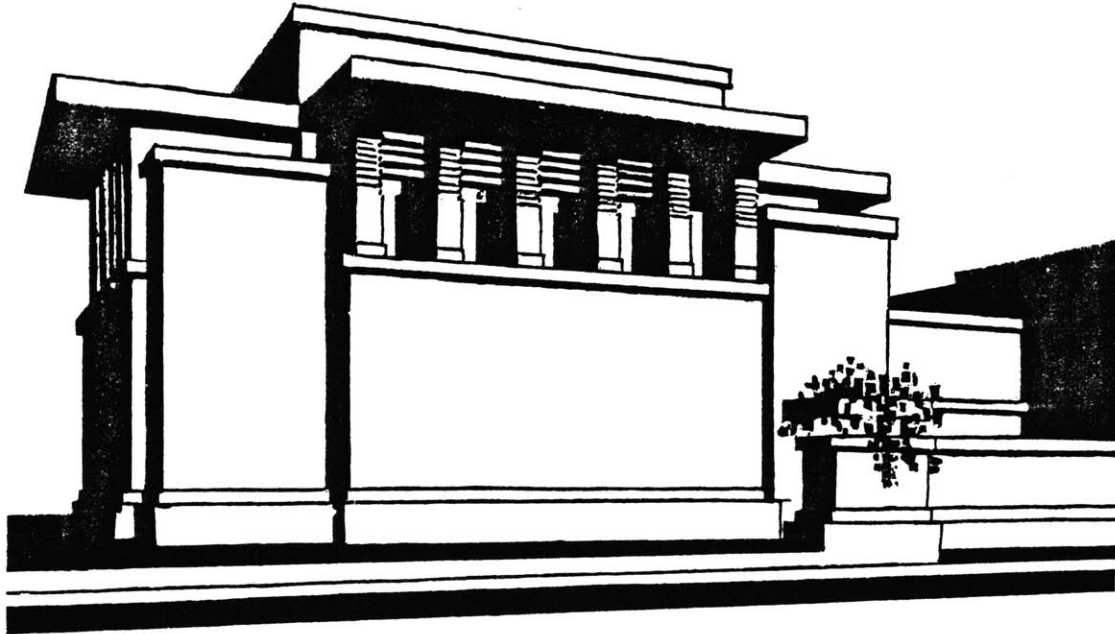
12. F. L. Wright, Winslow house, River Forest, 1893, elevation



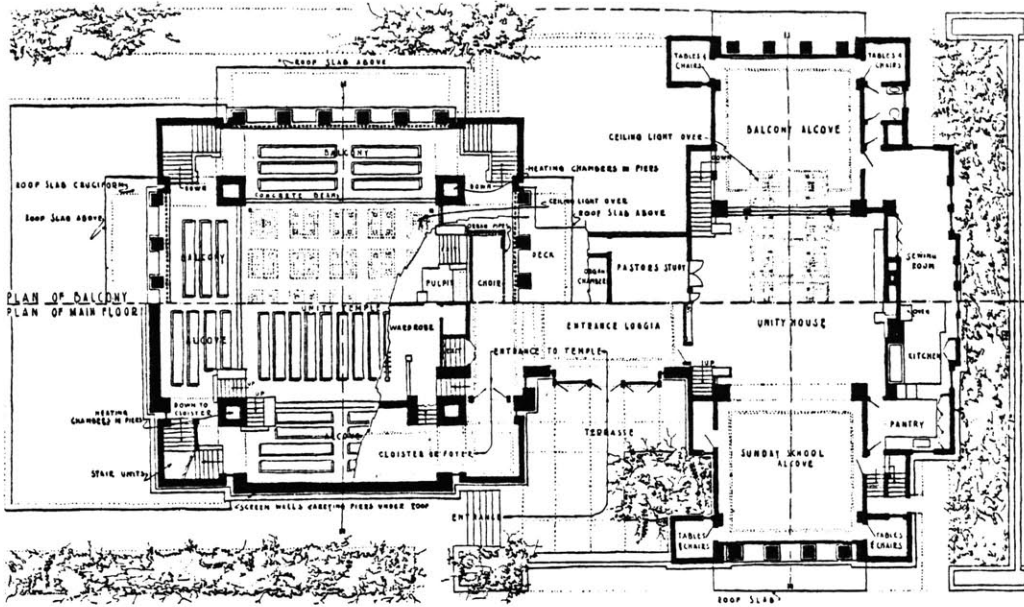
13. F. L. Wright, Winslow house, River Forest, 1893, floorplan



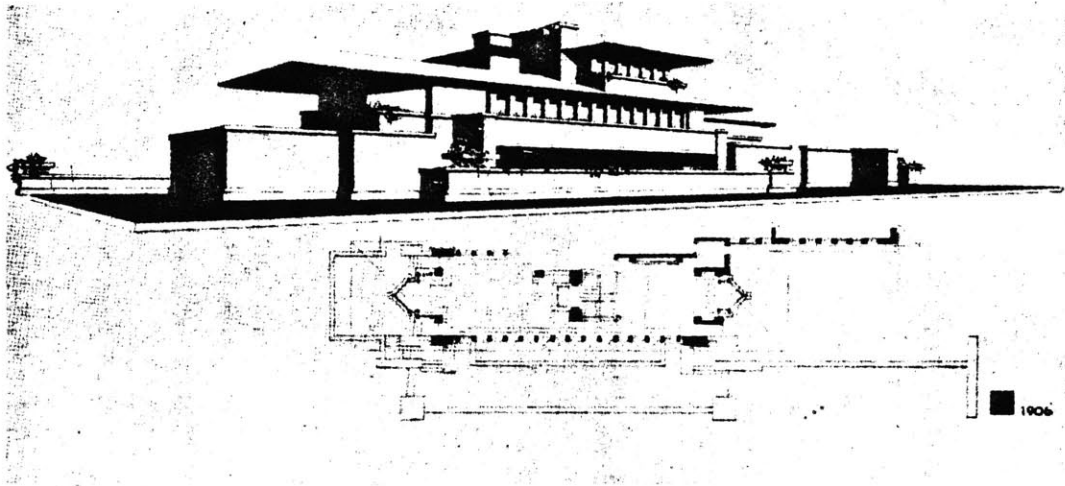
14. F. L. Wright, Martin house, Buffalo, 1904, floorplan



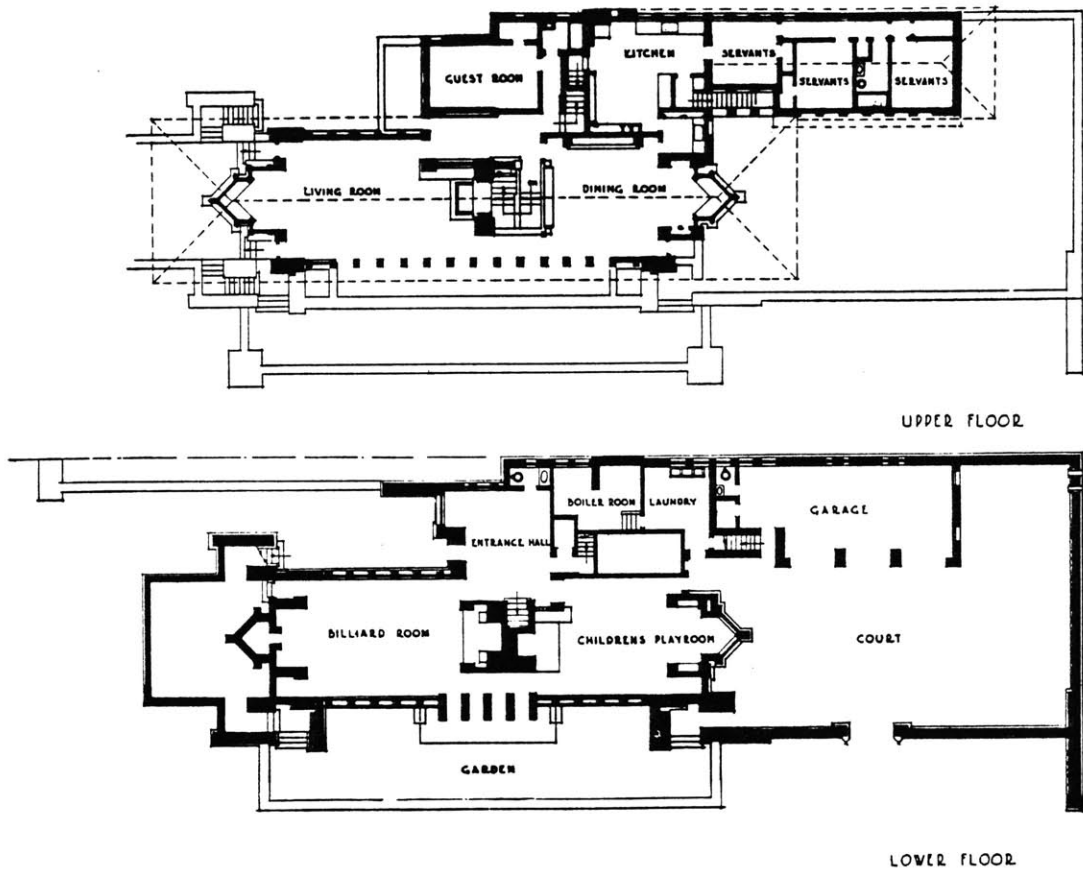
15. F. L. Wright, Unity Temple, Oak Park, 1906, elevation



16. F. L. Wright, Unity Temple, Oak Park, 1906, floorplan



17. F. L. Wright, Robie house, Chicago, 1909, elevation



18. F. L. Wright, Robie house, Chicago, 1909, floorplan





19. R. Schindler for F. L. Wright, Olive Hill,  
director's house, Los Angeles, 1920, elevation

CHAPTER II

RUDOLPH M. SCHINDLER - THE THEORETICAL WRITINGS

In art, nearly everything rests on conventions, while it is true that every art is itself truly a convention.

(A. C. Quatremere de Quincy, 1755-1849)



## 2. CHAPTER II

### RUDOLPH M. SCHINDLER - THE THEORETICAL WRITINGS

#### 2.1. SCHINDLER'S MANIFESTO OF 1912

Before discussing a selection of Schindler's work, I will present and interpret his writings in the historical context of modern architectural manifestos. The "Manifesto" is Schindler's single most important theoretical work, since it outlines, describes, and anticipates much of his future architectural work. The manifesto, written while Schindler was still a student in the Wagnerschule, was the only article he wrote in Austria before he left for the United States in June 1914, and also the only article which was originally written in the German language. At the Schindler archive at the University of California at Santa Barbara (UCSB) there is no evidence of the original German version of the manifesto. It is most likely that he translated it after 1914 while living in the United States. The question why Schindler never tried to publish his architectural program remains unclear and unanswered. <sup>1</sup>

The manifesto is entitled: "Modern Architecture: A Program, Vienna 1912, R. M. Schindler," consisting of four stanzas. <sup>2</sup> It is written in the form of a poem. The manifesto is typed here in its verse form, with each line numbered to facilitate interpretation.

## Modern Architecture: A Program

Vienna 1912      R. M. Schindler

I

- 1) The cave was the original dwelling.
- 2) A hollow adobe pile was the first permanent house.
- 3) To build meant to gather and mass material, allowing it to form
- 4) empty cells for human shelter.
  
- 5) This conception provides the basic for understanding all styles
- 6) of architecture up to the Twentieth Century.
- 7) The aim of all architectural effort was the conquest of structural
- 8) bulk by man's will for expressive form.
  
- 9) All architectural ideas were conditioned by the use of a plastic
- 10) structural mass material.
- 11) The technique of architect and sculptor were similar.
- 12) The vault was not the result of a room concept, but of a
- 13) structural system of piling masonry to support the mass enclosure.
- 14) The decoration of the walls was intended to give the structural
- 15) mass a plastic face.
  
- 16) These old problems have been solved and the styles are dead.
  
- 17) Our efficient way of using materials eliminated the plastic
- 18) structural mass.
- 19) The contemporary architect conceives the "Room" and forms it with
- 20) ceiling and wall slabs.
  
- 21) The architectural design concerns itself with "Space" as its raw
- 22) material and with the articulated room as its product.
  
- 23) Because of the lack of a plastic mass the shape of the inner room
- 24) defines the exterior of the building. Therefore the early
- 25) primitive product of this new development is the "box-shaped"
- 26) house.
  
- 27) The architect has finally discovered the medium of his art:
- 28) S P A C E.
  
- 29) A new architectural problem has been born.
- 30) Its infancy is being shielded as always by emphasizing functional
- 31) advantages.

## II

- 32) The first house was a shelter.
- 33) Its primary attribute was stability.
- 34) Therefore its structural features were paramount.
- 35) All architectural styles up to the Twentieth Century were
- 36) functional.
  
- 37) Architectural forms symbolized the structural functions of the
- 38) building material.
- 39) The final step in this development was the architectural solution
- 40) of the steel skeleton: its framework is no longer a symbol, it
- 41) has become form itself.
  
- 42) The Twentieth Century is the first to abandon construction as a
- 43) source for architectural form through the introduction of
- 44) reinforced concrete.
  
- 45) The structural problem has been reduced to an equation.
- 46) The approved stress diagram eliminates the need to emphasize
- 47) the stability of the construction.
  
- 48) Modern man pays no attention to structural members.
- 49) There are no more columns with base, shaft and cap, no more walls
- 50) masses with foundation course and cornice.
- 51) He sees the daring of the cantilever, the freedom of the wide
- 52) span, the space-forming surfaces of thin wall screens.
  
- 53) Structural styles are obsolete.
- 54) Functionalism is a hollow slogan used to lead the conservative
- 55) stylist to exploit contemporary techniques.

### III

- 56) Monumentality is the mark of power.
- 57) The first master was the tyrant.
- 58) He symbolized his power over the human mass by his control
- 59) over matter.
- 60) The power symbol of primitive culture was confined to the
- 61) defeat or two simple resistance of matter: Gravity and Cohesion.
  
- 62) Monumentality became apparent in proportion to the human mass
- 63) displacement effort.
- 64) Man cowers before an earthly might.
  
- 65) Today a different power is asking for its monument.
- 66) The mind destroyed the power of the tyrant.
- 67) The machine has become the ripe symbol for man's control over
- 67) nature's forces.
- 68) nature's forces.
- 69) Our mathematical victory over structural stresses eliminates
- 70) them as a source for art forms.
- 71) The new monumentality of space will symbolize the limitness
- 72) powers of the human mind.
  
- 73) Man trembles facing the universe.

IV

- 74) The feeling of security of our ancestors came in the seclusion  
75) and confinement of his cave.
- 76) The same feeling of security was the aim of the medieval city  
77) plan which crowded the largest possible number of defenders  
78) inside the smallest ring of walls and bastions.  
79) The peasant's hovel comforts him by an atmosphere in violent  
80) contrast to his enemy: the out of doors.
- 81) Rooms that are designed to recall such feeling of security out  
82) of our past are acclaimed as "comfortable and cozy".
- 83) The man of the future does not try to escape the elements:  
84) He will rule them.
- 85) His home is no more a timid retreat:  
86) The earth has become his home.
- 87) The concepts "comfortable" and "homy" change their meaning.  
88) Atavistic security feelings fail to recommend conventional  
89) designs.
- 90) The comfort of the dwelling lies in its complete control of  
91) Space, Climate, Light, Mood, within its confines.
- 92) The modern dwelling will not freeze the contemporary whim of  
93) owner or designer into permanent tiresome features.  
94) It will be a quiet, flexible background for a harmonious  
life.



To each of the four stanzas a "Leitmotif" could be assigned. The first stanza considers origin of dwelling, the issue of space, and the question of styles. "The architect has finally discovered the medium of his art: Space" is the crucial verse line of this first part.

The second stanza deals with structure and construction and their relation to architecture. Line 35 is a confounding statement, "all architectural styles up to the Twentieth Century were functional." One would expect exactly the opposite opinion from an architect of the modern movement. If the past architectural styles were "functional," then which adjective will describe modern architecture? Schindler continues to dismiss the concept of functionalism when he writes (line 54, 55) that "Functionalism is a hollow slogan used to lead the conservative stylist to exploit contemporary techniques."

The issue of the third stanza is the notion of monumentality as the mark of power. Schindler discusses the new and the old forms of power. Today the machine is the symbol of man's power. The machine is seen as a "liberation" from the traditional political and economic oppression of men. The mind (which, according to Schindler created the machine), destroyed the power of the tyrant (line 66). The "Fortschrittsglaebigkeit," the belief in progress - a nineteenth century conviction - is the idea behind these sentences.

The last stanza deals with the "consumer aspects" of architecture. The feeling of security was the aim of the past, to protect against the dangers from outdoors. Today architecture can free itself from this function and create the background for harmonious life.

It is obviously impossible to establish all the influences which may have acted on Schindler in formulating the manifesto.

Aparently two aspects influenced him most strongly:

- the "Problembewusstsein" of the Wagnerschule
- his personal development and reactions to the "Arts and Crafts Movement" of England and the ideas of Frank Lloyd Wright

The "Problembewusstsein" (being aware of problems) of the Wagnerschule has been discussed in a previous chapter. In connection with Schindler's manifesto, there are several articles written by former students of Wagner which indicate their general attitude toward architectural design, technology, and social change. <sup>3</sup>

Here are two examples in chronological sequence. Karl Maria Kerndle, a student of Wagner, stresses the importance of "necessity" even when constructing such traditional buildings as farmhouses. Kerndle denies the picturesque, romantic image of the farmhouse, arguing that the farmer does not consider himself picturesque but rather practical and in accord with necessities.

"Der Stil des Bauernhauses verdankt seine Entstehung durchaus nicht der Erwägung, dass das Bauwerk sich seiner Umgebung anpassen soll, er ist vielmehr ein Kind der Notwendigkeit, er ist als das Resultat der Lösung praktischer Fragen, konstruktiver Aufgaben zu betrachten. ...  
Es ist ein vollkommen falscher, unmoderner Standpunkt, das Vordringen des hochkultivierten Menschen in die Natur vertuschen zu wollen, mit einem Bauerngewand zu bemaenteln, es führt diese Art des Vorgehens ja doch nicht zum Ziele, und hierdurch entstandene Bauwerke werden im besten Falle den Eindruck eines Salontirolers machen." <sup>4</sup>

Several years later, another student of Wagner, Joseph Lux, writes an article entitled "Das Hotel, ein Bauproblem" (The hotel, a building problem):

"Das sind die drei Prinzipien, auf denen das Problem beruht: Dass das Haus funktioniere, maschinenmässig, wie ein tadellos konstruierter Apparat, dass es in den Einrichtungen auf der Höhe des Wagon-Lits stehe, dass es in Bezug auf Hygiene und Reinlichkeit, auch was die Gebrauchsgegenstände betrifft, klinischen Anforderungen entspreche.  
Also eine Synthese von Klinik, Wagon-Lits und Maschine." <sup>5</sup>

These articles are impressive statements indicating the concerns of the students of Wagner about future architecture. The problem solving in architecture no longer depends on the question

of good taste or artistic skill, but it is a question of technical and constructive feasibility. The revolutionary character of these "sachliche,"<sup>6</sup> functional, rational, and radical statements may not be dismissed as being purely polemical.

Hermann Muthesius recognized the development and architectural progress of the Wagnerschule in his article "Stilarchitektur und Baukunst" where he remarks, that

"Nur in Wien, wo die Architekturschule Otto Wagners schon seit Jahren auf eine kuenstlerische freiere, dem Zweckmaessigkeitsbeduerfniss Rechnung tragende Architektur hingearbeitet hat, war die Baukunst von vorneherein in der Lage und bereit, eine Verbindung mit dem neuauftstehendem Kunstgewerbe einzugehen." 7

Schindler's first projects at the Academy of Fine Arts, however, show a very disciplined structural concept, and are convincing in their elaborate handling of the technical and constructural articulation. In this context Schindler's thesis project, "Ein Totenfeld fuer eine Stadt mit fuenf Millionen Einwohner" (a cemetery for a city with five million inhabitants) is of great interest (figs. 20, 21).<sup>8</sup>

Schindler's personal development in reaction to changes of taste and attitude around him is particularly important. Until 1912 mostly English and German architects wrote the programmatic articles and manifestos: Henry van de Velde (1863-1957), a Belgian who established himself in Germany in 1903 his "Program,"<sup>9</sup> Hermann Muthesius (1861-1927) "The English house" in 1904,<sup>10</sup> Hans Poelzig (1869-1936) in 1906 "Fermentation in architecture,"<sup>11</sup> Charles Francis Annesly Voysey (1857-1941) "Reason as the basis of art" in 1906,<sup>12</sup> Sir Thomas Graham Jackson (1835-1924) "Reason in architecture" in 1906,<sup>13</sup> Henry van de Velde "Credo" in 1907,<sup>14</sup> Adolf Loos (1870-1933) "Ornament and Crime" in 1908,<sup>15</sup> Frank Lloyd Wright (1867-1959) "Organic architecture" in 1910,<sup>16</sup> and as early as 1901 Wright held a lecture entitled "The Art and Craft of the Machine."<sup>17</sup>

Reflections on Schindler's manifesto reveal a number of

similarities with the ideas of the early modern movement in England. Especially the influence of Hermann Muthesius is evident in a number of articles. In "Stilarchitektur und Baukunst" (1901) and in his lecture "Wo stehen wir" (1903) Muthesius describes the relationship between content and appearance in architecture:

"Die Architektur hat, wie jedes andere Kunstwerk, ihre Wesenheit im Inhalt zu suchen, dem sich die aeussere Erscheinung anzupassen hat, und man muss auch von ihr verlangen, dass diese aeussere Form nur dazu diene, dass innere Wesen wiederzuspiegeln ..." 18

Schindler's notion of "space" and his attitude toward the interior and exterior of buildings (see lines 23-28 of his manifesto) can be seen as the physical interpretation of the design theory which has its origin in the English house: the question how to dwell defines the question how to build. The house is articulated around the interior space which reflects the needs for a "flexible background for a harmonious life" (see manifesto line 94), and the exterior is thus defined through the spaces of the inner rooms. Schindler's concept of architecture presents a consequent sequence of designing from the inside to the outside of a building.

The paths of Schindler and Frank Lloyd Wright pass in 1910 and 1912 most likely for the first time, but only through publications. The Wasmuth publication (1910) of Wright's work was the first complete review.<sup>19</sup> Through numerous illustrations, floorplans interior perspectives, and photos the ideas of the prairie-style architecture were well documented. Wright's development until this time was extremely consistent, resulting in designs more novel than these of any other architect. The residences include the Martin house (1904) in Buffalo, and the Robie house (1908) in Chicago, the larger commissions were the Larkin building in Buffalo (1904), and the Unity Temple in Oak Park (1905-06). The Larkin building might well be called the most innovative office building of its date. The central open

space of the Larkin building and the adjoining offices create a completely new sense of "space." The floorplan shows that other than the service rooms, the whole building consisted of only one big interior space with a number of subspaces. Schindler's manifesto referred directly to what he saw in Wright's architecture (see lines 21-28), Unity Temple as well as the Larkin building conveying the same idea of universal interior space. Structure is part of Wright's architecture but his early buildings rather stressed spatial interrelations than structural expression. Schindler must have studied these works closely. The conclusions he drew in his manifesto illustrate his own attitude toward structure: "The approved stress diagram eliminates the need to emphasize the stability of the construction. Modern man pays no attention to structural members." (lines 46-48) Schindler regards structure as a serving element and the realization of space as the architect's prime concern. In 1912 H. P. Berlage published an article called "Neuere amerikanische Architektur" in the Schweizerische Bauzeitung, devoting his article to Louis Sullivan and Frank Lloyd Wright.<sup>20</sup> In his article, photos showed the exteriors and interiors of the Coonley house, the Martin house, the Larkin building, and the Unity Temple, the exterior only of the Dana house, and two perspective drawings for the Hardy house and the Westcott house. Berlage writes about the Larkin building:

"Das Gebaeude umfasst nur einen einzigen Raum, indem nach modernen amerikanischen Begriffen ein Kontor nicht in verschiede Raeume getrennt werden soll ... Ich ging von dannen mit der Ueberzeugung, ein echt modernes Werk gesehen zu haben, und mit Achtung erfuehlt vor dem Meister, der solches zu schaffen vermocht, das in Europa seinesgleichen sucht." 21

During the year 1914 Schindler wrote in Chicago five short unpublished notes on architecture and art (notes published here for the first time), which have an apparent relationship to his manifesto.<sup>22</sup>

Note no 1

Architecture is space art --  
is therefore only indirectly  
concerned with objects -- spaces  
are limited surfaces --  
surfaces differ  
in texture and color --  
spaceform, texture and color  
are actually all that  
concern the architect.  
Line is always a decoration of the  
surface -- therefore unimportant --  
mass -- form - sculpture is  
the opposite of architecture.

Note no 2

What we feel to be modern  
in American architecture  
is for the American architect  
the expression of those repulsive  
forces which he calls  
"contractor and budget."

Note no 3

Neighborhood center competition:

He says: "No new architectural  
forms are needed to say something  
new" --  
On the contrary -- every new  
thought creates for itself  
a new language --  
but then how can there still be  
"English" -- "German"? --  
Just as both the pyramid  
and the gothic church  
speak the "Language of stone."

Note no 4

Instead of having the judicial axe  
carried before him --  
the judge puts the initials  
of his title on the door.  
Words have become sufficiently  
clear to render the  
objective illustration by  
means of symbols dispensable.

Note no 5

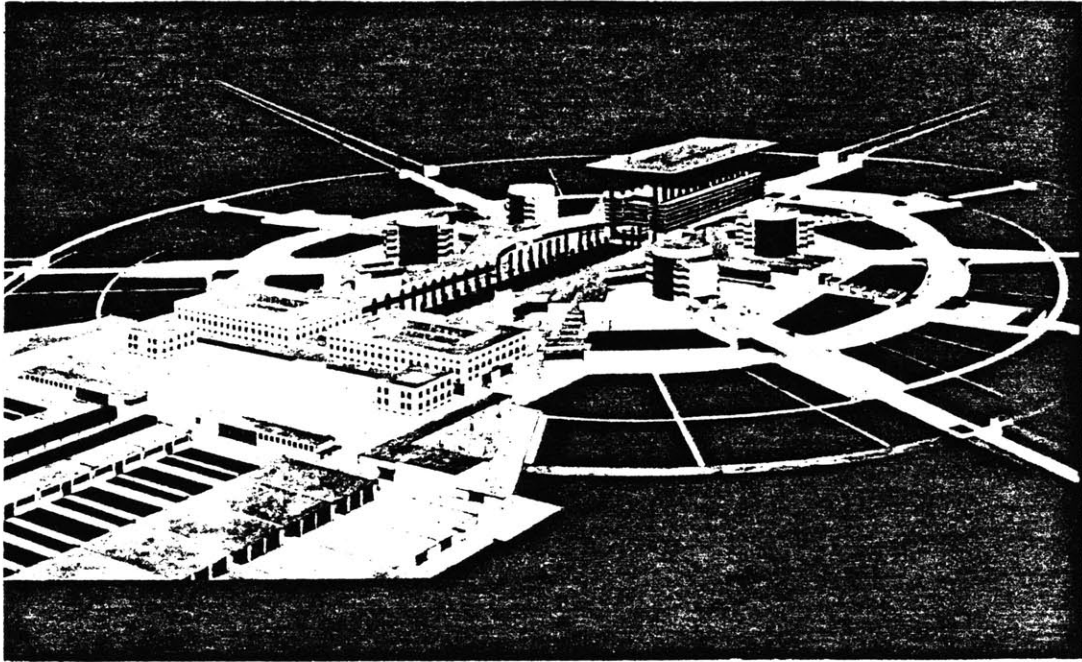
Primitive man suspects  
a causal "I"  
behind all phenomena --  
every organic structure has  
an "I" -- it is centrally  
designed.  
The artist therefore  
tried to give an "Ego" to his  
creation -- it eventually  
outgrew the master and became divine.  
The powerful modern  
"Ego-feeling" suppresses the central  
composition of the work of art --  
The work is an extension  
of the "artist's ego" --  
primitive man suppresses  
his feeling of loneliness by  
mirroring himself in the  
central work of art -- the  
child plays with its doll.  
Modern man always feels the man  
behind the work of art --  
which should be a mirror of humanity.  
For this reason we can no longer  
have works of art in our living space --  
we can tolerate no strangers in  
our home --  
and finally the home itself  
must then be informal --  
it must not have an "Ego,"  
nor a centric plan.

These notes all continue the idea of architecture as space art, the rejection of ornament and finally the rejection of art itself.

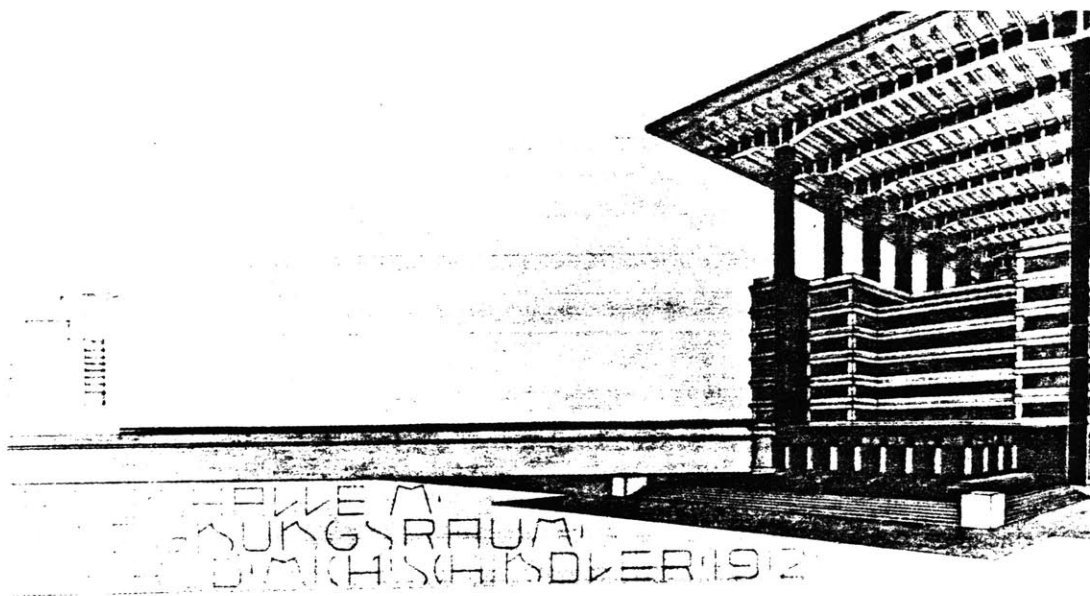
Schindler's Chicago notes also reveal some critical and pessimistic feelings about modern American architecture (see note no 2), which stand in striking contrast to the enthusiasm with which his fellow countryman Richard Neutra wrote his book Wie baut Amerika in 1927. <sup>23</sup>







20. R. Schindler, project for a crematorium and chapel,  
Vienna, 1912-13, (Schindler's thesis)



21. R. Schindler, project for a crematorium and chapel,  
Vienna 1912-13, the chapel, (Schindler's thesis)

## 2.2. "CARE OF THE BODY" - TOWARD A NEW PERCEPTION OF LIVING AND ARCHITECTURE

The six articles published in the Los Angeles Times during March, April, and May 1926, represent the first theoretical writings of the Modern Movement by an emigrant European architect in the United States.<sup>1</sup> In context with his own house built on Kings Road, Hollywood, and the beach house for Dr. Philip Lovell, Newport Beach, these articles illustrate the new spirit of Schindler's architecture.

Juxtaposing these articles with contemporary writings in Europe will give evidence of the importance of Schindler's contribution to the Modern Movement. The articles were written in the same year as the "Five points towards a new architecture" by Le Corbusier and Pierre Jaenneret,<sup>2</sup> and the "Principles of the Bauhaus production (Dessau)" by Walter Gropius.<sup>3</sup>

In those years a number of architectural manifestos and postulates were published. From the 1923 "De-Stijl Manifesto V: -□+ = R<sub>4</sub>"<sup>4</sup> to Theo van Doesburg's "Towards a plastic architecture" in 1924,<sup>5</sup> to Kasimir Malevich's "Suprematist manifesto unovis."<sup>6</sup> Common to all these statements was the elimination of all conceptual form in the sense of a fixed form or a fixed typology, the introduction of function and economy as the determining design factors. The new architecture rejected the traditional building technology searching for a new way to express the machine age.

Schindler's journalistic activity was a result of knowing Dr. Lovell, a well known Los Angeles nutritionist. He was not only a pioneer for a life based on natural diets, mental and physical health, but he also believed in the importance of the built environment influencing our daily life.

Lovell authored a popular column called "Care of the body" in the Sunday Magazine of the Los Angeles Times.<sup>7</sup> His wife Leah Lovell was involved in artistic, political and social issues of that period and through her activities met Pauline Gibling-Schindler

as early as 1921. The sister of Mrs. Lovell, Mrs. Harriet Lovell-Freeman and her husband Samuel Freeman commissioned Frank Lloyd Wright to design their house in 1923. Through these circumstances Rudolph Schindler was introduced to the Lovells. Discussions relative to health and built form finally led to the commission for the Lovell beach house (1922-26). It was during the construction of the beach house that Dr. Lovell invited Schindler to author six guest articles for his column on six Sundays during the spring of 1926.

In the six articles Schindler advances his principals for the dwelling-question; the relationship between a good physical environment and a healthy life is pervasive throughout his writings. The topics of his articles are "Ventilation," "Plumbing and Health," "About Heating," "About Lighting," "About Furniture," and "Shelter or Playground." Written for a popular magazine these articles use semi-scientific explanations of historical and cultural phenomena.

Their ideological roots reveal two categories:

- 1) Schindler's belief in the importance of technological change and progress
- 2) Schindler's demand that the house be adapted to the new social and cultural conventions and conveniences.

The first four articles represent the changing in the physical fabric through technology, the last two articles represent the new attitude toward our social behavior.

"The house of the future will abandon the present window and provide separate systems of openings for air and light." 9

The design is determined by objective requirements of the physics of nature. The article "Plumbing and Health" reveals the underlying idea of "physical culture," an unusual term in the English language, the use of which reveals Schindler's reference to the German idea of "Koerperkultur."

"Instead of being crowded into the smallest possible space, the bathroom will more and more assume the spaciousness due to a room for physical culture. It will have the largest window in the house and be adjoined by porches for sunbaths and gymnastics." 10

The third and the fourth article deal with the technical and functional aspects of heating and lighting, showing that Schindler was well aware of artificial light as an essential factor producing architectural comfort. "About Furniture" and "Shelter or Playground" make an independent step away from the conventional attitude concerning interior decoration and social behaviour. Schindler rejects all decoration on furniture and walls, and even demands that household-objects should be kept in closets unless needed.

"The furniture is growing lower and lower. A modern table should hardly be more than two feet and two inches high, and a modern seat measures less than sixteen inches. ... Instead of impressing each other with a series of conventional postures and manners, certifying good ancestors and upholding our social prestige, we are trying to relax together, as the only way of getting real human contact." 11

The last article continues some ideas Schindler mentioned in his manifesto of 1912. The house is no longer a castle emphasizing safety through strong walls, but the background for a harmonious life. The house will lose its conventional front-door and back-door façades; the distinction between indoors and outdoors will disappear; the garden will become an integral part of the building.

The notion of "health," "Koerperkultur," and "progress" are pervasive in all articles. Search for a new "Kultur" is regarded as the highest cult-symbol in a time where ecclesiastical values are no longer extant. Therefore "Koerperkultur," as the specific celebration of the body seems the logical consequence of a progress which started at a time of fundamental changes with

the new industrial and technological production and related changes in the urban and architectural development. Georg Simmel analyzed the behavior of the "metropolitan man," and his relation to the individual-mass within the metropolis. The contradiction between the celebration of the "Koerperkultur" and the metropolitan crowd reflects the contradiction between the personal concern with health, and the "blasé" attitude of the individual of modern metropolis. This is best observed by Simmel in his book The Metropolis and Mental Life.<sup>12</sup>

Reflecting on Schindler's teacher Adolf Loos, two similarities are evident. Loos' appreciation of the Anglo-Saxon culture and its informal lifestyle, and two articles written by him in 1898. In "Das Sitzmoebel,"<sup>13</sup> and "Die plumber"<sup>14</sup> Loos celebrates the English and the American attitude of sitting and relaxing.

"Praktisch soll also jeder stuhl sein. Wenn man den leuten nur praktische sessel bauen wuerde, wuerde man ihnen die moeglichkeit bieten, sich ohne hilfe des decorateurs vollkommen einzurichten." <sup>15</sup>

And in "Die plumber" Loos presents his experiences of America.

"Als ich vor einiger zeit eine amerikanische dame fragte, welcher ihr der bemerkenswerteste unterschied zwischen Oesterreich und Amerika zu sein scheine, antwortete sie mir: the plumbing! - die installationsarbeiten, heizung, beleuchtung und wasserleitungsanlagen. Unsere haehne, ausguesse, waterclosets, waschtische usw. sind noch weit, weit hinter den englischen und amerikanischen einrichtungen zurueck." <sup>16</sup>

But as Loos points out in the same article, the bathroom and the "Koerperkultur" were not always neglected in the German speaking countries, and he cites the famous bathroom in the Fugger-house in Augsburg as a jewel of German renaissance art. Loos concludes that we will reach a higher level of art if we achieve a higher level of culture.

"Neben akademien baue man badeanstalten und neben professoren stelle man bademeister an. Eine hoehere kultur hat dann schon eine hoehere kunst zur folge, die, wenn sie sich offenbaren will, ohne hilfe des staates zutage tritt." 17

Comparing these ideas with Schindler's article about "Plumbing and Health" the similarities seem evident.

**“Care of the Body”**  
**Los Angeles Times, 14 March 1926**

Rudolph M. Schindler

*Ventilation*

Although the old cultures of the Orient have developed a deep understanding of the physiological aspects of human breathing, the truths about proper physical conditions of the air for our breath are new and largely unknown.

Remainders of the old animal instincts for safety and religious prejudices against the night air led to the pernicious but widespread custom of closing the house up tight at sundown. The pursuant use of incense and perfumes is proof of the infantile stage of ventilating habits.

As long as we use directly the immense reservoir of air the out-of-doors provides, no problem of air supply arises. If, however, a portion of this body is enclosed in a room, conditions change entirely. The air in the room will be changed, chemically, physically, and bacteriologically through the exhalations of the inhabitants and objects in the room until it is entirely unfit to sustain life.

This enclosed body of air is not of even consistency, but arranges itself in layers according to its temperature and density. The moisture released through our breath and our skin tends to rise toward the ceiling, and forms a layer of invisible clouds. The carbon dioxide produced in our lungs, on the other hand, is heavier than clean air, and sinks to the floor. It is, therefore, evident that proper

constant ventilation necessitates exhaust openings to the outside near the ceiling and near the floor, whereas the pure air should be allowed to enter at the height of its level of density.

The usual open window creates a current of air through the room which does not efficiently affect the layers of air above the level of its lintel, below the level of its sill, and in the corners of the room. This startling fact has its parallel in the warm or cold water currents of the ocean, which are able to transverse distances of thousands of miles without mixing very much with the surrounding fluid. If such localized currents of air through a room attain very noticeable speed we call them “drafts.”

To breathe polluted air most of the time, only to get a few wafts of fresh air for short periods by opening a window or two, is an unclean procedure. The lack of tightness of the average window or door is a life-saving feature, and the advent of the modern metal weather strip a real menace, provided no other means to obtain a constant and diversified ventilation is provided.

The problem of ventilation is, therefore, to change the air slowly and constantly as a body with avoidance of localized drafts and stagnant air pockets.

The house of the future will abandon the present window and provide



separate systems of openings for air and light.

The old superstition that rooms must be high in order to be wholesome is obsolete. Instead of a high room with a few half-height windows at one or two sides, the rooms should be low, with small openings at all sides and levels, building the whole house on the principle of a basket. If these openings are formed in such a way as to reduce the velocity of the air sufficiently, we shall have a constant and not noticeable exchange of air through the whole house.

The moving force for this exchange will not be the violent localized differences of temperature used theretofore, but a much more efficient horizontal movement caused by wind, differences of density, and barometric pressure.

An important impediment to good ventilation is our method of using the air as a vehicle for heat transference. In order to heat a room sufficiently it is really necessary to stop ventilating it. An entire new scheme for heating will have to be developed; of this I shall speak later.

Contrary to the custom of our ancestors, we are more and more aware of the beauty and healthfulness of sleeping out of doors. The bedrooms are slowly degenerating into dressing-rooms and our beds are placed on an open porch. But still there are architects who think they may enhance the "homey" appearance of a house by fitting it out with the old criminal wooden shutters, and reminding us of the resultant wonderful bedroom "atmosphere" which must have oozed through their perforations.

The basement is another insane reminder of past limitations. Why anyone should build such an expensive, unventilatable, moist, dark room in the ground is not understandable. By means of a thin layer of heat-insulating material, any room above the ground may be made as heat-proof as the basement.

The city planner has not even begun to think about his problem of ventilation. The present city street is absolutely unfit to form a proper channel for the air supply, and is only inhabitable through various uncontrolled conditions.

Although the new law for terracing the skyscraper helps ventilation indirectly, the frequent eddies and whirls in our streets, made apparent by the dust raised, show the failure of our city system. However, there is hope that by the time the growth of cities will have intensified this problem beyond the bearable, we shall be ready to abandon the form of social grouping altogether.

**“Care of the Body”**  
**Los Angeles Times, 21 March 1926**

Rudolph M. Schindler

*Plumbing and Health*

The first attempt at plumbing is the rule-of-camp of all primitive social groups, to reserve the water of the neighboring brook for drinking purposes, and to do washing and bathing after it has left the settlement.

This “close-to-the-water” tendency of the primitive is strangely in contrast with the customs of our cultural ancestors in medieval Europe. Intense crowding, compelled by social conditions, polluted streams and wells. Sanitary considerations and taste led more and more to the constant use of artificial beverages like wine, beer, milk, and other water substitutes. Infrequent bathing and its consequences, on the other hand, compelled the use of strong perfumes, powder, and rouge.

The abundant water supply which our modern cities provide has changed our customs of washing and drinking completely. Furthermore, it makes it possible to liquefy the waste matter to a degree which leads to an efficient and sanitary removal of sewage. This does away with the dangers of decay in our immediate surroundings, and it will, in the end, eradicate unreasonable fear of our drainage system.

A modern, smooth, tile sewer, properly graded and ventilated, is an entirely sanitary tube. If the pipe is well ventilated by being carried into the open above each roof, the air in it is freer of dust and germs

than is that of our city streets. However, to prevent this air from entering our rooms, American cities prescribe elaborate backventing systems which form the one unsanitary feature of the scheme. The multiple connections with the dry ventpipes provide unflushed pockets for stagnant waste matter, and invite decay.

The plumbing system of the future will use traps which may not easily be siphoned, but which will do away with all ventpipes. It will try to preserve a uniformly smooth interior for the drainage pipes, keeping them sufficiently small in diameter to insure a complete high velocity flush at every use.

Although the material of modern plumbing fixtures is developed very highly, their forms are not free from the influence of the past. Both washbowl and bathtub are fixtures designed for infrequent use, and in view of a limited water supply.

The principle of leaving one's body in stagnant water which has been polluted by the cleansing process is not sound. It is further impossible to keep washbowl and bathtub entirely clean, or to prevent the water from coming into contact with stoppers, overflow pipes, and the like, which have been soiled by preceding use.

With the possibility of drawing water of any temperature and mixing it with soap and other ingredients before it leaves the

faucet, it will be feasible to use flowing water exclusively. Both bathtub and washbowl will be replaced by fixtures built on the shower principle.

The toilet bowl will have to be lowered for physiological reasons, and should be cleaned by an efficient noiseless flushing valve.

Instead of being crowded into the smallest possible space, the bathroom will more and more assume the spaciousness due to a room for physical culture. It will have the largest window in the house and be adjoined by porches for sunbaths and gymnastics.

The respectable "Saturday night" bath has developed into showers taken at least daily. It is natural that this change of attitude toward the cleanliness of our body will reflect on our attitude toward our clothes. Most of our textiles are still designed on the astounding principle that they should not "show the dirt." The washing machine should make it possible to develop the spasmodical "dry-cleaning" into a condition of more constant cleanliness. It will only be necessary to do away with all the ugly cuts, seams, buttons, and fasteners, which make the present cleaning process such a chore for an expert, and to use, as much as possible, textiles which need not be pressed at all.

These points indicate the tremendous significance of the "plumber" in our lives, and in the effort to make them enjoyable without the necessity of getting "drunk" on substitutes for clean water.

**“Care of the Body”**  
**Los Angeles Times, 4 April 1926**

Rudolph M. Schindler

*About Heating*

Civilization is, to a large degree, a result of the success of the human race in adapting itself to varying conditions by means of its inventive imagination instead of physical development. So, instead of growing a fur in order to meet rigorous climatic conditions, men have invented looms and the elaborate heating systems of our buildings.

If we make a campfire in the open, we are careful to select a place which affords some protection to our backs. Only the direct heat radiation of the first serves for comfort. The air warmed by the flames escapes unused. All the heating systems developed since try to use the air as a vehicle for heat transference, and in consequence require a tight enclosure for our rooms, and insulation for our houses against the influence of outside temperatures.

Our time has developed efficient schemes for such insulation, effecting important changes in our architectural conceptions. The thick heavy wall has been abandoned and the room enclosures are designed subject to the principle of division of labor. The material which serves to insulate the house is separate and distinct from the one which forms the room and carries the roof. Being made with one purpose in view only, this insulating material is efficient enough to require but a very thin layer. As much as we may like them, the deep embrasures and jambs, thick adobe walls and their imitations are a thing of the past.

Their use is not possible in any honestly built house of our time, but relegates all such sentimental reminiscences into the category of misplaced stage settings.

The old attic, too, has lost its reputation as a heat protector for the house. The few dusty spiderwebbed vent openings in its side cannot prevent the attic from becoming a more or less enclosed volume of air, not fit for insulating purposes. In summer this air will heat up during the day and keep the house uncomfortably hot long after sundown. In winter the usually thin ceiling construction of the top floor cause a tremendous heat loss into the attic.

It is much cheaper and more efficient to insulate a single roof construction by means of a thin layer of insulating material against heat loss and provide the necessary cooling in summer by a horizontal air current right underneath the ceiling.

Incidentally our ability to produce heat or cold, at will, is one of the most revolutionary influences upon our cooking. By keeping supplies cool and avoiding the initial decay, it is possible to do away with all the strong seasonings and flavorings of our old recipes invented to cover up the lack of freshness of the food.

The fireplace has lost its main original purpose of heating the house and forms now an important nucleus

for social grouping in the room. As such it gives a natural center around which to compose the whole of the room formally. To do this by placing the mantel, as is usually done, in the center of the long wall, frequently flanked by doors, is misunderstanding the problem. The fireplace and its hearth should be moved toward a quiet corner out of the path of the traffic lines in the room, and have enough wall space flanking it to make a comfortable grouping of seats possible. Why builders should insist on topping the place of the fire with a mantel shelf on which to put the usually hideous, insignificant ornamentation is not understandable. The fire should be kept the feature of a restful 'fire place' and only things related to it belong in its immediate neighborhood. A clock especially seems superlatively inappropriate in front of anyone who wants to browse. The flame is one of the most enjoyable luxuries of our lives and only the most innocent will be satisfied to replace it by modern gas logs and such atrocities.

On the other hand, there seems no reason for the frantic attempts at covering up all steam or hot water radiators. Although it is desirable that the room should digest formally all appliances in it and become an organic unit, this can be achieved only by a few of the most skilful architects. Usually the radiator cover used is much less sightly than the radiator under it, at the same time spoiling its best efficiency and sanitary qualities.

Useful as our heating systems may be, however, their basic principle is faulty. To use the air as a vehicle for the heat necessitates tight enclosure of rooms and the overheating of portions of them. Anyone who has experienced the stimulating effects

of a cool pure breeze on a sunny mountaintop and the length of a stagnant hot-air night in the tropics, will realize that the old campfire uses a much more wholesome method of heating than all of our complicated modern plants.

The house of the future will provide cool, clean, constantly changing air, but will keep us warm by means of direct heat rays emanating uniformly from the walls and the ceiling. The methods for such distributed radiating heat supply are still entirely undeveloped, but the heating engineer must sooner or later realize the need.

**"Care of the Body"**  
**Los Angeles Times, 11 April 1926**

Rudolph M. Schindler

*About Lighting*

Primitive life is filled with fear and superstitions concerning darkness, in spite of the protection against enemies offered through it. The feeling of safety created in dusky dens still gives us the illusion of coziness in darkened rooms. This remembrance, however, is rapidly overcome by our understanding natural phenomena, the pacification of the world, and our strong feeling for outdoor life. The house is losing more and more the character of the den and changes into an open shelter against the rain.

The architectural consequences of this development are important. The window has ceased to be a small light opening in a heavy wall, but becomes a glass wall in itself. The basic architectural scheme of all traditional architecture, that is, to surround the window opening by large wall surfaces and by decorative frame designs, is now out of place. The traditional small pane of the times of primitive technic has been supplanted by the large sheet of plate glass, removing the bars between us and the "out-of-doors."

The double-hung window, with its ugly crossbar and its meager breadth, is being supplanted by the out-swinging, open-armed casement.

The same tendency has done away with the use of the colored glass and the heavy drape of the last century. The glare in the room is now being softened by light curtains—which must be real draw curtains, in order

to obliterate the horrible window shade with its unsightly roller and its restless mechanism.

It is therefore evident that the development of the window from a furtive peek-hole into a means of living out-of-doors at will must make it impossible to apply traditional architectural styles without turning our present houses into caricatures. A new type of architecture is in the making.

A similar revolutionary change can be observed in our artificial lighting schemes. The primitive means of producing light, like oil, gas, etc., required an inconvenient concentration of the light source into an awkward fixture, hung of necessity in the center of the room. The electric light, on the other hand, permits free distribution of the light sources into all places where light is required. The stupidity of furnishing electric light by means of a chandelier can therefore only be surpassed by trying to make the bulbs look like candles.

A mistake in the opposite direction is very often made, however, by using the possibilities of the electric light to the extent of imitating the effect of daylight. The indirect lighting schemes, with their lighted ceilings, should be sparingly used in homes, where brackets and low standing lamps brought into contrast with the dusk are much more restful. It is important that the manufacturer perfect brackets which

are utilitarian and useful instead of producing a host of "ornamental" atrocities with imitation candles.

No room should ever be cursed by an outlet in the center of the ceiling. The use of plugs and movable lamps should be encouraged wherever possible. The popular pair of brackets placed on either side of the mantel is to be condemned. Anybody sitting in front of the fire will be distressed by their light and will require instead a reading lamp behind his shoulder.

If the center light should not be used in any room for the sake of its spaciousness and restfulness, it is entirely out of place in the bedroom. Anybody lying in bed will prefer a low-placed light rather than the glare of a fixture or lighted ceiling.

In general, the bulbs will require transparent shades to distribute and soften the light. In the dining room, however, some exposed direct rays will increase the sparkle of the silver and the lucidity of the glass.

In absolute contrast to this are all entrance halls. The eye which emerges from the dark outside should be welcomed by meeting only the softest indirect rays possible.

The tendency of the modern architect who understands his problems will be to distribute light sources as efficiently and usefully as possible. He will do away with all unnecessary gingerbread commonly called "fixtures" and instead make the source of light as unobtrusive and glareless as possible. The bulb shall become a friend and helpmate instead of remaining the ridiculously overdressed, flashy and tiresome lackey of yesterday.

**“Care of the Body”**  
**Los Angeles Times, 18 April 1926**

Rudolph M. Schindler

*About Furniture*

The relations between home and health are such that their importance cannot be overestimated. We are what our environment makes us and if our environment is such as to produce excellent health, beauty, joy, and comfort, it will reflect immediately in our lives.

One of the most potent enemies in our struggle for a happier life is our inability to remain masters of our creations.

The furniture, originally conceived to adapt the house to a more comfortable use, has usurped our place in it. Our homes have become storage places for all kinds of “things” instead of affording us a sheltered space for living, which means movement.

The house will have to cease to squeeze us through narrow door jambs, to keep us dodging among pieces of furniture, to perch us on top of scaffolds. It must permit us to indulge in the free harmonious motions of a walking and resting animal, which we are.

The most important development leading to a saner way of furnishing is the mastering of the floor problem in our densely populated social groups.

The medieval street served not only as a passage but as a gutter, sewer, and garbage-disposal plant combined. It was no wonder that walking was not considered dignified

and that even the floors inside the houses had no good reputation.

The furniture had largely a mission of cleanliness and everything was raised as high off the floor as possible. It is characteristic that the Japanese, who solved a less acute floor problem by the use of two sets of shoes, never developed furniture in our sense.

A physical and mental tendency “back to earth” is making itself felt strongly in this century. We are again able to sit on the floor without physical, and especially, without social discomfort.

The furniture is growing lower and lower. A modern table should hardly be more than two feet and two inches high, and a modern seat measures less than sixteen inches.

Our bodily positions, too, are losing their stiff, representational lines. It has ceased to be a sign of politeness to assume the most uncomfortable position possible in front of our friends. Instead of impressing each other with a series of conventional postures and manners, certifying good ancestors and upholding our social prestige, we are trying to relax together, as the only way of getting real human contact.

The abandoning of the use of the corset, physically and mentally, forces a similar development of the furniture. The difference between a stiff medieval chair throne and a



good, really modern, upholstered club chair is a difference between two worlds of thinking and motioning.

And this is the reason why the busy attempts of our antique dealers, the copying manias of our furniture manufacturers, and the "true to style" concoctions of our interior decorators are so ridiculous.

Another development of equal importance is the one "away from pattern." The decorative forms and colors on the textiles and walls of our ancestors had a definite meaning and the significance of writing. With the use of the letter-alphabet, we have lost all understanding for this type of communication, and the modern pattern is usually an incoherent play with senseless forms.

Our highly developed technic is enabling us to produce materials of such variety of color and texture that the pattern is entirely unnecessary to give interest.

A plain, well colored, modern floor covering is highly preferable to any Oriental or other patterned rug. Even a simple border will have the bad tendency to restrict the apparent size of the room.

Especially the wallpaper must lose all its "decorative" attempts to compete with vegetable markets. It should, as a matter of course, be the quietest, most neutral note in the room. We must lose our prejudice that any kind of scrawl, laboriously applied to a surface, enhances its value. On the contrary, an interesting plainness is the most difficult and most precious thing to achieve.

If a design or picture is good enough, a whole room should be devoted to it. Repetition or grouping with similar bad ones will not improve its quality.

Vases belong in the closet unless some branch is in need of water and support.

Curtains are a convenient means to regulate and vary the light entering through our windows, and not useless rags fastened and draped for the sake of decoration.

It must be the basic principle of all interior decoration that nothing which is permanent in appearance should be chosen for its individual charm, or sentimental associations, but only for its possible contribution to the room conceived as an organic entity, and a background for human activity.

Rooms furnished according to historical styles belong in museums or on the stage. Our modern way of living is developed and characteristic enough, and has the power to create its own style.

**Care of the Body**  
**Los Angeles Times, 2 May 1926**

Rudolph M. Schindler

*Shelter or Playground*

It is not enough appreciated how directly and clearly our attitude toward life is expressed through our houses. The peasant who is trying to build his house exactly like his father's modernizes it unconsciously. The architect, however, who does not work freely from memory, but who uses reproductions to help his imagination, is too conscious about his effort and creates dead replicas.

Our present houses are too strongly under the influence of the past and its outlook on life. Fear dictated originally the form and spirit of the house. The behavior of our ancestors was overshadowed by constant defense reactions against real and imaginary enemies. The emphasis of the historian upon war and its physical heroism proves the tremendous need to counteract these fear complexes.

No wonder that everybody's house was his castle, and that all rooms tried to appear comfortable by emphasizing their safety through their heavy walls, small windows, ponderous grilles, thick curtains, and dim light.

This spirit was only partly broken when the crumbling of the caste system started the lower classes on a period of social climbing. The house was and is a source of social prestige. The parvenu who had access to the front rooms of the aristocrat insisted that his home be historical in design, and that every one of his own rooms be a replica of

the luxurious salon which impressed him.

The American house of today is entirely a product of this attitude. Neglecting to consider the changes in our mental and physical life, it tries to give social prestige by masquerading in outworn historical styles.

These changes, however, demand expression. The earth, the sky, and the neighbor, the curse of the past and the retribution of the future, have lost their frightfulness.

Our high mechanical development easily controls our living conditions. Our knowledge about our own bodies releases us from slavery, and Nature becomes a friend. The house and the dress of the future will give us control of our environment, without interfering with our mental and physical nakedness.

Our rooms will descend close to the ground and the garden will become an integral part of the house. The distinction between the indoors and the out-of-doors will disappear. The walls will be few, thin, and removable. All rooms will become part of an organic unit, instead of being small separate boxes with peepholes. How petty the attempt to erect each one of different materials and to decorate them separately in different "styles!" Each house needs to be composed as a symphony, with variations on a few themes.

Our present scheme of social life in which we drudge behind the scenes most of the time in order to present an "impressive" face for a few moments of company is outworn. In driving out the king, we have lost the careless instigator of fashionable social manners. Our own everyday actions must achieve the dignity of the past ceremonials. Each one shall create his own fashions—but only for himself.

Our house will lose its front-and-back-door aspect. It will cease being a group of dens, some larger ones for social effect, and a few smaller ones (bedrooms) in which to herd the family. Each individual will want a private room to gain a background for his life. He will sleep in the open. A work-and-play room, together with the garden, will satisfy the group needs. The bathroom will develop into a gymnasium and will become a social center.

A simplified cooking will become part of a group play, instead of being the deadly routine for a lonely slave.

The architect will try to divine the possible development of his client, and will design a building which may grow with him. The house will be a form-book with a song, instead of an irrelevant page from a dictionary of dead form dialects.

And life will regain its fluidity.

### 2.3. "SPACE ARCHITECTURE"

The article "Space Architecture" of 1934 was first published in Dune Forum (Oceano, Calif., pp. 44-46) in February 1934, and for the second time in California Arts and Architecture (San Francisco, vol. 47, pp. 18-19) in January 1935.

Two years before, in 1932 the exhibition the "International Style" took place at the Museum of Modern Art in New York.<sup>1</sup> As the article is a response to and criticism of functionalism and the International Style the juxtaposition of the two opinions will indicate their differences.

Functionalism is an inductive scientific model assuming that a complete and distinct determination of all problems will reveal the true and only solution to an architectural problem given. Functionalism is a term used in architecture to describe an attitude toward design which holds that the form of a building should be determined by practical considerations such as planning and structure, as distinct from the attitude which postulates a preconceived notion in the designer's mind to which plan and structure have to conform.

"In part the principles of the International Style were from the first voiced in the manifestos which were the order of the day. In part they remained unconscious, so that even now it is far simpler to sense them than to explain them or to state them categorically. Many who appear to follow them, indeed, refuse to admit their validity. Some modern critics and groups of architects both in Europe and America deny that the aesthetic element in architecture is important, or even that it exists. All aesthetic principles of style are to them meaningless and unreal. This new conception, that building is science and not art, developed as an exaggeration of the idea of functionalism."<sup>2</sup>

Outlining the historical background of modern architecture Henry-Russell Hitchcock and Philip Johnson claim in their 1932 book The International Style: Architecture Since 1922 that the so-called rationalism of architects like Schinkel and Labrouste was a type of functionalism. The distinction between the European notion of

functionalism and the American categorization of functionalism as a style is probably the most crucial issue. The underlying assumption of the European functionalists was the relevancy of socio-economical input as the determining factors. Architects like Hannes Mayer claimed

"...that interest in proportions or in problems of design for their own sake is still an unfortunate remnant of nineteenth century ideology. For these men it is an absurdity to talk about the modern style in terms of aesthetics at all. If a building provides adequately, completely, and without compromise for its purpose, it is to them a good building, regardless of its appearance." 3

In contrast to the European functionalist,

"...to the American functionalists, unfortunately, design is a commodity like ornament. If the client insists, they still try to provide it in addition to the more tangible commodities which they believe rightly should come first." 4

Disregarding the European principles of functionalism Hitchcock and Johnson present the "Three principles of their International Style." The first principle is "architecture as volume," describing the contemporary construction method as a skeleton of supports, differentiating between the construction skeleton and the non-bearing enclosing and interior walls. The second principle is entitled "concerning regularity," dealing with the logical subdivision of the façade according to the structural principles.

"The supports in skeleton construction are normally and typically spaced at equal distances in order that strains may be equalized. Thus most buildings have an underlying regular rhythm which is clearly seen before the outside surfaces are applied. Moreover, economic considerations favor the use of standardized parts throughout. Good modern architecture expresses in its design this characteristic orderliness of structure and this similarity of parts by an aesthetic ordering which emphasizes the underlying regularity. Bad modern design contradicts this regularity." 6

This second principle is in contrast to Le Corbusier's fifth principle, the "Free design of the façade," whom Hitchcock and Johnson on the other hand claim as one of the four leaders of modern architecture.<sup>7</sup> The third principle is "the avoidance of applied decoration." Adolf Loos as one of the most important theorists demanding the abolition of ornament is not mentioned in the book, neither his theoretical writings nor his architectural work. In spite of all these shortcomings the book became the most influential documentation of the European Modern Movement for the United States.

Since Rudolph Schindler was engaged in a correspondence with Johnson before the opening of the exhibition, Schindler's opinion is well documented:

"It seems to me that instead of showing late attempts of creative architecture it (the exhibition) tends toward concentrating on the so-called 'International Style.' If this is the case my work has no place in it. I am not a stylist, not a functionalist, nor any other sloganist. Each of my buildings deal with a different architectural problem, the existence of which has been forgotten in this period of Rational Mechanization. The question of whether a house is really a house is more important to me, than the fact that it is made of steel, glass, putty or hot air." 8

This letter nevertheless shows Schindler's personal disappointment to find out, that he was not regarded as a modern architect by the leading East Coast critics.

The "Space Architecture" article gains new relevancy when seen in this context.<sup>9</sup> Schindler speaks in his article about the modern

"buildings which try to achieve an up-to-date character by a play with highly-conventionalized contrasting sculptural forms." 10

In contrast to this "new conventionalism" of what constitutes the vocabulary of modern architecture, Schindler's statements of space architecture correspond rather to a perceptive idea of "Raum" ("space," in the German language used as an abstract word)

than to a mere functional and formal use of modern building technology and international-style elements. Schindler's idea of "Space Architecture" parallels the new perception of "Raum" as it occurred in the 1920s in the natural science and as it was defined in physics by Albert Einstein's theory of relativity. The theory of relativity has brought a fundamental change in scientific conception of space and time, as described by the famous saying of Hermann Minkowski:

"From henceforth space in itself and time in itself sink to mere shadows, and only a kind of union of the two preserves an independent experience." 11

The definitions and implied conventions of space underwent a radical change in the 20th century. Concerned with the meaning of "where" space is, it appears that there is no quality contained in our individual primitive sense experiences that may be designated by men, rather, what is spatial appears to be a sort of order of the material objects of experience. The existence of a concrete "object" is a means of taking into account the persistence in time or the continuity. The existence of concrete objects is thus of a conceptual nature.

In conjunction to this a look at Heidegger's space conception could help to elaborate on a discussion of space. The meaning of the concepts of objects depends wholly on their being connected with groups of elementary sense experience. This connection between "object-sense experience" is the origin of the illusion making primitive experience which appears to inform us directly about the relation of material bodies (objects). These objects are things (Dinge) and our dwelling is always staying with things. Our dwelling therefore is experienced through our staying with things, which themselves allow in this manner to manifest space.

"What the word space, 'Raum,' 'Rum,' designates is said by its ancient meaning. 'Raum' means a place cleared or freed for settlement or lodging. A space is something that has been

made room for, something that is cleared and free, namely within a boundary, Greek 'peras.' A boundary is not that at which something stops but, as the Greeks recognized, the boundary is that from which something begins presencing. That is why the concept is that of 'horismos,' that is horizon, the boundary. Space is in essence that for which room is made, that which is let into bounds. That for which room is made is always granted and hence is joined, that is, gathered, by virtue of a location, that is, by such a thing as the bridge (example used by Heidegger). Accordingly, spaces receive their being from locations and not from 'space.' Things which, as locations, allow a site we now in anticipation call buildings." 12

Heidegger continues his definition about space by outlining the correlation of location and space.

"Man's relation to locations, and through locations to space, inheres in his dwelling. The relationship between man and space is none other than dwelling, strictly thought and spoken. When we think, in the manner just attempted, about the relation between location and space, but also about the relation of man and space, a light falls on the nature of the things that are locations and that we call buildings." 13

Returning to Schindler, his notion of architecture is derived from relationships of bodies (Lagebeziehungen) creating space. For Schindler it is not function, construction, or building technology which are the determining factors creating architecture, but the preconceived notion of a location through objects. When Schindler describes the attitude of the architect designing modern buildings, he characterizes him as

"not primarily concerned with the body of the structure and its sculptural possibilities. His one concern is the creation of space forms - dealing with a new medium as rich and unlimited in possibilities of expression as any other media of art: color, sound, mass, etc." 14

Color, sound, and mass refer directly to what Heidegger called the "boundary" from which something "begins its presencing." Schindler's definition of architecture includes the significance of architecture



as art. With this statement Schindler formulates his criticism of the functionalists and the International Style.

"Blind to the growth of a new art dealing with the new medium (space) in their midst, the 'Functionalists' ask us to dismiss architecture as art altogether. They want to build as the engineer does, producing 'types' without other meaning but that of function. They limit themselves entirely to the problem of civilization - that is the struggle to adapt our surrounding to our limitations. They forget that architecture as an art may have the much more important meaning of serving as a cultural agent - stimulating and fulfilling the urge for growth and extension of our own selves." 15

Schindler's article is also directed against the statement of Le Corbusier, that the "house is a machine to live in." The loss of a cultural model of how to dwell is replaced by a deterministic model following the rule of a practically orientated operational functionalism.

"Most of the buildings which Corbusier and his followers offer us as 'machines to live in,' equipped with various 'machines to sit and sleep on,' have not even reached the state of development of our present machines. They are crude 'contraptions' to serve a purpose. The man who brings such machines into his living-room is on the same level of primitive development as the farmer who keeps cows and pigs in his house. Mere instruments of production can never serve as a frame for life. Especially the creaks and jags of our crude machine age must necessarily force us to protect our human qualities in the homes contrasting most intensely with the factory. The factory must remain our servant. And if a 'Machine-Made House' shall ever emerge from it, it will have to meet the requirements of our imagination and not be merely a result of present production methods." 16

In 1934 Schindler already rejected the functional tradition which had its origin in the discontent of the 19th century architects with the historical revivalism. Louis H. Sullivan's dictum of "form follows function" was an expression of the late 19th century scientific body of knowledge. The function-theories starting with Descartes and Leibnitz found their most important

formulation in the "Theorie des fonctions analytiques" by Joseph L. Lagrange in 1797. By the time the inductive function theories were applied to architecture, they were already "historical." Functionalism as an inductive scientific model was most significantly questioned by Karl Popper. Popper refutes the scientific-empirical method as it was commonly formed, which is essentially inductive, proceeding from observation or experiment. In an article "Science: Conjectures and Refutations" Popper summarizes his criticism on induction: <sup>17</sup>

"In constructing an inductive machine we, the architects of the machine, must decide a priori what constitutes its 'world;' what kinds of 'laws' we wish the machine to be able to 'discover' in its 'world.' In other words we must build into the machine a framework determining what is relevant or interesting in its world: the machine will have its 'inborn' selection principles. The problem of similarity will have been solved for it by its makers who thus have interpreted the 'world for the machine.'" 18

Inductive functionalism in architecture has its 'inborn' selection principles, determining the relevant and irrelevant architectural criteria.

Anybody who reads about modern architecture in current publications comes constantly upon the reiteration of how important it is for the modern architect to deal with "space". However, if one analyzes the various pronouncements issued by the groups or individuals who want to lead the modern architectural movement, one does not find any real grasp of the space problem.

In the summer of 1911, sitting in one of the earthbound peasant cottages on top of a mountain pass in Styria, a sudden realization of the meaning of space in architecture came to me. Here was the house, its heavy walls built of the stone of the mountain, plastered over by groping hands - in feeling and material nothing but an artificial reproduction of one of the many caverns in the mountain-side. I saw that essentially all architecture of the past, whether Egyptian or Roman, was nothing but the work of a sculptor dealing with abstract forms. The architect's attempt really was - to gather and pile up masses of building material, leaving empty hollows for human use. His many efforts at form-giving resolved themselves continuously into carving and decorating the surface layers of his mass-pile. The room itself was a byproduct. The vault was not invented as a room-form, but as primarily a scheme to keep the masses hovering. The architectural treatment of the inner room confined itself to the sculptural carving of the four walls and ceiling, shaping them into separate faces of the surrounding pile of sculptural mass. And although improved technique has constantly reduced the actual bulk of this sculptural pile, essentially the architect was still concerned with its sculptural treatment. All conventional architecture of the occident, including all historical styles, was nothing but sculpture.

And, stooping through the doorway of the bulky, spreading house, I looked up into the sunny sky. Here I saw the real medium of architecture - SPACE. A new medium as far as human history goes. Only primitive uncertain gropings for its possibilities can be

found in historical buildings. Even the gothic builder merely caught it between his sculptured pillars without attempting to use it consciously as a medium of his art.

"Architecture" is being born in our time. In all really modern buildings the attitude of the architects is fundamentally different from the one of the sculptor and the one of his brother, the conventional architect. He is not primarily concerned with the body of the structure and its sculptural possibilities. His one concern is the creation of space forms - dealing with a new medium as rich and unlimited in possibilities of expression as any of the other media of art: color, sound, mass, etc.

This gives us a new understanding of the task of modern architecture. Its experiments serve to develop a new language, a vocabulary and syntax of space. Only as far as the various schools help us in that direction can they be considered significant.

Shortly after my revelation in the mountains, a librarian in Vienna handed me a portfolio - the work of Frank Lloyd Wright. Immediately I realized - here was a man who had taken hold of this new medium. Here was "space architecture". It was not any more the question of moldings, caps and finials - here was space forms in meaningful shapes and relations. Here was the first architect. And the timeless importance of Wright lies especially in these first houses. I feel that in his later work he has again become sculptural. He tries to weave his buildings into the character of the locality through sculptural forms. The hotel in Tokyo seems the play of a virtuoso with traditional oriental motives, rather than the product of a direct impregnation by the nature of the locale. And although as an artist far above most of his contemporaries, this somewhat relates his later work to the "Modernistic School."

In the main the work which is generally called "modernistic" is an architectural backwash of the several movements of modern art in Europe, such as futurism, cubism, etc. These buildings try to

achieve an up-to-date city character by a play with highly-conventionalized contrasting sculptural forms. Instead of conceiving the building as a frame which will help to create the life of the future, they limit themselves, like a painting or a piece of music, to an expression of the present with all its interesting short-comings. And it is in this way that the buildings of the World's Fair in Chicago have to be understood. Architecturally they are the last outcry of the chaos of the recent past, unfortunately without any attempt at opening a way toward a better architectural future.

The sub-conscious realization that architecture in its old sculptural form has died as an art, leads to an attitude characteristic of our age. Blind to the growth of a new art dealing with a new medium (space) in their midst, the "Functionalists" ask us to dismiss architecture as an art altogether. They want to build as the engineer does, producing "types" without other meaning but that of function. They limit themselves entirely to the problems of civilization - that is the struggle to adapt our surrounding to our limitations. They forget that architecture as an art may have the much more important meaning of serving as a cultural agent - stimulating and fulfilling the urge for growth and extension of our own selves.

To make matters worse and public attention more concentrated, a group of functionalists have given their breed a name: International Style. Problems of form as such are completely dismissed. The manufacturer (influenced by considerations of available equipment, competition, labor rules, profit, and personal inertia, etc.) is the god who furnishes "form" ready-made. The classical code of set forms for columns, horizontal parabets, and corner windows, all to be used equally both in the jungles and on the glaciers.

The ideal of perfection of the new sloganists is the machine - without regard for the fact that the present machine is a crude collection of working parts, far from being an organism. Endlessly

we are being shown photographs of the present automobiles as an example of formal machine perfection, forgetting that what we see in looking at a modern automobile is not a "machine". The sheet-metal hood with which its designer covers the working parts is only slightly functional. It is very definitely nationally characterized, subject to fashion, and bound by a tradition as relentless as the one which defines our clothes. What is still more important, the automobile, and for that matter all machines, are essentially one-dimensional, whereas the house as an organism in direct relation with our lives must be of four dimensions.

Most of the buildings which Corbusier and his followers offer us as "machines to live in", equipped with various "machines to sit and sleep on", have not even reached the state of development of our present machines. They are crude "contraptions" to serve a purpose. The man who brings such machines into his living-room is on the same level of primitive development as the farmer who keeps cows and pigs in his house. Mere instruments of production can never serve as a frame for life. Especially the creaks and jags of our crude machine age must necessarily force us to protect our human qualities in homes contrasting most intensely with the factory.

The factory must remain our servant. And if a "Machine-Made House" shall ever emerge from it, it will have to meet the requirements of our imagination and not be merely a result of present production methods. The work of Mr. Buckminster-Fuller in propagating the tremendous possibilities which the use of our technique of production may have for building construction, is invaluable. If he creates his Dymaxion house, however, entirely from the viewpoint of facile manufacture, letting all considerations of "what" take care of themselves, he is putting the cart before the horse. The space architect has primarily a vision of a future house. And with the clearing of that vision the necessary technique for its realization will undoubtedly develop. Although Mr. Buckminster-Fuller realizes the coming importance of space-con-

siderations in architecture, his Dymaxion house is not a "space creation". However "ephemeral", to use his own term, it may be, it is born of a sculptural conception. Its structural scheme is akin to the one of the tree, and although its branches and members may try to wed it to space by the tenderest interlockings, the "room" they enclose is not an aimful space conception but a by-product without architectural meaning.

Modern architecture can not be developed by changing slogans. It is not in the hands of the engineer, the efficiency expert, the machinist or the economist. It is developing in the minds of the artist who can grasp "space" and "space forms" as a new medium for human expression. The development of this new language is going on amongst us, unconsciously in most cases, partly realized in some. It is not merely the birth of a new style, or a new version of the old play with sculptural forms, but the subjection of a new medium to serve as a vehicle for human expression.

## 2.4. SCHINDLER'S IDEA OF PREFABRICATION

The idea of prefabrication is crucial to the Modern Movement in architecture, and Schindler's achievements have to be seen as part of a larger discussion.

The problem of prefabrication versus design is part of Schindler's reflection on this topic. In his early work he used prefabricated elements which culminated in his project for the "Schindler Shelters" in 1933, a scheme for concrete and metal-frame single-family houses. In his later years, Schindler turned away from prefabrication and used entirely wood-frame constructions with a skin of plaster or stucco.

The Schindler Shelter is the solution for the problem of the factory-made house, which was to fill the demand for low-cost homes of higher quality than was possible with the usual construction methods. Since the Schindler Shelters are not the result of prefabricated building elements, but of a prefabrication process, these houses do not imply the monotony of standardization.

The aim of all prefabrication in building construction is socio-economic: providing more extensive low-cost housing to a greater number of people by reducing high, labor-intensive, on site costs. During the depression of the 1930s the economic restraints on building houses were a distinct and important factor.

Quoting Fortune Magazine from April 1933, the cost of an average house were 6,000 to 7,000 dollars, while the average income was 2,000 dollars.<sup>1</sup> Reducing the production cost for a house to 1,800 dollars as the Schindler Shelter did was only possible by using new and unconventional building methods.

Schindler published designs for the Schindler Shelters in the early thirties. He also submitted them to the Federal Government, Department of the Interior, Washington D. C. The response of the government housing section was negative, the reasons given were too high production costs and shortcomings in the design requirements according to the governmental standards and rules.<sup>2</sup> For the Schindler Shelters, Rudolph Schindler adapted the Neal



Garret-Construction system, the floorplan is shown in the illustration (fig. 22).<sup>3</sup> The plan (copyrighted) provides for a standard layout including kitchen, bathroom, and laundry. The concentration of these rooms allows the plumbing to be located in a single wall, which - as suggested - may be an inexpensive factory-made unit. The house consists of a one-piece "shell" around a single space, which is divided by movable closet partitions. The closet partitions and the doors are standardized units, and their installation eliminates nearly all carpentry work. The standard plan includes a central hall. This hall is lighted and ventilated by clerestory windows, and together with a transom above the room doors cross ventilation and sunlight for the whole house is assured.

The entrance leads directly into the living-room without a special entrance hall (the scheme was developed for Southern California). Living-room and kitchen may be completely opened to each other, serving as one big room. The dining table is supposed to be set in the kitchen and wheeled into the living-room. Most rooms have two exposures to the outside. According to the lot the garage is placed where needed.

The Garret construction which is used for walls, floors, ceiling, and roof, so that the entire house is a monolithic weave can be described as following (fig. 23):

- 1) Light metal forms are erected on a steel pipe scaffolding. Wire mesh is placed over the forms and cement plaster applied with a trowel.
- 2) Two such concrete slabs are held apart at any desired distance by light metal braces, with fingerlike ends which bed into the concrete.
- 3) These braces form light trusses (16 inches apart) and are sufficient in strength for both walls and floor construction.
- 4) Therefore the house consists of two monolithic shells inside each other, without joints. The house is as a result well insulated.

5) The structural scheme applied uses concrete not as a massive material but only in the form of thin slabs.

A comprehensive description of the Schindler Shelters by Schindler himself outlines the structural advantages, hygienic features, and the living qualities: <sup>4</sup>

Structural advantages:

Monolithic building of one material. Simple erection by few trades. Hollow construction without bulk. Individualization possible without extra cost. Garage is separate unit to be attached any side. Living-room any size without changing of the house. All plumbing contained in one wall. Closet partitions complete factory units. Minimum of finishing on the job. Metal sash of large size without divisions. No window sills. Floors are resilient.

Hygienic features:

Vermin roof, completely monolithic. Water proof, double construction throughout in an inorganic material. Heat insulating, double walls, floors and roof. Ventilation, all rooms have cross ventilation. The hall is lighted and ventilated by clerestory windows. All rooms have two exposures. Living-room has four exposures. Sunbath on garage roof. Very large windows.

Living qualities:

Flexibility, partitions are movable and removable. Closets may open into any room. Large closets without waste space. Living-room and child's room may be overlooked from kitchen. Dining table may be wheeled from kitchen to living room. Bathroom accessible from kitchen without passing through living-room. Hall may be extended at any time to allow construction of additional bedrooms. Garage is extra wide for work bench. Garage has door to garden to facilitate its use as a work shop.

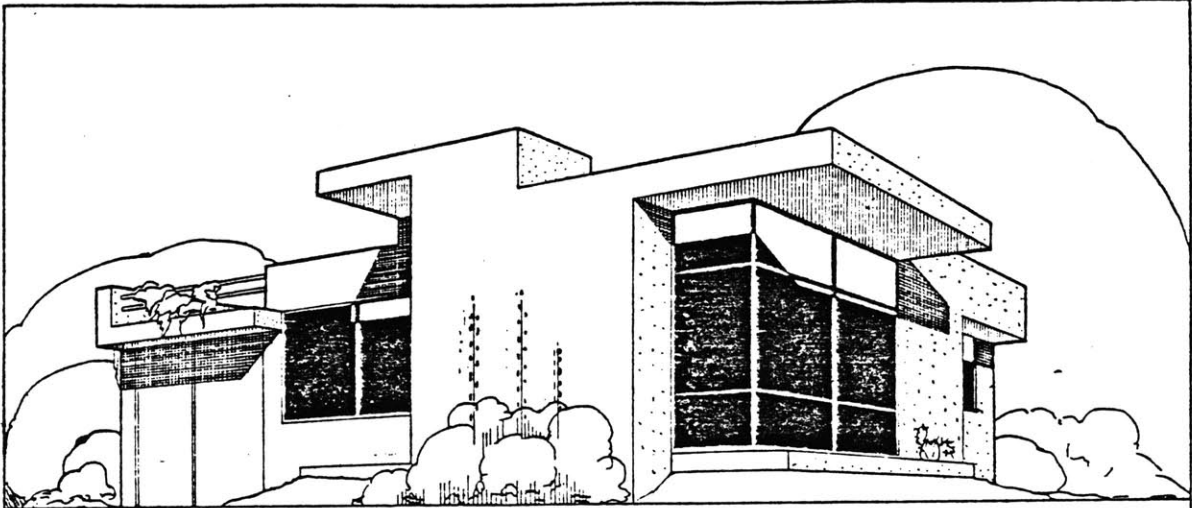
Using the Garret construction system for the shell, the elimination of window sills, the efficiency of the plumbing layout, the simplicity of the plan, the elimination of costly foundations, and the use of standard doors and closet units, combine for economy.

In the early thirties Schindler abandoned the concrete skeleton design in which interior spaces correspond to the primary structure. The Sachs apartment house in Los Angeles (1928) was the first building where Schindler replaced concrete by a wood frame construction with a skin of plaster.

The Schindler Shelters represent a transitory position between the use of massive and space-framing building materials. Comparing the decade before the Schindler Shelters, the most innovative contributions came from Germany. In 1923 Walter Gropius designed a single family house for industrial production.<sup>5</sup> Gropius is only mentioned as "one" of the many early modern architects in Europe, who pursued the research of industrialized building technology, and because of his eminent importance as a teacher at the Bauhaus.

Mass production implies through its operational process the development of a type. "Typenbildung" (formation of a type) therefore was demanded by architects and sociologists as the adequate materialization of repeating living patterns and social structures.

Seen in this context the Schindler Shelters present a thorough contribution to the discussion of the prefabricated house.



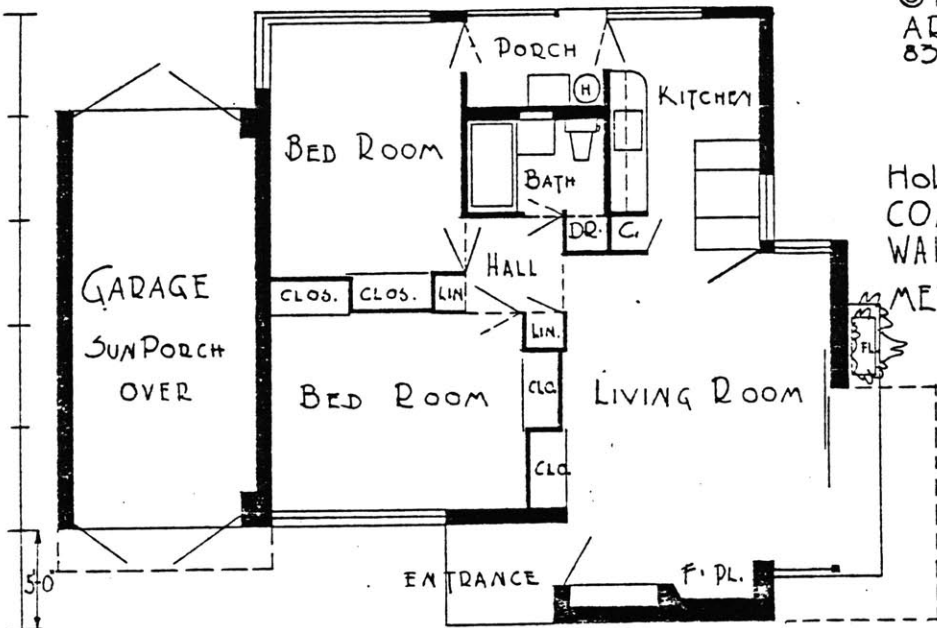
© R.M. SCHINDLER  
 ARCHITECT · L.A.  
 835 · KINGS ROAD

HOLLOW REINF.  
 CONCRETE FOR  
 WALLS, FLOORS, ROOF

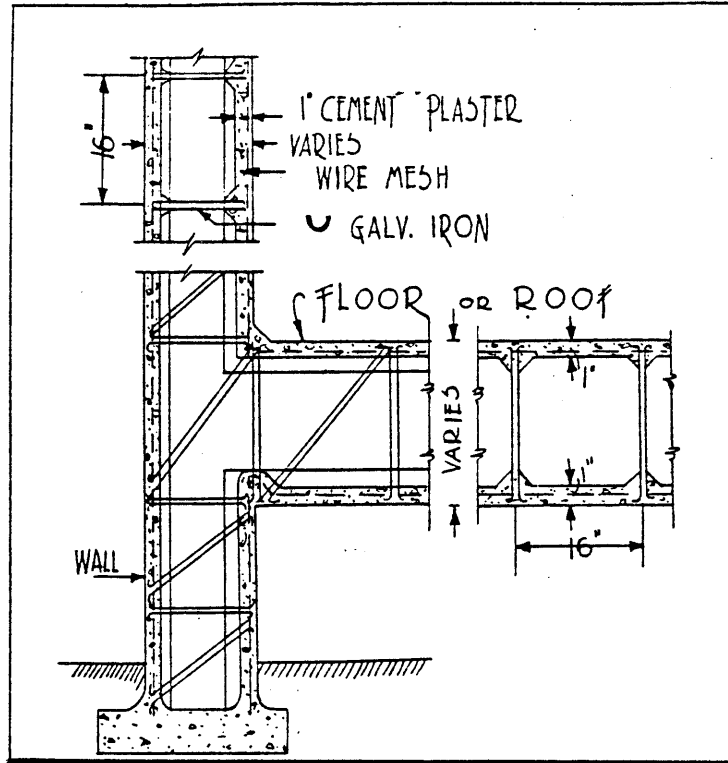
METAL SASH W.  
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**SCHINDLER — SHELTER**



22. R. Schindler, 'Schindler-Shelter', 1933, elevation, (project)



23. R. Schindler, 'Schindler-Shelter', 1933, (project) typical detail (patented) - Garret construction

## 2.5. SCHINDLER'S POSTWAR WRITINGS

After World War II Schindler published a number of articles concerning the question of how to approach the new architectural problems.

The first article was published actually during the last year of the war, entitled "Architect - postwar - post everything" (1944), the other major articles were "Reference Frames in Space" (1946), "Postwar Automobiles" (1947), and "Schindler Frame" (1947). In these articles Schindler criticizes the "Moderne" and "Streamline Design" as having lost responsibility toward problem-solving design. In search for a design which functions and expresses at the same time, Schindler attacks the phenomenon of the "sugar-coating" of the body stylist. The complete list of articles written and published after 1945 consists of four articles, one interview, and one letter to the editor. <sup>1</sup> His last article "Visual Technique" (1952) is an unpublished manuscript.

The complex socio-economic situation of post-war America, the ambiguous cross cultural relationship between the United States and Europe with the large number of emigrants who settled at the East Coast and the West Coast, and the total destruction of Europe and especially Germany constitute the overall historical context. The countries in Europe from where the new architecture had emerged and had influenced the world were fields of despair and chaos. The physical and psychological collapse was total.

The urgency of rebuilding left little place for architectural manifestos in Europe. In 1947 however, the first number of an architectural periodical, Baukunst und Werkform, carried an appeal to resuscitate the architectural discussion. Managed by Adolphons Leitl and co-signed by a great number of artists and architects an article called "A post-war appeal: functional demands" expresses the spirit and the Zeitgeist of the late forties. <sup>2</sup>

"All the people of the earth are faced with this task; for our people it is a case of to be or not to be. Upon the conscience of us, the creative, lies the obligation to build the new visible world that makes up our life and our work. ...In a spirit of self-sacrifice we call upon all men of good will." 3

For architects like Schindler living in the United States the situation was completely different. In the United States the comments and criticism on architecture were directed toward the coherence of economy, function, building technology, and "coating." The article "Architect - postwar - post everything," deals with the professional role of the architect in the society, his education, his practical work, and his cultural contributions. Schindler anticipates the breakdown of the architectural profession if the architect will not react against the present economic situation.

"Should the architect fail to regain a leading position as a builder, his outlook is dismal: the public will pay any amount for services of a commercial nature, but is unwilling to recognize cultural contributions. Similarly, war housing operations show that the government prefers to deal with large business and contractors who give the appearance of financial responsibility. It seems certain that the speculative builder and large manufacturer will become increasingly more powerful economically. If he does not take steps to prevent it, 'the architect will end up as their hireling, and his art will suffocate under a blanket of commercialism.'" 4

Two articles about frames and space were published, in April 1946 "Reference Frames in Space" (although written in 1932), and in May 1947 "Schindler Frame." Dealing with the human scale in buildings, the interaction of a standardized design system with a human-based module is regarded as the most distinct issue.

Schindler argued that by using the four-foot module detailed measurements could be dispensed with on the drawing, as those constructing the building need work only with multiples or divisions of the module. The modular system was only applied to wood frame constructions.

"The architectural product must be part of human life, and unless related to us in scale and rhythm is monstrous. In order to be useful the unit must have a simple relation to human stature and must be large enough to keep the necessary number of units required to size the average room small enough for easy grasp. It must be small enough to fill all needs for detail sizes by subdividing into simple fractions which can easily be pictured, 1/2, 1/3, or 1/4 at the most. For practical reasons the unit should adapt itself to certain standard dimensions already established in our industry - lumber lengths, door and ceiling heights, 16" in woodframing, etc. I have found that the four-foot unit will satisfactorily fulfill all specifications outlined above. To show its application:

Human height ...1 1/2 units ...6°  
Standard door height ...1 2/3 units ...6<sup>8</sup>  
Standard room height ...2 units ...8°  
Fractions: 1/2 unit ...2°  
          1/3 unit ...16"  
          1/4 unit ...12"

These three fractions plus small multiples of the four-foot unit will give all the dimensions necessary for the architect." 5

Schindler concluded with a very Loosian statement:

"Since I believe that 'space-architecture' and not the now fashionable 'International' and 'Functional' styles will be the lasting contribution of our time to the future, it is important for the builders to acquaint themselves with the use of reference frames as soon as possible." 6

The article "Postwar automobiles" reflects on the streamline "Moderne" buildings and the problem of coating the work of the engineers.

Los Angeles, especially in the western commercial area, was in the 1940s superabundant with streamline moderne buildings, used for every building type. The most impressive and the largest commissions were designed by the offices of Stiles O. Clement and of Albert Martin. In this article Schindler indicates that good car design based on functional considerations was a metaphor used by the avant-garde architects to justify their own functional



approach to building design. Most of the modern architects designed automobiles; Walter Gropius designed in 1930 an automobile body for the Adler car manufactory, and Adolf Loos designed automobiles in 1923. In 1947 however, Schindler rejects these pre-war assumptions as inappropriate design criteria.

"During the last twenty years when a courageous architect braved a doubtful audience to prove that contemporary architecture was not a fantastic fashion but a sensible development based on a new attitude toward living and a new approach toward production, he solemnly pointed to the automobile. The house, he asserted, would have to be designed with the same fresh and functional spirit as the modern car. This illustration seemed convincing to many doubters, who assumed that the automobile was functional simply because it had lost the features of the old coach. Form follows function is a principle which actually had very little influence in shaping pre-war cars." 7

Schindler distinguishes between functionalism and functional aspects, the latter aspects being compatible with space architecture and organic design whereas functionalism is not.

The last paragraph of the article summarizes the aspects of a post-war attitude toward design:

"The criticism use only functional considerations as a frame reference, and do not venture into the realm we 'contemporary architects' are ultimately striving for: 'organic design.' This means that the many parts of the vehicle would not be shaped and joined arithmetically to fulfill their mechanical function, but that they should at the same time become harmonious members in a symphony of shapes, achieving formal unity, meaning and expression. The engineer and the designer no longer at cross purpose, but become one. The final machine without the sugar coating of the body stylist, a machine which functions and expresses at the same time." 8

In 1947 Frederick Kiesler wrote an article about "Magical Architecture." Born in Vienna in 1890, he was only three years younger than Schindler. Educated at the same school as Schindler, the Imperial Technische Hochschule (1912-14), he had worked with Adolf Loos on the first slum clearance and rehousing project in

Vienna in 1920. In 1923 Kiesler designed the "Space stage" for the theatre production of O'Neill's "The Emperor Jones," in Berlin. He demonstrated the time-space-idea by means of revolving flats and a stage flowing continually with light and color. The notion of "space" was of similar importance to Kiesler as to Schindler. The development of the two architects corresponds in one way as they both emerge from the same educational-cultural background and arrive in the late forties at a point, where they both criticise and in consequence reject "functionalism." Kiesler formulates in 1947 (Magical Architecture):

"... 'Modern functionalism' in architecture is dead. In so far as the 'function' was a survival - without even an examination of the Kingdom of the Body upon which it rested - it came to grief and was exhausted in the mystique hygiene + aestheticism. (The Bauhaus, Le Corbusier's system, etc.)" 9

In contrast to Mies van der Rohe and Gropius - to name but two of the most influential emigrant teachers - who imported to the United States the dead body of "functional architecture," Schindler was reacting against a one-dimensional deterministic idea. His projects built during the late forties reflect his search for a "post functional" architecture. 10



CHAPTER III

APPLICATION AND CASE STUDIES

The architect has finally  
discovered the medium of his art:  
SPACE.

(Rudolph M. Schindler, 1887-1953)



### 3. CHAPTER IV APPLICATION AND CASE STUDY

#### 3.1. THE SCHINDLER HOUSE AT KINGS ROAD, HOLLYWOOD

##### 3.1.1. INTRODUCTION

When Schindler arrived in Los Angeles in 1919 the city was in the process of rapid expansion. Hollywood's population in the 1920s rose from 36,000 to 250,000. Los Angeles was not a city but a loose arrangement of different towns - Hollywood, Santa Monica, Pasadena - and others. As the map of urban growth in the Greater Los Angeles area from 1850 - 1930 shows, the different towns were separated by open fields (fig. 24).

The discontinuity of urban space was and is one of the characteristics of Los Angeles. The free standing single-family house is the urban unit of which the metropolis consists. Most of Schindler's buildings follow that pattern.

Schindler had been working for Frank Lloyd Wright since 1917, when Wright was commissioned to build the project for Aline Barnsdall on Olive Hill, Hollywood. At the same time Wright was involved in the design and building process of the Imperial Hotel in Tokyo (1916-1922). During the absence of Wright, Schindler and Lloyd Wright, the son of Frank Lloyd Wright, supervised the building process of the Barnsdall project. It was during this time, that Schindler designed the director's house for the Barnsdall art center project. The close cooperation with Wright had a lasting influence on Schindler's perception of architecture.

His own house at Kings Road, Hollywood, is the first building he built as an independent architect. Constructed in 1921-1922 it exemplifies his concern with "space" and "building technology." Referring to Schindler's manifesto written in 1912 this house almost seems like a piece of "program music," transposing the literary ideas into built form.

Compared to European and American contemporary architecture the Kings Road house is an outstanding interpretation of the ideas of the Modern Movement, introducing and combining a radical new social and spatial concept. Throughout his later work Schindler used architectural elements first acknowledged in this building. At about the same time, Rietveld completed the Schroeder house at Utrecht (1924), and Adolf Loos had built the house Rufer in Vienna (1922), Le Corbusier the house in Vaucresson (1922), and Mies van der Rohe's project for a brick villa was designed in 1923.

### 3.1.2. ANALYSIS

#### I

When the site for the Schindler house was selected, at a point where the Kings Road slightly begins to mount the Hollywood Hills, the piece of property was virtually at the end of the built up area, on a street where only a few houses existed. Irving Gill's Dodge house was built in the same street in 1916, a few blocks north of the Schindler house on the opposite side of the street. As a contemporary photo from 1922 shows, there were neither trees nor neighbors close to the house. There was no view toward the sea or the downtown area; it was a suburban lot 100 by 200 feet, with access from the street in the southwest. In the Schindler archive there are fifteen contemporary photos of the Schindler house, nine exterior photos and six interior photos from the years 1921 and 1922.<sup>1</sup> The earliest reference to a design for the house is dated from November 1921, entitled "Residence for Hollywood, California," showing the first floor plan (fig. 25). There are no sketches or preliminary drawings known to exist.

Also from November 1921 dates a plan entitled "Residence for Hollywood, California," which shows a note written on the plan saying, "This plan to show how building may be converted into nine room residence by adding a few partitions" (fig. 25b). This interesting unpublished version of the executed plan will be

discussed for the first time below. <sup>3</sup> Schindler made two different presentation drawings, dated 1922, which show very illustratively the relation between the interior spaces and the formal garden design with two patios and the sunken garden (fig. 26). The only existing perspective of the entrance and the patio corresponds very closely to the final project, except the entrance projection no longer carries the glazed entrance screen. There is still some hesitation about the date of a perspective drawing showing the Schindler house set on top of a hill. <sup>4</sup> Notable in this drawing is a different solution for the entrance (corner to the right of the perspective). Comparing this perspective with the floorplan for a "nine room residence" one can assume, that this is a further development of this idea. These alternative but simultaneous plans indicate the fact, that Schindler was very flexible regarding the site planning and that he could imagine the same building being built at different locations. The elevations prove that the architect did not change formal elements during the execution of the building <sup>5</sup> (fig. 27).

## II

Normally a visitor will approach the Schindler house from the Santa Monica Boulevard or Melrose Street and will have difficulty catching a first view of the building because of the overgrowing vegetation. During Schindler's occupancy the trees and bamboo already took away the view of the house completely. <sup>6</sup> The long street elevation is not immediately seen in its full extension, since one enters the house from the small paths paralleling the property lines. The traditional and conventional elevation directed toward the street has been abolished. There is no urban reference of the building to the public street; actually the street elevation and the garden elevation are very similar. The side elevations are without major windows, because they would be too close to the neighboring fence. The front elevation is characterized through the vertical "light slots," and through its huge glass doors which literally abolished the differentiation



between "window" and "door." (figs. 27, 28, 29, 30)

Most observers would probably agree that in all elevations the single most striking feature is the vertical light slots which rhythmically divide the house into elements. But this division is also a reference to the building process of the whole house, indicating the structural system, using prefabricated concrete wall units. The three-inch light slots are part of the building process, required by the working tools. The façade therefore reflects not only an architectural design but also how the house was built. These vertical light slots have nothing to do with a reminiscence of art nouveau "lines of force" or linear decoration (figs. 27, 29). The visual result is nevertheless very striking and structural to the extreme. Structural is used here to describe the manner in which the expressive interaction of load and support (see section, where two 2" by 6" beams rest next to the light slots) in architecture is visually stressed.

There are many other details and elements in the Kings Road house. The prefabricated concrete walls are graduated in thickness from the floor toward the top in order to save material.

"The resulting wall has all the repose of the old type masonry wall, without its heavy confining qualities. It permits air and light to filter through the joints, where they are kept open." 7

The notion of "material saving" gives direct reference to Otto Wagner and Adolf Loos.<sup>8</sup>

The garden with different areas and functions is treated in a formal manner (fig. 26). Through a number of ways the garden, the façade, and the interior spaces are tied together, actually through outdoor living spaces (two open fireplaces), and virtually through the creation of vistas. One patio is placed in front of each family's studio, followed by a sunken garden. These sunken gardens pretend a spaciousness and grandeur beyond what actually exists. Though the eye follows the various levels of the garden, the historical idea of the "garden parterre" seems reformulated and

reinterpreted for this urban house.

Gardens in modern architecture were normally designed in a "romantic," "informal," "natural" way in contrast with the supposed machine-like house, consider Mies van der Rohe's patio houses from the 1930s or Le Corbusier's drawing for the Citrohan house of 1920. Today, because the trees, hedges, and the bamboo have grown so much, it is hard to appreciate the simple, elegant composition of the formal garden. From the two "sleeping baskets" on the second floor, which were added later over the two entrances, there is a very pastoral view over the garden.

### III

The complex approach from the outside has its parallel inside the house.

The Kings Road house was planned as "a cooperative dwelling for two young couples."<sup>9</sup> The interior spatial concept is in two ways striking. First, the traditional floor plan with rooms for separate social functions like living-room, dining-room, library, study is no longer present. Instead there is one room for every adult, which serves as an all purpose room (fig. 26). Second, two couples share one common kitchen,<sup>10</sup> and it is supposed that the wives take alternate weekly responsibility for meals.<sup>11</sup>

The floor plan creates through the use of three L - shaped sections three patios, one patio for each couple with an open fireplace, and one patio adjoining the kitchen. The "studios" (that is the way Schindler referred to these rooms) of the women were next to the kitchen. Beside the kitchen, with a separate entrance, is a guest room.

Each couple shared one bathroom located next to the entrance hall. The "studio" itself is the closest spatial interpretation Schindler ever built in connection with his manifesto. ("It - the modern dwelling - will be a quiet, flexible background for a harmonious life"). The wall is embracing the room on three sides, the fourth side is completely glazed with the exception of the

sliding doors, which were originally covered with white canvas, filtering the light very strongly. With the canvas doors closed, the interior was very dim but some light penetrated through the clerestory windows. The floors and walls are concrete, transmitting a rather "purist," and "ornamentless" image of the house.

The materials used throughout the house were concrete, wood (California redwood, wirebrushed to accentuate the grain), and glass.

This house also reflects the unique ecological conditions Schindler found in Southern California. With an average mean temperature of 62.4 degrees F and only a very few inches of rain fall, this climate seems perfect for the demands of the modern architectural movement.<sup>13</sup> The ecological conditions are not a threat to men, but allow a deep appreciation of nature, sun and outdoor living. No where in Austria, Germany, or Northern Europe (from where the International Style emerged) did the climatic conditions reflect the programmatic intentions of the architects, using roof-terraces, sun-decks, patios, and outdoor spaces as a new perception of modern life. In 1922 Schindler himself wrote a comment on his house on Kings Road, dividing it into seven topics: location, program, layout, structural scheme, architectural scheme, materials, and textures and colors. These seven topics (according to Schindler textures and colors are one topic) could be described as the "seven lamps of Schindler's architecture." The following is a complete quotation from his writings:<sup>14</sup>

Location: Lot facing east with slight slope towards the southwest. Eight miles from the center of Los Angeles.

Program: A cooperative dwelling for two young couples.

Layout: The ordinary residential arrangement providing rooms for specialized purposes, has been abandoned. Instead, each person receives a large private studio, each couple a common entrance hall and bath. Open porches on the roof are used for sleeping. An enclosed patio for each couple, with an out of door fireplace serves the purpose of an ordinary living room. The form of the house divides the garden into several such private areas.

A separate guest apartment, with its own garden, is also provided for. One kitchen is planned for both couples. The wives take alternate weekly responsibility for meals and so gain periods of respite from the incessant household rhythm.

Structural scheme: The house is constructed by the architect's "slabtilt" system, using prefabricated concrete wall units. A reinforced concrete floor is placed on the ground. Low wooden frames and reinforced rods are placed on it. The concrete wall units are poured between them in a horizontal position and finished on the top surface. After the concrete has set they are tilted up by means of a tripod with a block and tackle easily handled by two men. Adhesion between wall and floor is prevented by a coating of soft soap on the floor before pouring the wall slabs. The wall slabs are graduated in thickness towards the top in order to save material. The form work requires a three-inch space between the wall units. This is either filled up with concrete or left partly open for glazing. The system provides a reinforced concrete wall, finished on both sides with a minimum of form work. A layer of insulating material could easily be introduced for colder climates.

The resulting wall has all the repose of the old type masonry wall, without its heavy, confining qualities. It permits air and light to filter through the joints, wherever they are kept open.

In that particular instance the ceilings are all made of exposed redwood covered with composition roofing. They are supported on one side of each room by the concrete walls, and on the other side by two wooden posts. All partitions and

patio walls are non-supporting screens composed of a wooden skeleton filled in with glass or with removable "insulite" panels. Clerestory windows between two ceiling levels maintained throughout the house, provide a cooling air current right under the roof and permit the sunlight to enter from all sides. All doors are double-acting with pivots fastened to floor and lower ceiling.

**Architectural scheme:** Each room in the house represents a variation on one structural and architectural theme. This theme fulfills the basic requirements for a camper's shelter: A protected back, an open front, a fireplace and a roof.

Each room has a concrete wall for back, and a garden front with a large opening fitted with sliding doors. This opening is protected by an overhanging eave, carried by two cantilever beams crossing the rooms. These beams serve at the same time as supports for sliding light fixtures, and for additional moveable partitions.

The shape of the rooms, their relation to the patios and the alternating roof levels, create an entirely new spatial interlocking between the interior and the garden.

**Materials:** The traditional building scheme, by which the structural members of the house are covered onion-like with layers of finishing materials - lathe, plaster, paint, paper, hangings, etc. is abandoned. The house is a simple weave of a few structural materials which retain their natural color and texture throughout. It is the beginning of a building system which a highly developed technical science will permit in the future. Each material will take its place openly in the structure, fulfilling all architectural and structural functions of its place in the organic fabric of the building.

**Textures and colors:** Concrete: gray, smooth. Insulite: tan, rough like a textile.

Wood: California redwood, natural redbrown, wirebrushed to accentuate the grain.

Glass.

#### IV

It is practically impossible to establish all influences on the design-process prior to and during Schindler's work on this house.

Nevertheless three relevant factors can be singled out for discussion: Schindler's training with Otto Wagner, the influence of the architecture of England and Scotland, and Schindler's personal creative development during his collaboration with Wright. As described in the chapter of the "Wagnerschule" the influence of Wagner should not be underestimated. Through his books, publications and works he gave a direct interpretation of his architectural conceptions.

Schindler's programmatic statements of his manifesto like "architectural forms symbolized the structural functions of the building material" and "there are no more columns with base, shaft, and cap, no more wall masses with foundation course and cornice. He (modern man) sees the daring of the cantilever, the freedom of the wide span, the spaceforming surfaces of thin wall screens" come directly out of the Wagnerschule.<sup>15</sup>

The influence of Gottfried Semper on the Wagnerschule is evident in the rationalistic way that Wagner formulated his ideas. Semper's demand for "necessity as the basic of art"<sup>16</sup> and Wagner's "etwas unpraktisches kann nicht schoen sein"<sup>17</sup> (something unpractical cannot be beautiful) reveal the same architectural concerns.

The English influence in Vienna was very prominent. In 1900, in the eighth exhibition of the Secession, Ashbee and the Glasgow group, the Mackintoshes and the McNairs, presented their work. Adolf Loos promoted the ideas of the Anglo-American civilization through articles, lectures and magazines (Das Andere). Also in 1900, Ruskin's The Seven Lamps of Architecture was published in a German edition, translated by W. Schoelermann. Hermann Muthesius published in 1904 Das englische Haus, two years earlier a publication about Charles R. Mackintosh.

The notion of the fireplace for example is a direct reference by Schindler to the English house. In Vienna, traditionally, the stove was used for heating. The open fireplace was used by Hoffmann and Loos as an "informal," "cozy" place people could gather around. Throughout the whole movement of modern architecture the "open fireplace" remains the single most "anti-functional," "anti-modern," "romantic" element in the conception of the machine-like house. There is no functional need for an open fireplace when every house is equipped with central heating. It is worth noticing that in a polemical statement modern architecture could be divided into socialist-orientated architecture without the "open fireplace element" (Russian Constructivism, German socialist architects like Ernst May), and architecture using the "open fireplace element." The very influence of Wright on the Kings Road house can be discovered conceptually and formally although the overall appearance of the house is very dissimilar from the contemporary Prairie-style houses by Purcell and Elmslie. Conceptually the house continues Wright's ideas of the "natural house," and formally Schindler accepts the glazed window corners, the cantilevering wooden sun protection, and the flow of interior space. There is a "Japanese" aura about this building which is conveyed through its very puristic, reductive, and sensible use of materials (figs. 28, 31, 32).

## V

In outlining the contemporary architectural context in which the Kings Road house has to be seen, a number of projects and buildings come into mind. The most Mediterranean project is Le Corbusier's "Citrohan" house of 1920. The building is a rectangular box with an exterior stair leading from the first floor to the top floor. The main elevation is completely glazed and the roofgarden reflects the appreciation of out-door life. The project is conceived as a "type," it is supposed to be mass-produced for different sites.

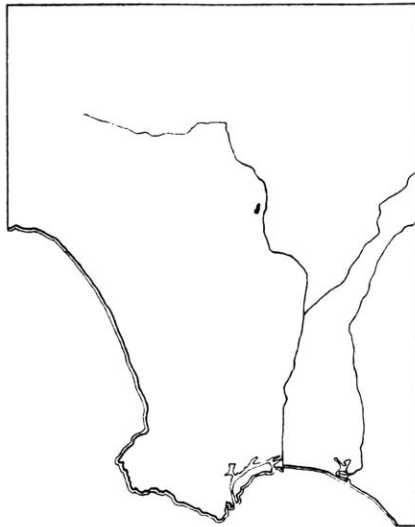
In similar ways Schindler's Kings Road house is a "type." First, it reflects an idea and interprets the theoretical writings. Second, the architectural elements, forms, materials, and light are used in a prototypical way and reappear in his later works. The Pueblo Ribera project (1923) adapts the basic studio element of the Kings Road house for a vacation house by adding to the studio element on one side a kitchen and on the other side a bedroom and a bathroom (figs. 33, 34). Schindler's Pueblo Ribera project was one of the most innovative multi-family housing designs of the 1920s. A cluster of twelve vacation houses was situated on a sloping hill to the ocean front. Two U-shaped houses were arranged to form a large L - form or a large S - form in order to provide privacy for the patio, and on the other side, to provide a view to the sea from the roof terraces. Sliding glass doors open up to the patio establishing a continuity from enclosed interior space to enclosed exterior space. This transition from enclosed interior space to enclosed exterior space is a motive indigenous to Schindler's early work. His spatial relations create a sequence of visual continuity. In relation to this, Mies van der Rohe's project for a brick villa (1923) articulates similar spatial configurations as Schindler's Kings Road house (figs. 35, 36). The walls in the Mies project not only define the interior space but extend into the surrounding landscape; the design as a whole is remarkably original. Frank Lloyd Wright preceded Schindler and Mies in breaking down the traditional perception of the house as a box with holes in it, but Mies' approach deserves its own credit: it depends upon a new conception of the wall. The core of the design is no longer the cubic room, but the free-standing wall, breaking the traditional box by sliding out from beneath the roof and extending into the landscape. The result is a new sense of ambiguous space, created by independent walls joined only by glass screens. Indoors and outdoors are no longer distinct spaces. To summarize the achievements of Schindler's Kings Road house, a



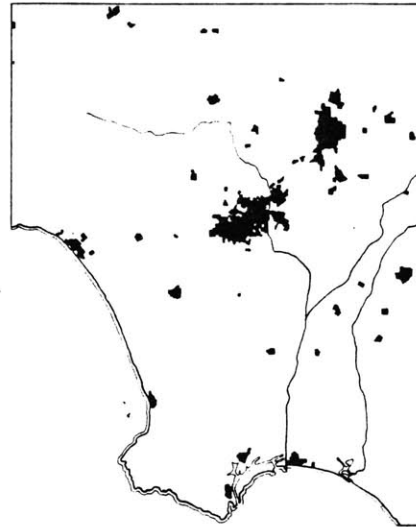
quotation from Reyner Banham's Los Angeles - the Architecture of the Four Ecologies describes best the qualities of the building:

"Nevertheless, those earlier small works of Schindler's included the most remarkable design he was ever to produce - the house for himself and Clyde Chase on King's Road. Its system of interlocking garden-courts, flanked by living spaces that had open glass fronts and almost fortified backs made of tilted-up concrete slabs, is a model exercise in the interpretation of indoor and outdoor spaces, a brilliant adaption of simple constructional technology to local enviromental needs and possibilities, and perhaps the most unobtrusivly enjoyable domestic habitat ever created in Los Angeles. The design draws deeply on previous work in the area - the form of the concrete walls owes a clear dept to adobe building, their technology to Irving Gill (whose Dodge house would have been visible from the site), but their combination and exploitation is genuinely original." 18

1850, population 2,500



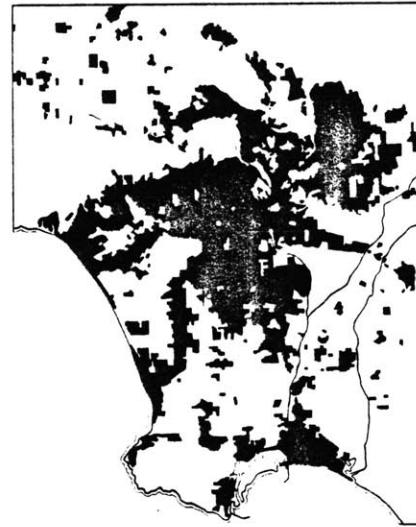
1893, population 160,000



1915-16, population 1,000,000

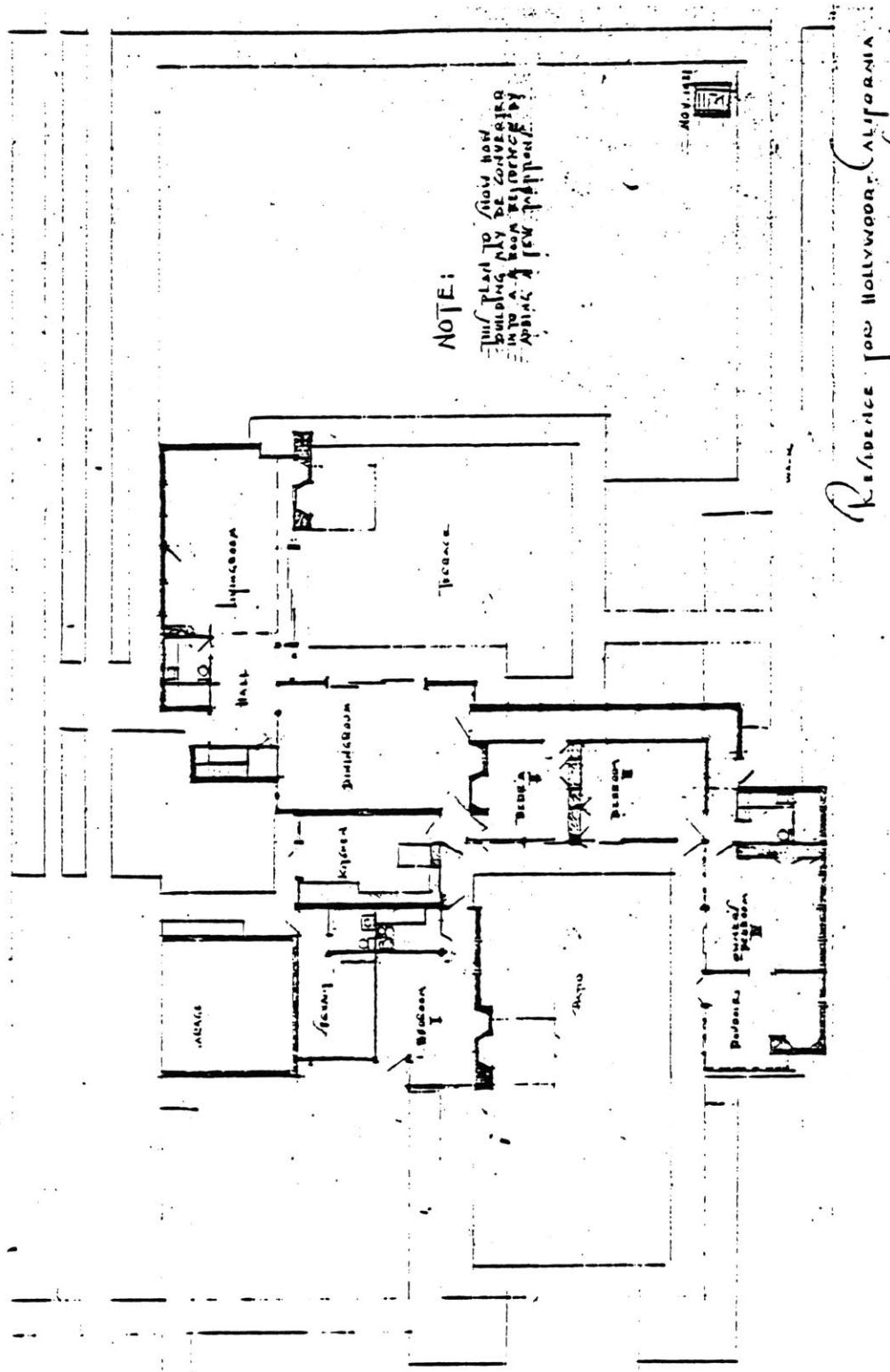


1932-3, population 3,500,000

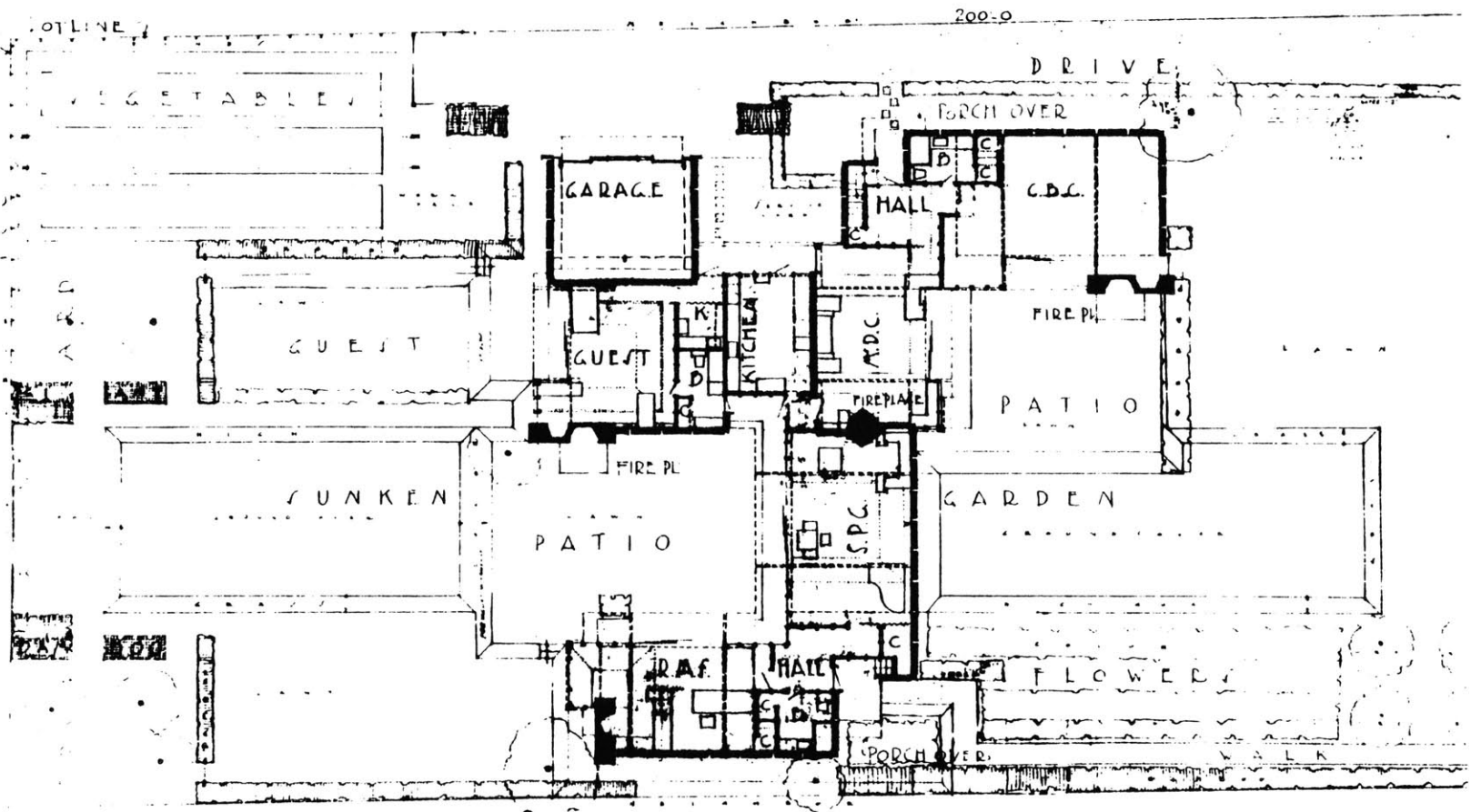


24. Urban growth in the Greater Los Angeles area, 1850-1933



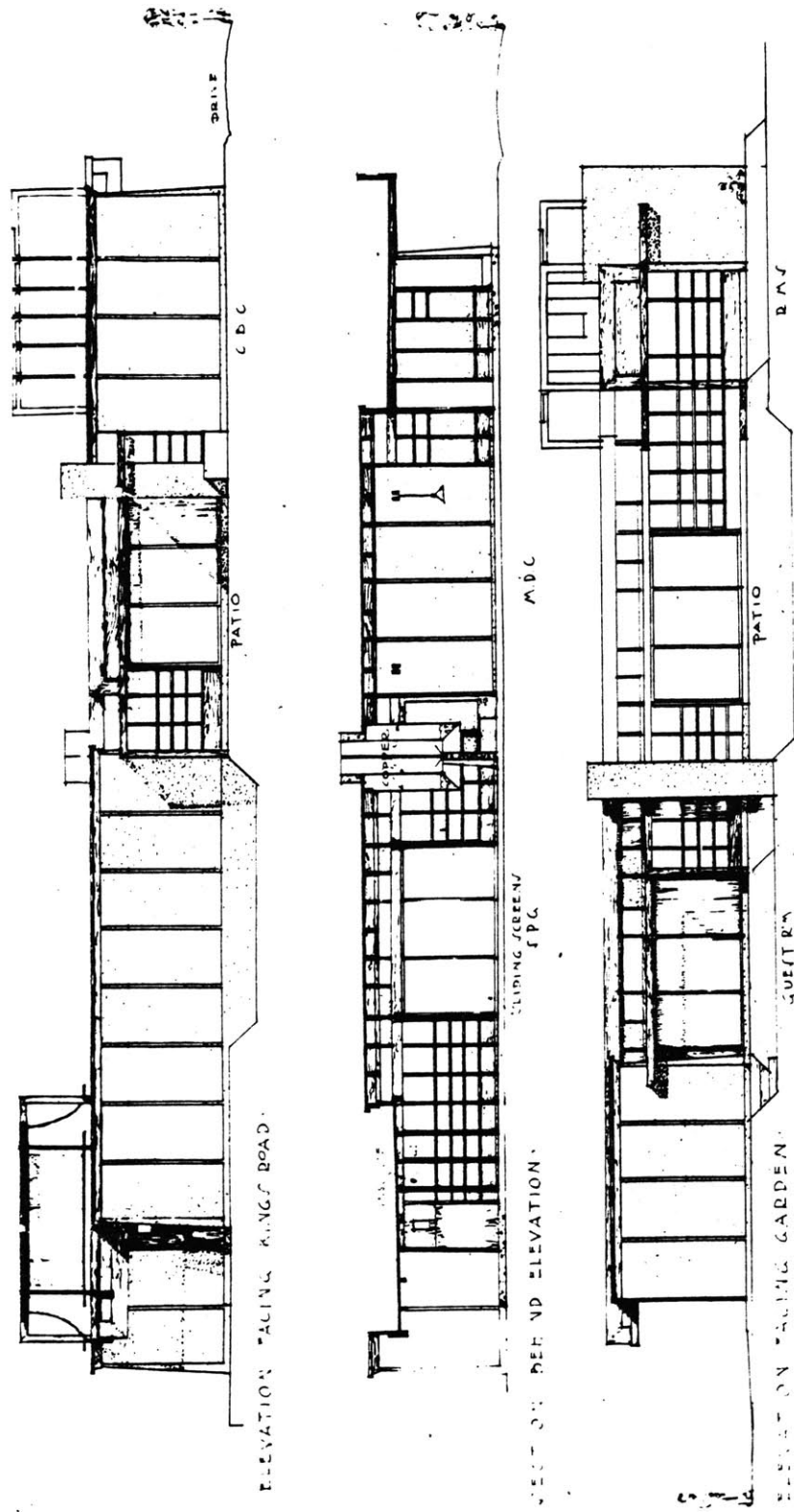


25b. R. Schindler, Kings Road house, Hollywood, 1921, preliminary plan, dated Nov. 1921.

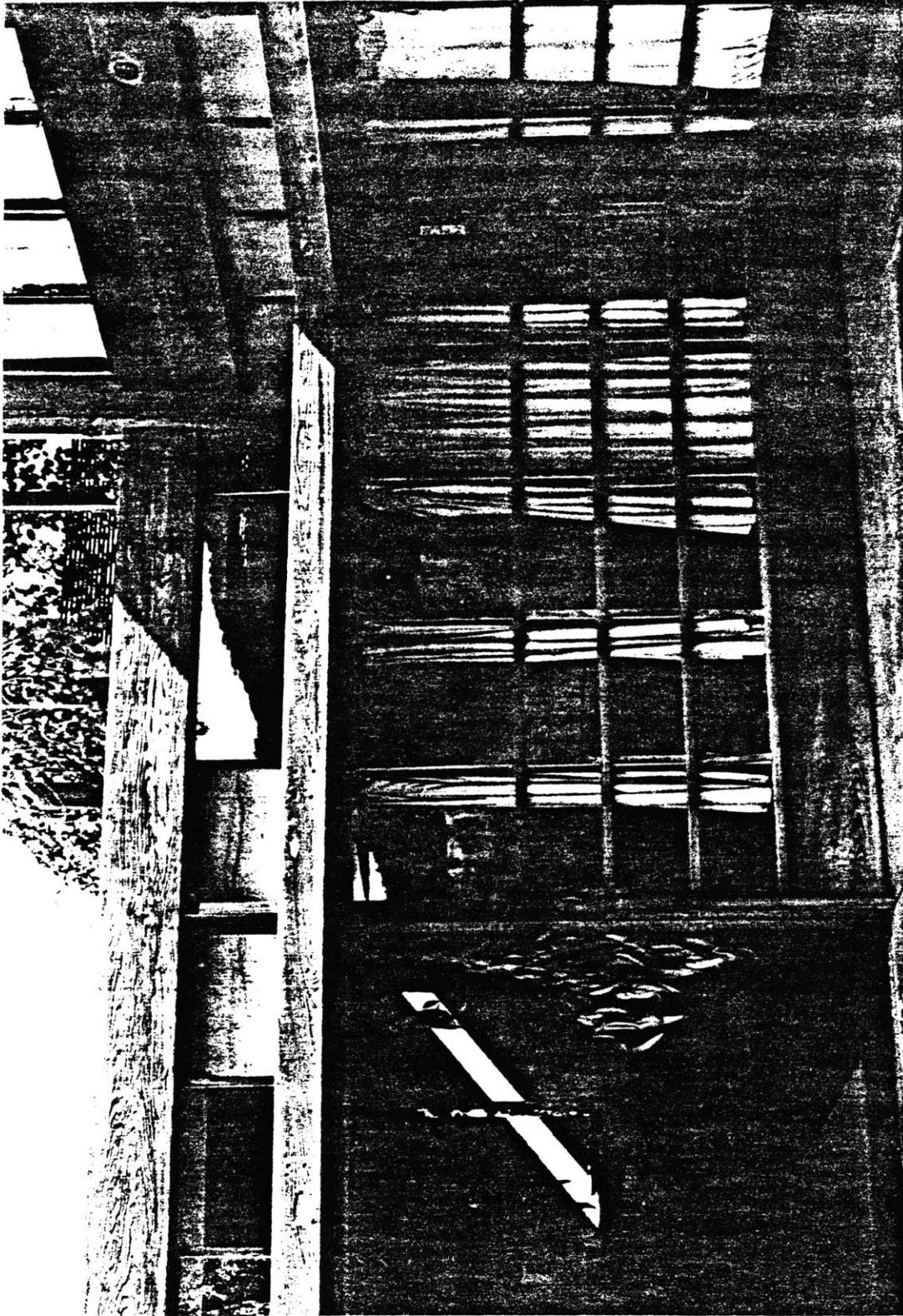


26. R. Schindler, Kings Road house, Hollywood, 1921, presentation plan.

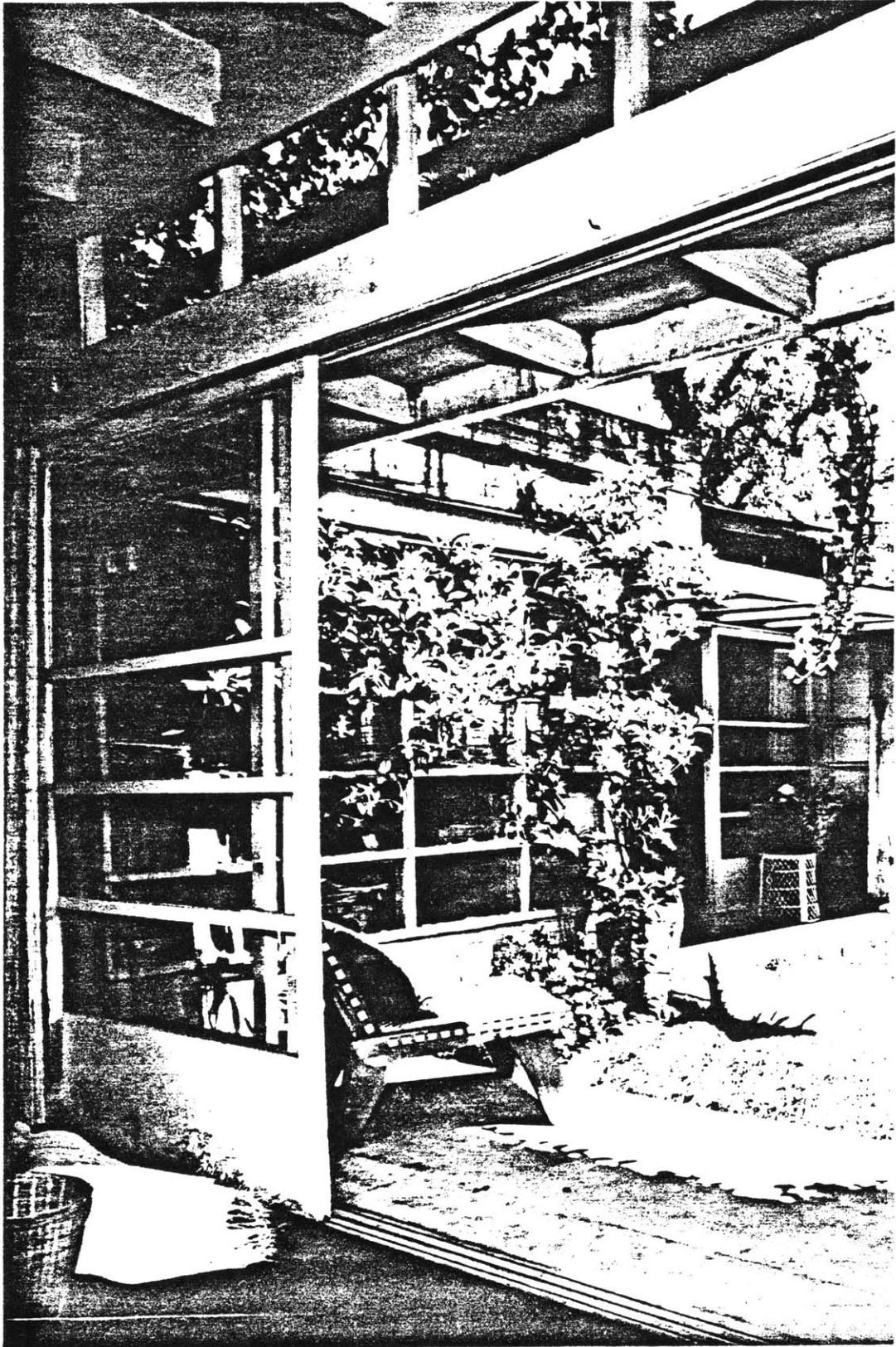
**RESIDENCE R.M.'S HOLLYWOOD CALIFORNIA**



27. R. Schindler, Kings Road house, Hollywood, 1921, section and elevation



28. R. Schindler, Kings Road house, Hollywood, 1921,  
view from the patio to the house



29. R. Schindler, Kings Road house, Hollywood, 1921,  
view from the studio to the patio

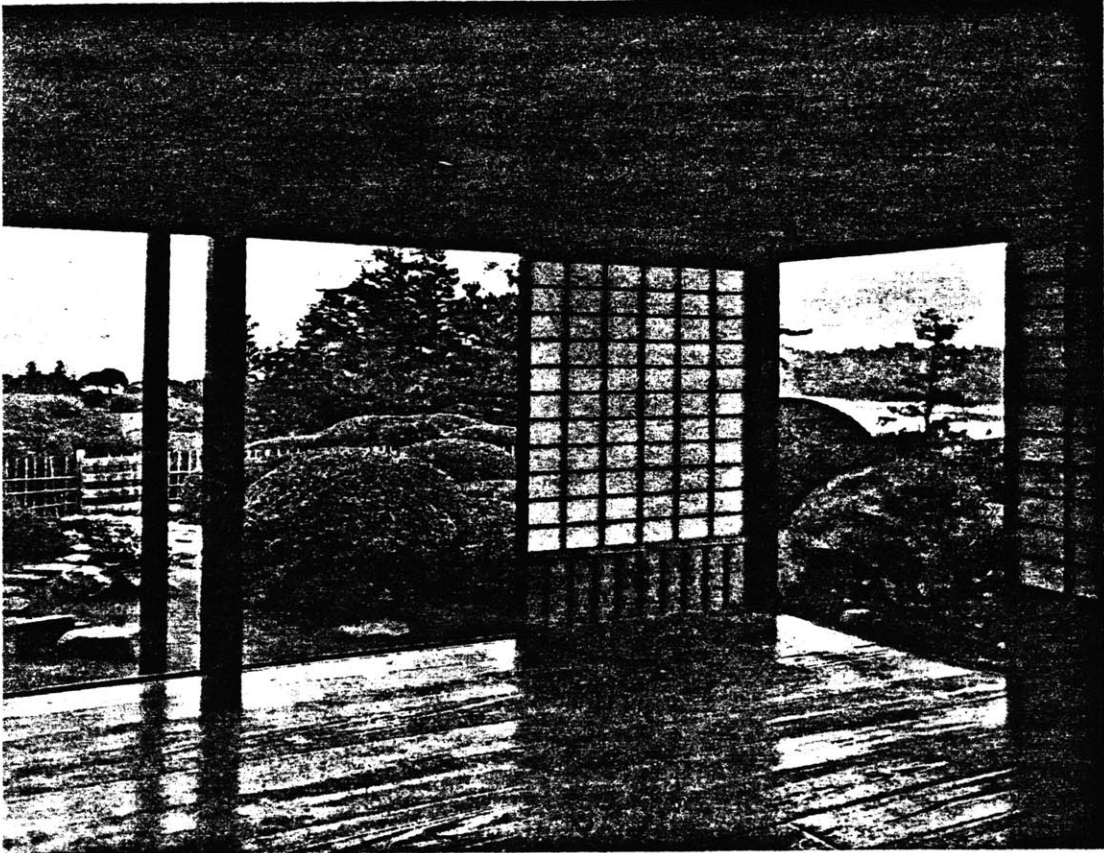




30. R. Schindler, Kings Road house, Hollywood, 1921, patio



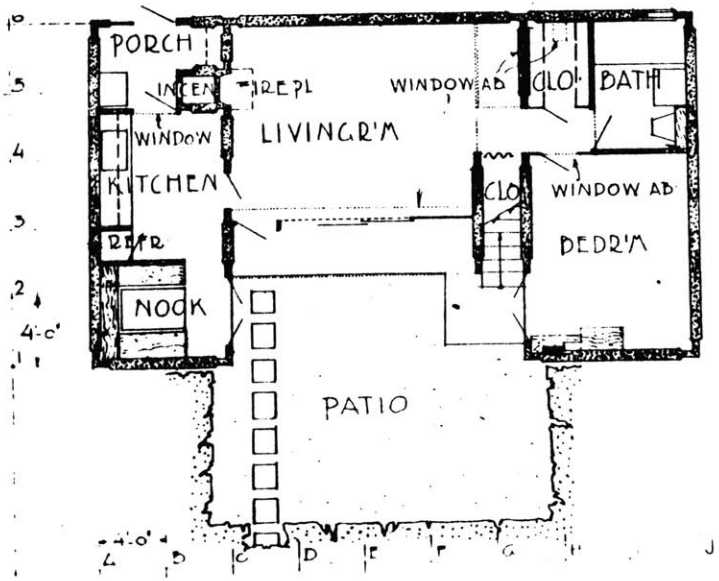
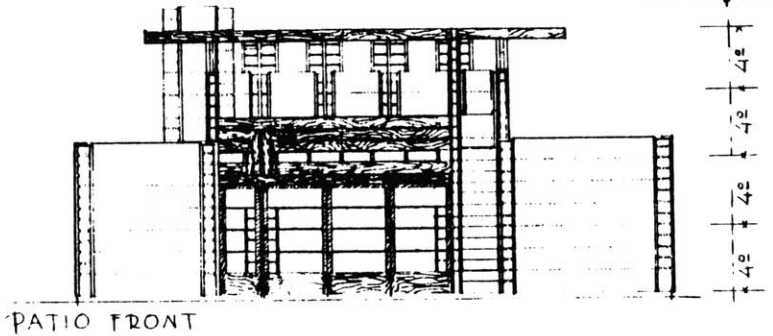
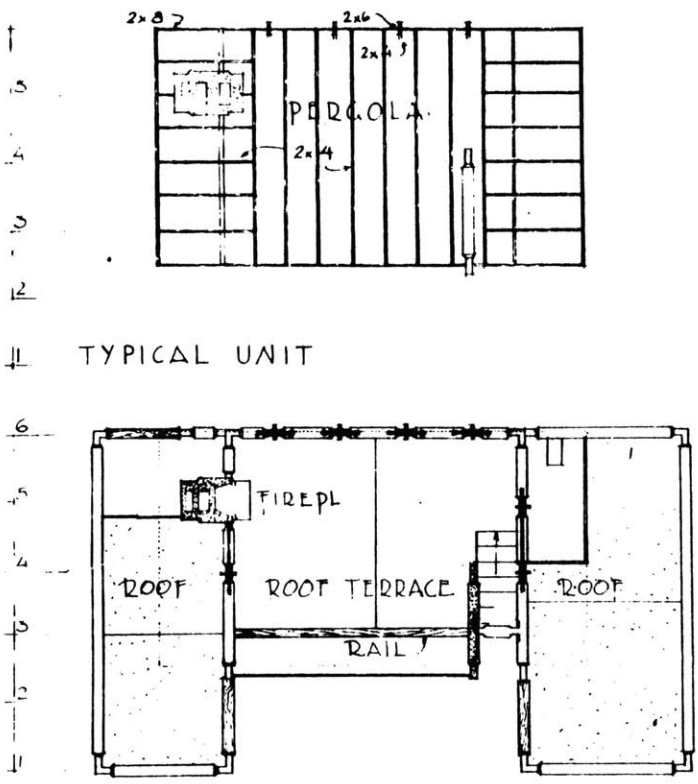
31. R. Schindler, Kings Road house, Hollywood, 1921, 'studio'

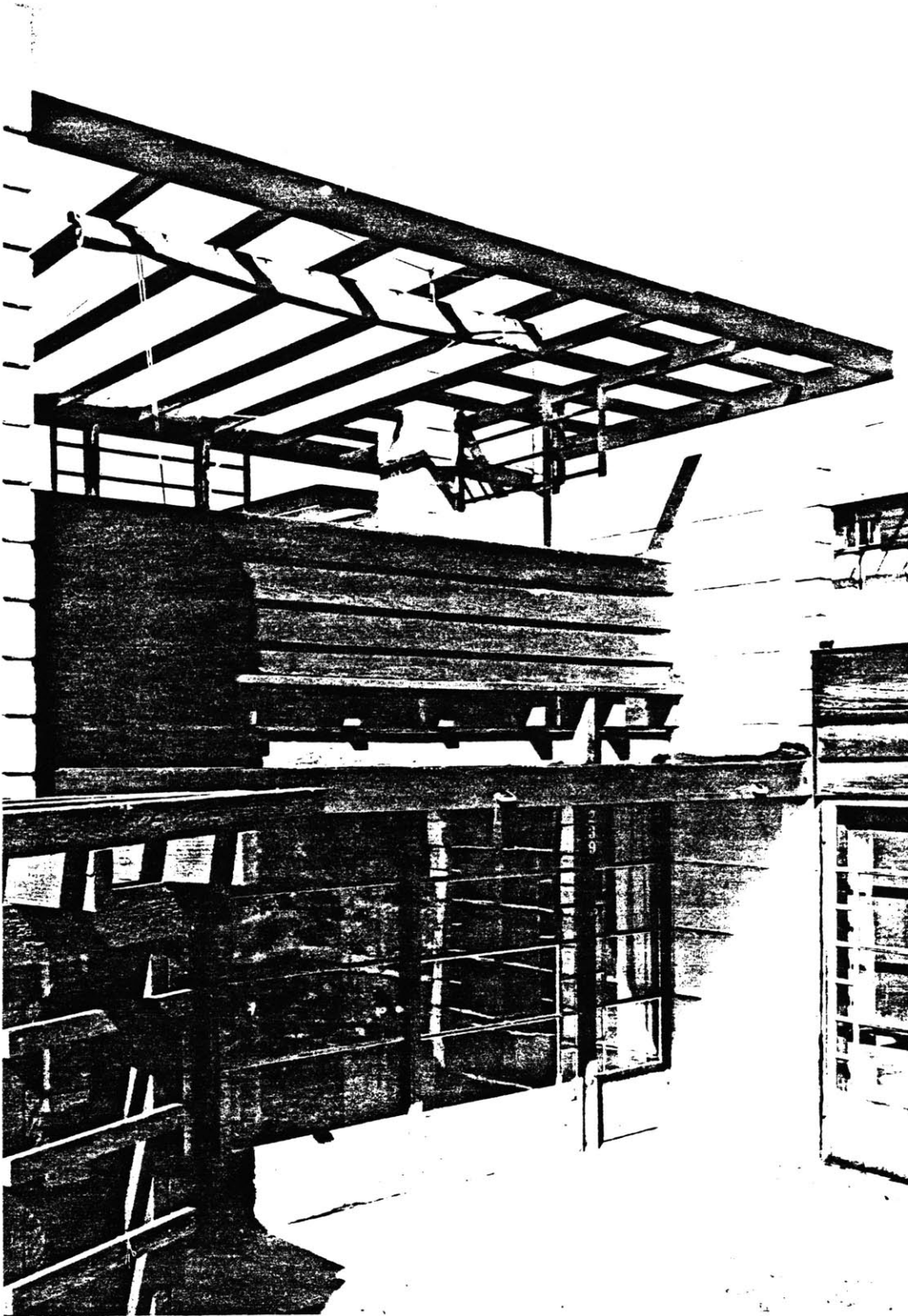


32. Room in the Kōbuntei, Tokiwa Kōyēn, Mito

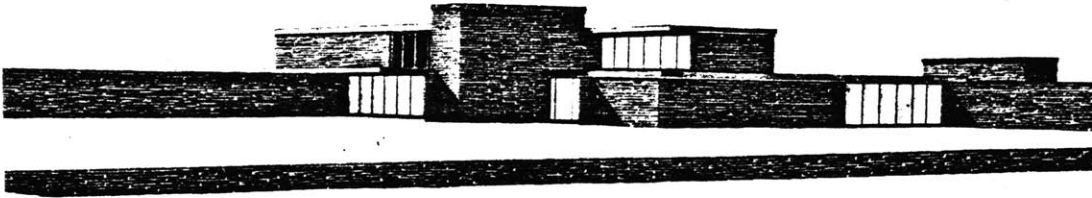
**RIBERA · LA JOLLA · CALIFORNIA · 1925 ·** **R. SCHINDLER**

33. R. Schindler, Pueblo Ribera, La Jolla, 1923-25, typical unit, plans and elevation

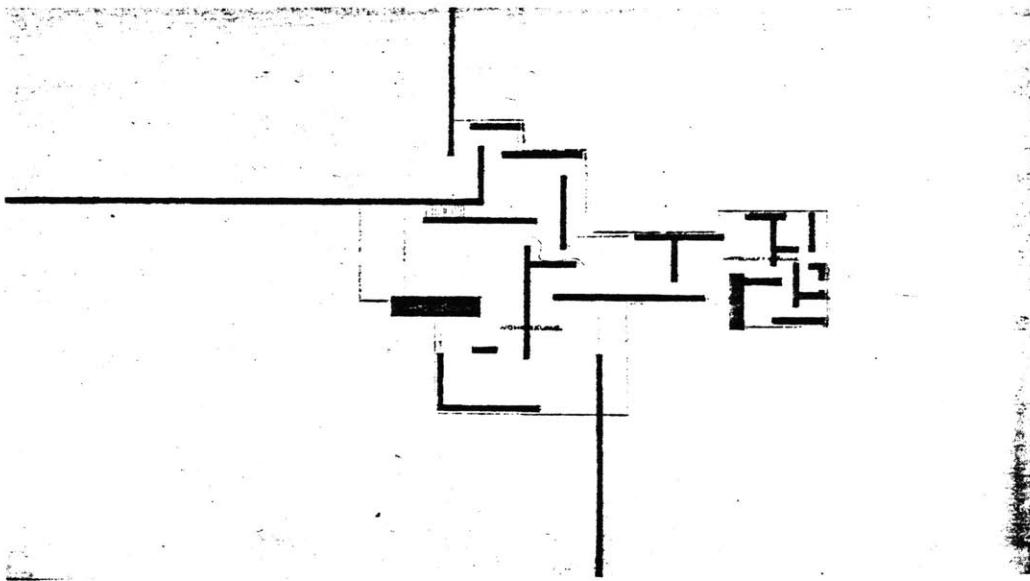




34. R. Schindler, Pueblo Ribera, La Jolla, 1923-25, patio



35. Mies van der Rohe, brick country house, (project), 1923, elevation



36. Mies van der Rohe, brick country house, (project), 1923, plan



### 3.2. THE LOVELL BEACH HOUSE AT NEWPORT BEACH

#### 3.2.1. INTRODUCTION

"Dear Mr. Schindler:

You are undoubtedly familiar with people who would be interested in the purchase of a modernistic home. If so, this is to advise you that the Lovell Home at 4616 Dundee Drive is for sale at \$35,000 and the Lovell Beach Home at Newport Beach is for sale at \$6,500.

If you know of any one interested in either one of these homes, I would appreciate it very much if you would refer them to me. I shall be very glad to pay the customary commission, should you culminate a deal.

Sincerely yours,  
Dr. P. M. Lovell "

Fifteen years after Dr. Lovell and his family had commissioned Schindler to design their vacation house at Newport Beach, California, Dr. Lovell wrote this letter to the architect.<sup>1</sup>

The dream for a new life as manifested through modern architecture did not even endure for one generation. The enthusiasm of the 1920s, the cult of celebrating a healthy lifestyle in correspondence with a new architecture which was freed from the traditional conventions seemed to have lost its validity already as early as 1941.

Historians have customarily estimated Schindler's Lovell Beach house (1922-1926) as one of the most important buildings of the Modern Movement,<sup>2</sup> and its importance is often compared with the Bauhaus building of Walter Gropius at Dessau (1925-26), the German pavillion at the Barcelona exhibition of Mies van der Rohe (1929), the Lovell house of Richard Neutra (1929), and the villa Savoye at Poissy of Le Corbusier (1929-30).<sup>3</sup>

Historians have also treated Schindler's Lovell Beach house as a transitional building standing between the de Stijl and the Constructivist tendencies in Schindler's work.

This chapter will be concerned with the question of explaining



a single work of architecture and its intentions and relations to the greater body of work of the architect. In order to answer such a question, one has to reconstruct first the relationship between the architect and the client, and to try to reconstruct the design process. In the case of the Lovell Beach house the evidence for this process is considerable and includes drawings, letters, and notes.<sup>4</sup>

It is a coincidence that the two most famous houses of the 1920s in California were commissioned by the same client, by Dr. Philip Lovell. Rudolph Schindler built the beach house, Newport Beach, and Richard Neutra built the town house for Los Angeles.<sup>5</sup>

Schindler met the Lovells through the socio-cultural and educational activities of Mrs. Lovell. She directed a kindergarten on Olive Hill (Hollyhock center) which was attended by the daughter of Miss Barnsdall. Through her teaching at Olive Hill Mrs. Lovell met Frank Lloyd Wright, and consequently she also met Schindler.

Mrs. Lovell's sister Harriet was married to Sam Freeman who commissioned Wright to design a house for them in the hills above Highland Avenue in Hollywood. The Lovells (Philip and Leah) did not seem to be impressed by Wright, but they became close friends with Schindler.

"We liked Schindler better. At the time we were living in a Swiss chalet-type house on Mt. Washington, and Philip wanted a playhouse for summer. He let Schindler build a cabin for us in Wrightwood. He wanted Schindler to build a beach house for us, too. Schindler incorporated all of Philip's ideas in the cabin. We thought he had the genius of Wright."<sup>6</sup>

Schindler was engaged in creating a new idea of space architecture. His solution to individual buildings were examples of his theoretical writings. In the case of the Lovell Beach house the building process was paralleled by the publication of six articles. (see chapter 2.2.)

Schindler adopted the specific needs of a family for a vacation house to create the general image of a "health house." Combining structural efforts with his concern of space architecture Schindler approached the program of a vacation house with a completely unconventional attitude.

### 3.2.2. ANALYSIS

I

The Lovell Beach house is well known to many who otherwise know very little about Schindler, because it is published in almost every architectural history book as the representative work of Schindler. The usual black and white photograph showing the house accentuates the heavy concrete frames at the entrance façade; the other completely different façades are rarely published.<sup>7</sup>

The site for the beach house is at the southeast corner of 13th street and the beach walk off Balboa Boulevard, Balboa Peninsula, Newport Beach.

Because of the scarcity of sheltered bays on the South Coast, Newport Bay was early thought of as a possible major port for the rich farm lands of Orange County. The continual silting from the Santa Ana River made the earlier aspirations impossible, and in the 1920s the harbour was dredged to the depth of 10 feet to accomodate pleasure craft. The resort atmosphere of Newport Beach began to develop in the 1920, but the greatest development took place in the late 1930s and after 1945.

The Lovell Beach house is surrounded by small houses and vacation cottages, built in the various revival styles of the late 1930s. The small scale of the houses is very unpretentious, the resort town itself is not very fashionable, and it lacks the great mansions of the society resorts.

As a contemporary photo from 1926 shows, there were few neighbors next to the beach house. The house faces directly the Beach Walk and the Pacific Ocean to the west. The entrance elevation faces north.

In the Schindler archive there are thirteen contemporary photos of the Lovell Beach house, serving as the primary visual documentation, including one construction photo from 1925-26, seven exterior photos, and five interior photos.<sup>8</sup>

The earliest reference to a design for the house is a sketch from 1922. Today there are fifteen plans and drawings of the beach house in the Schindler archive; eleven plans are directly related to the design and building process of the 1926 project, and four plans are dated 1947 showing design sketches for an apartment to be built on the first floor, transforming the playground area into a separate studio apartment. These plans, however, were never realized. The drawings and plans consist of preliminary sketches (fig. 37), one presentation drawing (fig. 38), and six working drawings showing wood-work details, furniture details, the kitchen design, and electrical conduits.

The earliest reference to a design of the Lovell house was published in 1927 in Popular Mechanics Magazine,<sup>9</sup> but it took two years for the house to be published in one of the leading architectural magazines.<sup>10</sup> Photos of the Lovell house first were published in a book in the year 1930 in The New World Architecture by Sheldon Cheney.<sup>11</sup> This reference is important, since Cheney juxtaposes the house of Walter Gropius in Dessau (1926) with the Lovell Beach house of Rudolph Schindler. The visual difference between these two houses is striking.

## II

Approaching the house from 13th street one is immediately aware of the cantilevering third floor and the five concrete frames which dominate the overall form of the house. The constructive quality of the elevation is nowadays not so strongly apparent, since the former open sleeping porches on the third floor have been screened with windows (figs. 39, 40, 42).

Probably the strongest first impression is that of a building which is not only very different from anything around it (material and scale) - an impression which must have been even stronger in the 1920s - but which in many ways strikingly reveals the unconventionality of modern architecture. The entrance elevation (north elevation) is dominated by the strong rhythm of the four bays created by the five concrete frames. In contrast to the strong verticality of the frames is the horizontality of the balustrade of the sleeping porch and the horizontal line of the cantilevering roof (fig. 41). In 1926 the house was not surrounded by a wall as it is today, and therefore the contrast between the continuous sandy beach and the house raised on the concrete frames must have been much more dramatic. Old photos show the transparency of the entrance elevation with the concrete frames resembling a huge entrance portico. Next to this, the diagonal lines of the two exterior staircases leading to the second floor are the most characteristic formal elements. On a representational level, one could describe the frames as the static space creating elements, and the stairs as the dynamic space penetrating elements. Although there are two similar exterior stairs, the different hierarchy of the stairs is immediately evident. Three steps lead to a raised platform from where the two stairs ascend to each side of the central concrete frame. The "public staircase" ascends at a very soft angle, leading to an open balcony on the second floor from where one enters the house, whereas the "private staircase" ascends at a steep angle of nearly 45° leading directly to the kitchen and further to the bedrooms on the third floor. The "private staircase" leads between one bay of the concrete frames from one floor to the other, whereas the "public staircase" occupies two bays.

In contrast to the entrance elevation the three other elevations present a rather different architectural vocabulary. The structure no longer seems to be the dominating factor, but the interplay between different surfaces becomes equally important

(figs. 43, 44, 45, 46). The ocean elevation (west elevation) is completely dominated by horizontal lines and surfaces. The white balustrades of the two balconies and the white attic repeat "literally" the structural concept of the house, the huge window openings correspond to the double story living-room on the second and third floor. Since the building is raised from the ground, the scale of the ocean elevation appears bigger than it actually is. The white color of the house can easily be seen from a great distance, and approaching the house from the ocean side (on the boardwalk) one's eye is captured by the large glazed wall used as an infill for the structural concrete frames. Since the large living-room window is set back from the white plaster surface, the shadows create a very strong modulation of the façade, and the small bedroom window on the third floor was originally also set back from the surface of the white walls, emphasizing the cantilevering character of this floor. Small balconies on the second and third floor give the ocean elevation a clear articulation of the interior spatial configuration, and at the same time these balconies extend the interior space to the outside.

In contrast to the plane white plastered surfaces the large windows are carefully subdivided into smaller sections in order to give the window a relation to the human scale. The entrance door (on the second floor, ocean elevation) within the larger window was carefully detailed (no longer existing today) differentiating between the symbolic meaning of the entrance and the glass surfaces of the window.

The subdivision of the windows are reminiscent of Frank Lloyd Wright's early Prairie houses, although the blue color of the window frames is not Wrightian.

The south and the east elevation are similar as they both have few openings and are undramatic compared to the two other elevations.

The east elevation faces the service road which runs parallel to the board walk. Here the effect of a towering element (staircase to the roofgarden) dominates the formal treatment of the façade. The white plaster surface balances the effect of the cantilevering concrete frames. In general, this façade reveals best the structural and the sculptural qualities of this building and the penetration of separate horizontal and vertical volumes and planes.

According to David Gebhard, the constructivist element in designs of Rietveld appear particularly in the Lovell Beach house. Although the east elevation is asymmetrical the placement of the different planes uphold a compositional balance and harmony.

Presently the south elevation can hardly be seen since the original lot has been subdivided and another beach house was built very close to the Lovell house. As a result, the service stair leading from the garage to the kitchen on the second floor was removed. The south façade also was altered due to the fact that a balcony adjoining the kitchen was abolished.

Characteristic for the south façade are the five concrete frames which appear here as pilasters rhythmically dividing the elevation into four large sections.

Each section is treated differently, although the primary architectural elements are the same. At the upper part of each section there is a strip window spanning between the concrete columns. The fire-place intersects the strip window and divides it into two parts.

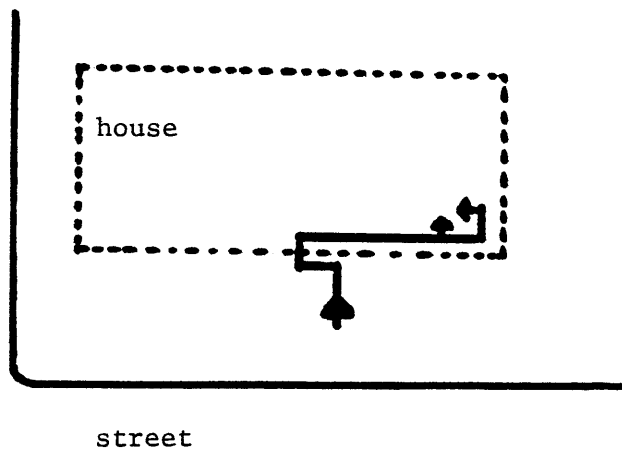
At the second floor level three large openings correspond to the living-room, dining-room, and kitchen. Balconies are set in front of the living room and the kitchen. Originally a stair led from the kitchen balcony directly down to the service alley and the garage. The stair ran parallel to the façade and had a wooden parapet which, significantly, did not follow the rate of the stairs but was carried up to a continuous height after the fifth step. Thus it became a wooden sculptural element, a formal

articulation very much reminiscent of a cubist sculpture.

### III

The interior configuration of the house is highly elaborate and the concept of light and space is handled with great mastery. Although there are three entrances to the house one normally would enter using the broad and wide external stair leading from 13th street up to the entrance balcony (figs. 39, 43). The movement from the sidewalk to the entrance-door is unusual. First one must mount three steps to a platform with the cantilevering bedrooms above providing a huge portico. One feels immediately the presence of the building without having yet entered the house itself. In order to mount the main staircase one has to take two steps toward a second little platform in the opposite direction as the main staircase and from there one can finally climb the steps to the entrance.

schematic movement:  
main staircase



The movement of ascending takes place in the dark space of the portico until one reaches the entrance balcony presenting a unique view over the beach and the ocean.

There is no vestibule or anteroom which prepares the visitor entering the house. From the balcony two entrance doors lead directly into the two-story living room of the house. Actually the doors are situated beneath a gallery which provides at least a small spatial differentiation between the entrance and the main room.

The clear organisation of the second and third floor fulfills well the needs of a vacation house (fig. 38).

The house was placed on stilts not only to provide some privacy from the public beach and to obtain a better view of the ocean, but also to give the possibility for the sandy beach to penetrate directly under the house, forming a sheltered outdoor living space equipped with its own open fire-place. Elevating the living area to the second floor also gives reference to the classical tradition of the "piano nobile" used since the Italian Renaissance for country houses providing a spectacular view of the surrounding landscape. The great two story living room has more the character of a hall than a "living room" which seems appropriate for a vacation house in order to invite friends and entertain guests. The hall is overlooked by a gallery on the third floor which leads to the bedrooms (figs. 38, 47).

The spatial quality of the living area is highly determined by the way the light penetrates the room from three sides (south, west, north). The living area runs through the entire depth of the building and, in its central part, through the full height of the two stories. On the third floor a gallery runs all the way along the north side of the central space, giving access to the master bedroom and the three bedrooms of the children. This gallery visually continues at the outside of the house leading to a small balcony (figs. 42, 47, 48, 49).



It is understandable that the space of the central living area with its many extensions tends to be elusive because its varied boundary definitions and the section's profile changes. The breakdown of the living area as a self-contained room is achieved. Rather, the glass walls on either side of the living area reduce the traditional differentiation between the inside and outside and open the room to light and sun.

The space of the great hall has its elusive aspects but securely belongs to the clearly articulated order of total composition. The high clerestory windows on the south side allow the sun to penetrate the whole building deeply; the glass wall facing west allows the afternoon and evening sun to fill the living area with a soft light.

The large window facing 13th street to the north transmits a very diffuse and shallow light and gives the possibility of observing the street from the living area. The bedrooms on the third floor are rather small; every room faces north, but the two corner rooms also have an east or west exposure. Originally each bedroom opened through French doors onto a sleeping porch running the complete length of the house. Some years after the completion of the house the clients asked Schindler to enclose the porch. He instructed the carpenters to remove the French doors and place them above the porch rail.

The last floor of the beach house is used as an enclosed space for sun bathing. A small stair situated next to the bathroom leads to this roof terrace.

#### IV

The Lovell Beach house reflects the very happy relationship between the client and the architect, a fact clearly expressed in the consistent character and quality of the building which shows that few compromises were forced. There was a fundamental agreement between the ideas of the Lovells and the architectural

intensions of Schindler. Dr. Lovell was the editor of a column in the Los Angeles Times called "Care of the body," and regarded himself as a truly modern person, who believed in the power of nature and health. His journalistic activities and his occupation as a drugless practitioner distinguishes him as an unconventional person who was willing to encounter new ways of living and new ways of building as essential to a modern time.<sup>12</sup> The discussion about the relationship between house form and health consequently involved Schindler in five projects for the Lovells of which three were realized.<sup>13</sup> The beach house was certainly the most important commission, and the documentation about this is well reported through letters.<sup>14</sup> Relevant to the discussion of the beach house's design are some revealing comments by Mr and Mrs Lovell. The Lovells bought two lots across the street on 13th street and Balboa street where they used to play tennis.

"There was a public walk past the lots to the beach, and that was why Schindler raised the house above the ground. The living room is on the second floor and the ground under it is a playground for the children. ... I wanted steel windows but Schindler loved wood. Thirty or forty of the panels in the big window sagged. The wood was pre-milled and it didn't fit well, and it was always being repainted because of the salt air. On the positive side, Schindler paid attention to our way of living and adjusted to it, which Neutra didn't. Private places for nude sunbathing on the roof. But the wind blew the rain into the sleeping porches. It was right over the public walk and I could lie in bed in the morning and hear the conversations of people walking to the beach. They called it the upside down house. They thought it was crazy. So did the loan companies. I was never able to get a loan on any house I built. I've always been a minority in everything. There were other modern houses around but you couldn't see them for all the Mission and Moorish styles. So I did some experimenting. ... Schindler wanted everything in the house to blend together. The bed frames were the same design as the windows. I remember that the wood had the look of seaweed. The leftover wood was cut up to make the stools and the long sofa in the living room. He gave Maria Kipp (a textile designer) yards and yards of cheese cloth and monk's cloth to dye a golden yellow for the curtains and rust for cover

for the sofa. When he finished, everything looked as if it belonged there. ...

The beach house ran 30 percent above the estimates, but then the town house ran a hundred percent over. ..." 15

The building was a very personal setting for a way of life based upon a profound respect for sport, health, and nature. In one way or the other both Lovell and Schindler were romantics, since they believed that they could solve social problems through building "health houses."

The strong belief of Lovell in a "health house" is also reflected in his town house, built by Richard Neutra between 1927 and 1929 which actually tries to eliminate the traditional urban culture of a town house by replacing it with a club house for fitness training. <sup>16</sup>

V

Discussing the influence on the process of designing the Lovell Beach house and discussing the relationship of the beach house to its contemporary architecture one has to reconstruct the context of its time. In case of the beach house the historical evidence is considerable and will draw its information from the letters between the client and the architect, the articles published by Schindler in the Los Angeles Times' section of "Care of the Body" (edited by the client, Dr. Lovell), and the personal file cuttings of Schindler. These files contain references and cuttings from a good number of major European, American, and Japanese architectural periodicals, including Der Architekt (Austria), L'amour de l'art (France), Die Baugilde (Germany), Das Werk (Swiss), Moderne Bauformen (Germany), Bauwelt (Germany), Schweizerische Bauzeitung (Switzerland), L'architect (France), Architectural Record (United States), Pencil Points (United States), The Architect and Engineer (United States), and Kokusai-Kentiku-Kyokai (Japan).

First the context of the house will be discussed, trying to reconstruct the major ideas.

The Lovell Beach house is well known to many who otherwise have not been to Southern California through the remarkable photographs showing the cantilevering concrete frame structure situated on the sandy beach. The bright light and the distinct shadows on the photographs recall the notions of an arcadian world of permanent holidays, a world of healthy bodies and healthy minds in which modern time and nature create a harmonious background for a life where the "eternal joys" of space, light, sun, and unspoiled nature are available to everybody.

The notion of nature and its appreciation by living in a vacation or weekend house is truly a post romantic nineteenth century notion. The capitalistic city - as contrasted to the arcadian rural good world - the city without quality, inhabited by the "blasé metropolitan man" and by the "man without qualities" has become the least desirable place to inhabit in the eyes of modern architects.

Modern architecture, generally speaking, was anti-urban, and against the bourgeois tradition of urban culture. The new urban ideal replaced urban culture with athletic fields, collective arrangements, and endless parks.

One way to escape the unhealthy cities was to live in a week-end or summer house.<sup>17</sup> The week-end house was not a city residence transferred to the country, nor a suburban bungalow reduced in scale. As a possible definition, the week-end house is the anticipation of a new life-style; it is the minimum stationary setting for a family life reduced to its simplest and most elementary terms, in close contact with the sun, soil, and sky, and the house is free from obsolete social and conventional architectural forms.

The purpose therefore was to provide a friendly unselfish

contact with nature, sunlight, and fresh air for the physical health, relief from the congestion and pressure of the city (through sport and physical expansion), and a necessary balance to the increasing demands and restrictions of a commercial competitive society (psychological expansion). In order to achieve these goals, the design criteria for the week-end house and the summer house had to fulfill several requirements.

The layout should be made in such a way as to reduce construction cost and maintenance cost to a minimum. The relation between the daytime space and the night-time space should clearly be in favor of the day-time space, reducing bedrooms to their minimal size. Provision for extensive "body care" is essential to any week-end house, offering good sanitary accommodations, outdoor sleeping porches, and a place for sunbathing.

One of the key issues of the week-end house is its informality. It evolved directly out of the idea of the English country house, embracing the occupants with comfort and ease. Schindler's Los Angeles Times articles on modern architecture (see chapter 2.2.) respond very closely to the vacation house ideology. In his opinion there was little or no difference between everyday housing and vacation housing, since for him every house was regarded as a shelter for a more harmonious life.

"The distinction between the indoors and the out-of-doors will disappear. The walls will be few, thin and removable. All rooms will become part of an organic unit, instead of being small separate boxes with peepholes." 18

The earliest sketches for the Lovell beach house date back to 1922. <sup>19</sup> Pervasive in all sketches is the idea of a concrete frame against which stucco and glass edges of the rooms are juxtaposed. Even in the early sketches the horizontal lines and the deep layering of the elevation generate the expression of sculptural

plasticity.

The only alternative plan compared to the executed design is dated from April 1926 and shows a different solution for the first floor plan, but a rather similar solution for the second and third floor plan.<sup>20</sup> The stairs leading from first to second floor did not parallel the longitudinal elevation of the house, but were conceived as two separate L - shaped staircases ascending from a central platform. In variation from the realized plan, the primary sketch did not have a maid's room next to the kitchen, and instead of bedrooms on the third floor there were eight little dressing rooms and the sleeping porch. The sketch also shows a swimming pool next to the playground.

The remaining question discussing the design process of the house is to what extent the architect was controlled by the wishes of the client. First, there seems to have been a general agreement on the specific qualities of a vacation house, like informality of the living room, easy maintenance, exposure to the sun, possibility of nude sunbathing, sleeping porches, and a playground for the children. It is not known if the Lovells had any preconceived notion about the formal design of the house, but it is rather unlikely since in the correspondence between the client and the architect the main topics discussed concern payments and the quality of the executed work for the house. Taking all this into account it is most likely that the complete design idea was from Schindler, and that no formal changes were made due to requests by the Lovells. The attitude of the client reflects the position of an architectural patron who wants to have the most advanced and modern house built for himself in order to express his own avant-garde cultural position.

The questions concerning possible influences on the process of designing the Lovell Beach house are multiple and the answers given can only be hypothetical.

H. R. Hitchcock in his book Modern Architecture (1929) describes Schindler as another Austrian who has remained closer to the New Tradition (Hitchcock's term for transitional architects prior to true modern architecture; Richard Neutra was the other Austrian). Yet at the same time, Hitchcock continues, Schindler has achieved with mediocre success more extreme aesthetic researches of Le Corbusier and the men of de Stijl.<sup>21</sup> David Gebhard, on the other hand, in his book on Schindler describes the connections to de Stijl with greater accuracy and sophistication:

"The finest of Schindler's design of the 1920s are those which could loosely be labeled de Stijl. With the one exception that he never relied on primary colors to establish or reinforce forms (he seems almost to have been frightened by color), this body of Schindler's work is closely parallel to the design of the Dutch de Stijl architects of the early twenties, especially Theo van Doesburg, and to a lesser extent Gerrit Rietveld and Mart Stam. Van Doesburg's careful sculptural arrangements of volumes and of horizontal plans, which penetrate and connect the separate volumes, is in many ways similar to Schindler's. The Constructivist element in Rietveld's design appear in several of Schindler's designs, particularly in his Lovell beach house of 1922-26. It was during the early twenties that Schindler began to develop what was to become his personal architectural idiom. Certain of these design concepts can easily be accounted for his Viennese experience and in his simplification of the Wright mode; but these two factors can explain only partially the strong de Stijl flavour." 22

Gebhard's remark that Schindler's architecture could be labeled loosely de Stijl although his rejection of primary colors raises the question: can Gebhard refer to de Stijl architecture when the use of color is reduced to white plaster for the walls and blue color for all exterior woodwork?

A different approach to Schindler's Lovell Beach house is presented by Reyner Banham in Los Angeles - The Architecture of the Four Ecologies, where he compares the beach house with Le Corbusier's work rather than with de Stijl architecture.

"Designed and built between 1923 and 1926, it was a world class building not only because of its quality as design, but also because its style, and manner of handling space, demand comparison with the best European work of the same period - and emerges from the comparisons enhanced, not diminished.

Put alongside, say, Le Corbusier's Villa Cook, its catalogued virtues reveal a building that could carry all Le Corbusier's theoretical propositions. It has a concrete frame which raises it clear off the ground on legs; it has a two-story studio-type living-room and a roof terrace; it has parking space, a play area and a wash-up at the ground-floor level. But the Corbu version is a timid, constrained design whose adventures take place only within the almost unbroken cube of the building envelope, whereas Schindler's spatial extravagances break forward and oversail the ground floor, with staircases threaded visibly through the frame." 23

These three very articulate opinions show the changing attitude toward Schindler's Lovell Beach house. However cut off California might have been in the 1920s from European culture, Schindler was at least connected with the old world through architectural periodicals and through correspondence with Austrian architects. The relationship between de Stijl and the architecture of Schindler seems more diverse and complex than suggested by Henry-Russell Hitchcock and David Gebhard.<sup>24</sup> De Stijl was one of the two movements in Holland at the beginning of the twentieth century, the other movement being Wendingen (the so-called Amsterdam School).<sup>25</sup> De Stijl was formed by a group of artists and architects, and their design was very much determined by the neoplasticism and elementarism of the painters Piet Mondrian and Theo van Doesburg, and by the movement of cubism.<sup>26</sup> Their design reflected their theoretical program; the cube served as the point of departure for the architectural design and they used right angles and smooth wall surfaces to design space that opened out on all sides into the universal space. The rectilinear character was common to the group of de Stijl architects and was to some extent influenced by Berlage and by Frank Lloyd Wright.<sup>27</sup> New attitudes emerged with regard to the use of color and space. Color was used at the interior and the



exterior of buildings no longer as an element of decoration, but to define space. Following Mondrian's example and Theo van Doesburg's book Grundbegriffe der neuen gestaltenden Kunst only the primary colors, red, blue, and yellow, and the principal tonal values white, gray, and black were used. All other colors were considered impure, non-elemental. <sup>28</sup>

De Stijl was to a great extent an aesthetic theory and in this respect different from the later development of much of modern architecture. The notion of space seems to be one of the crucial issues of de Stijl. The implication that space is infinite space was of such great importance as to integrate de Stijl into the international movement of abstract art. <sup>29</sup>

In general the use of reinforced concrete for buildings gives the possibility for successive floors to be larger in plan as one ascends, and walls can be stepped forward and backward according to the enclosed space. On a constructive basis this presents the fundamentals for an art of building that is almost dematerialized optically, and, almost hovering in appearance.

Relating Schindler to de Stijl there are several aspects to be considered:

- 1) Schindler left Europe in 1914 before de Stijl was formed and before any theoretic writing was published.
- 2) The letters written between Schindler and his Austrian friends did not contain any architectural drawings. And when Neutra arrived in Los Angeles in 1925, Schindler had already been working on the Lovell Beach house for three years.
- 3) Schindler's personal files of cutting from architectural periodicals until 1930 contain only very few illustrations of Dutch de Stijl architecture. <sup>30</sup> The most important information for Schindler came through a Japanese architectural magazine called Kokusai - Kentiku - Kyokai (no date given, but most likely from the year 1930). <sup>31</sup> The publications from this magazine found in the Schindler archive show works by Rietveld

(Schroeder house, 1924), and Oud (Shops and houses at the Hoek van Holland, 1926-27). Beyond this there is no historic evidence which could indicate Schindler's knowledge of de Stijl architecture.

Besides this, the often quoted constructivist influence on Schindler's Lovell Beach house is connected with two projects, the restaurant at the cliff, designed by the atelier of Ladovsk (1922), and the stadium for Moscow designed by Korschew (1926). Both projects are found in Schindler's personal file collection; the illustrations are taken from El Lissitzky's book *Russland* published in Vienna in 1930. But the argument that Schindler was influenced by the Russian Constructivism is very unlikely, since the book about Russian architecture was published after Schindler completed the Lovell beach house. After outlining the context of Schindler's Lovell Beach house and its relation to the European architectural development the relationship to Le Corbusier's "Five points towards a new architecture" remains to be discussed.<sup>32</sup> The declaration of the "Five points" is roughly contemporaneous with Corbusier's design for the Weissenhof settlement in Stuttgart (1927), the second big exhibition of the German Werkbund. Schindler anticipated in the Lovell Beach house Corbusier's five elementary architectural design principles without literally formulating a "program:" the beach house fulfills all five points without any questions. But Schindler seems less programatic than Le Corbusier, since he develops every building from the site and the architectural requirements.

In his further work Schindler applies the "five points" with the exception of the raised first floor. To paraphrase Le Corbusier and Reyner Banham, one could speak of Schindler as the architect of the "Four ecologies and the four points."

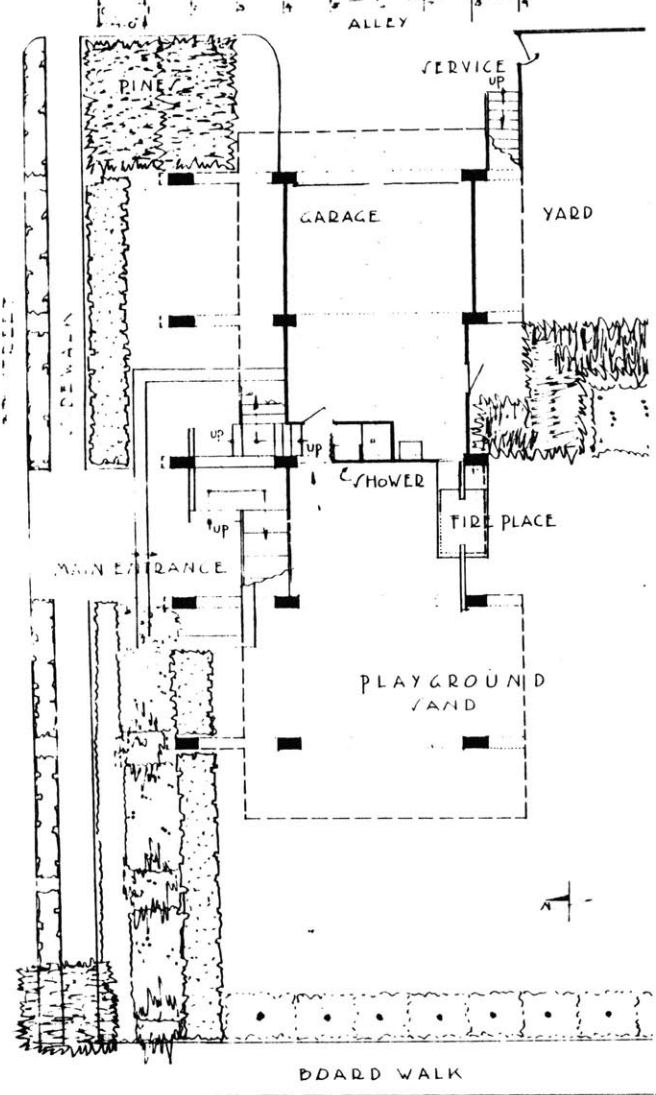




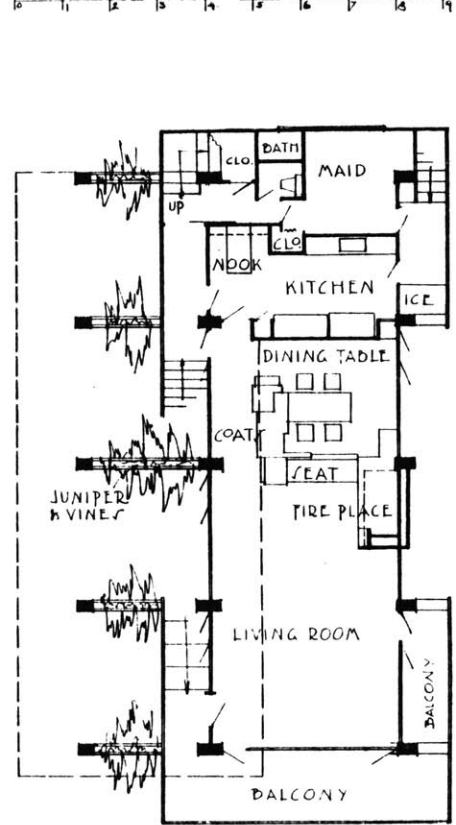
37. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922, preliminary sketches

38. R. Schindler, Beach house for Dr. Lovell, Newport Beach,  
1922-26, plans

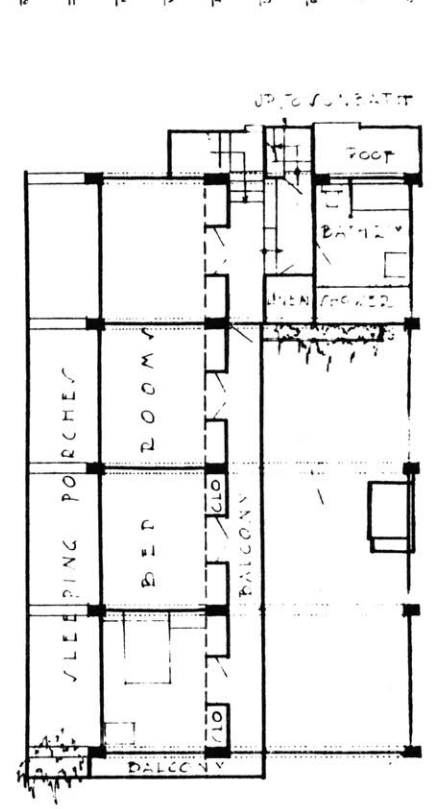
GROUND FLOOR PLAN



MAIN FLOOR PLAN



SECOND FLOOR PLAN

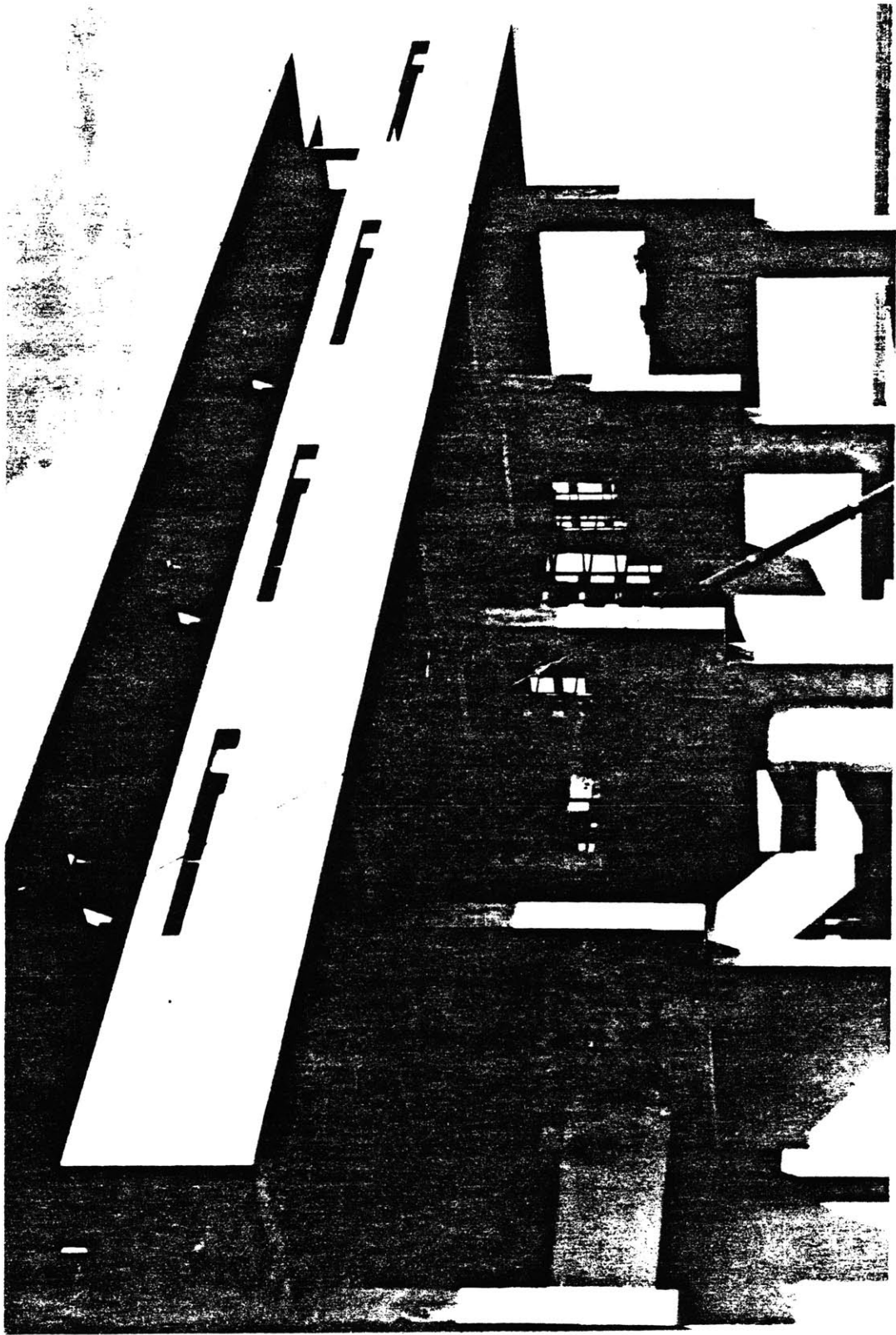


BEACH · PACIFIC OCEAN ·

BEACH HOUSE FOR DR. P. LOVELL · NEWPORT BEACH · CALIF. ·

R. M. SCHINDLER · 1926 ·

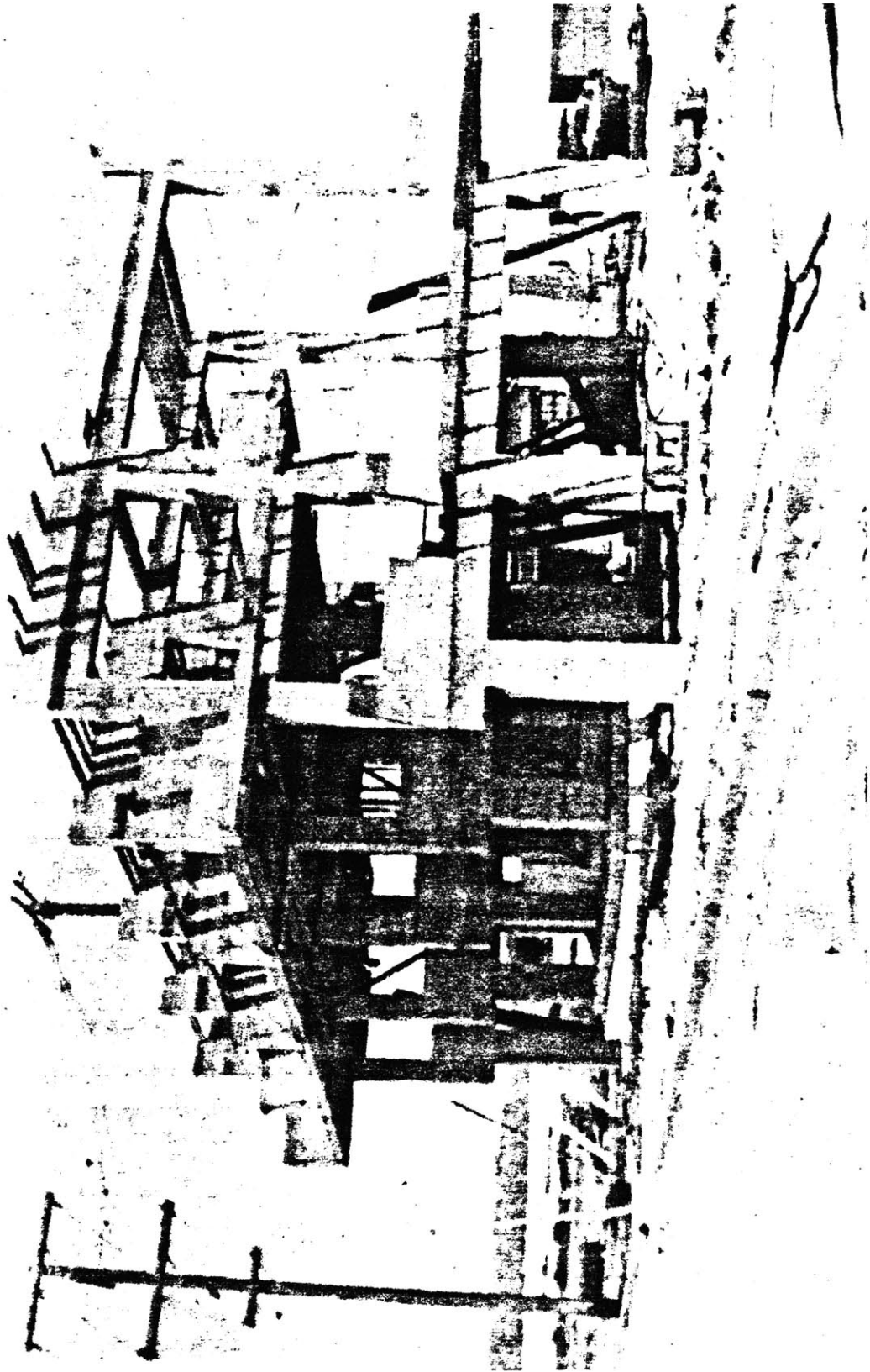




39. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, street elevation

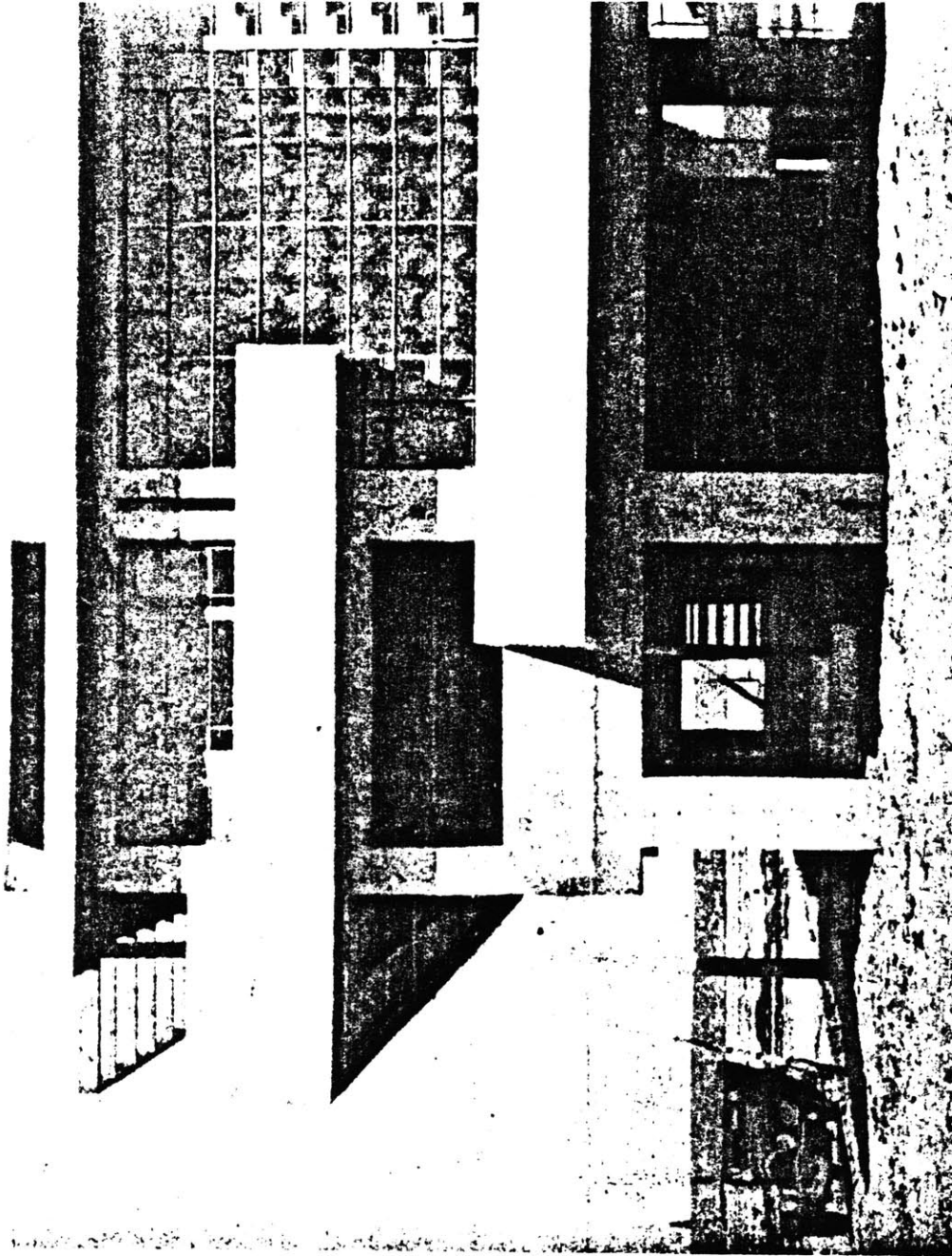


40. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, view from the beach

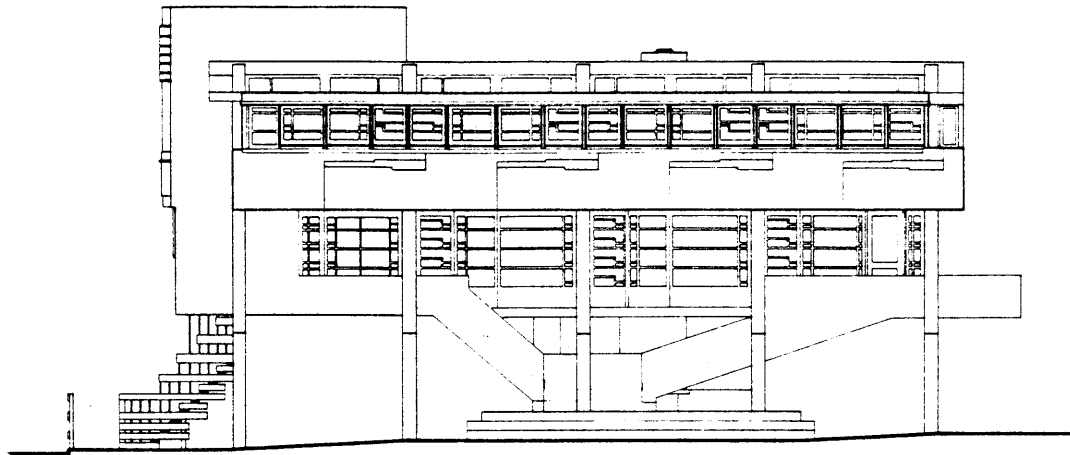


41. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, construction photo

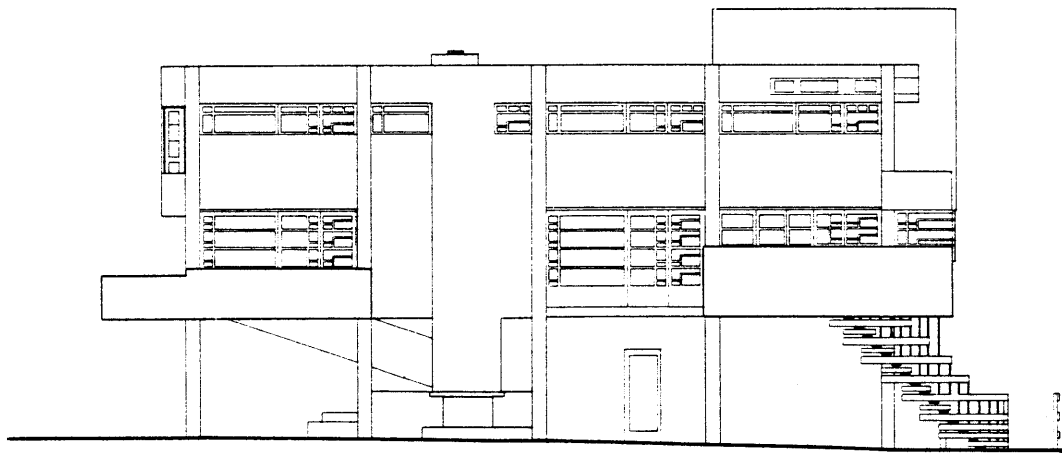




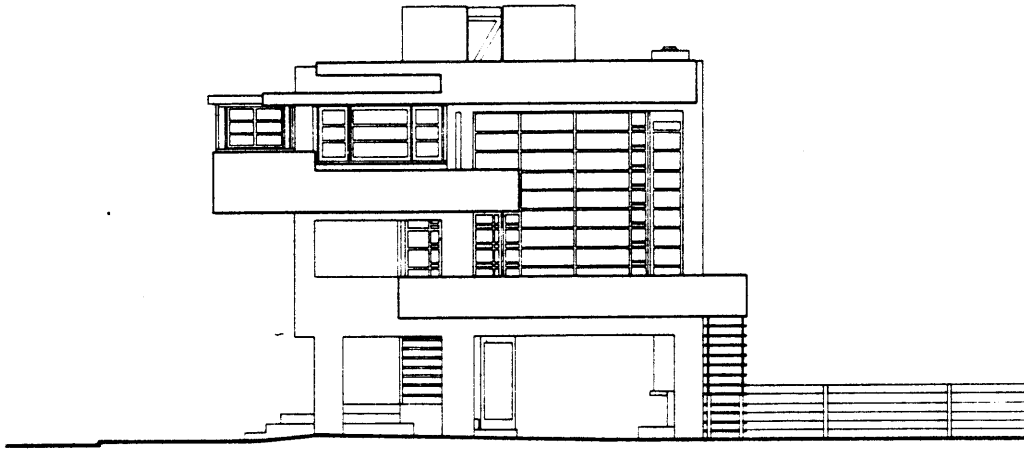
42. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, beach elevation



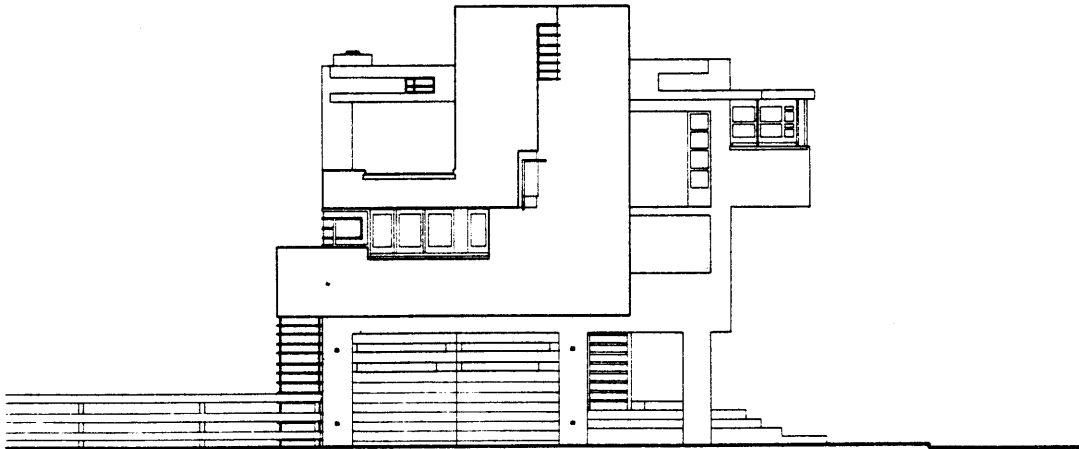
43. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, north elevation



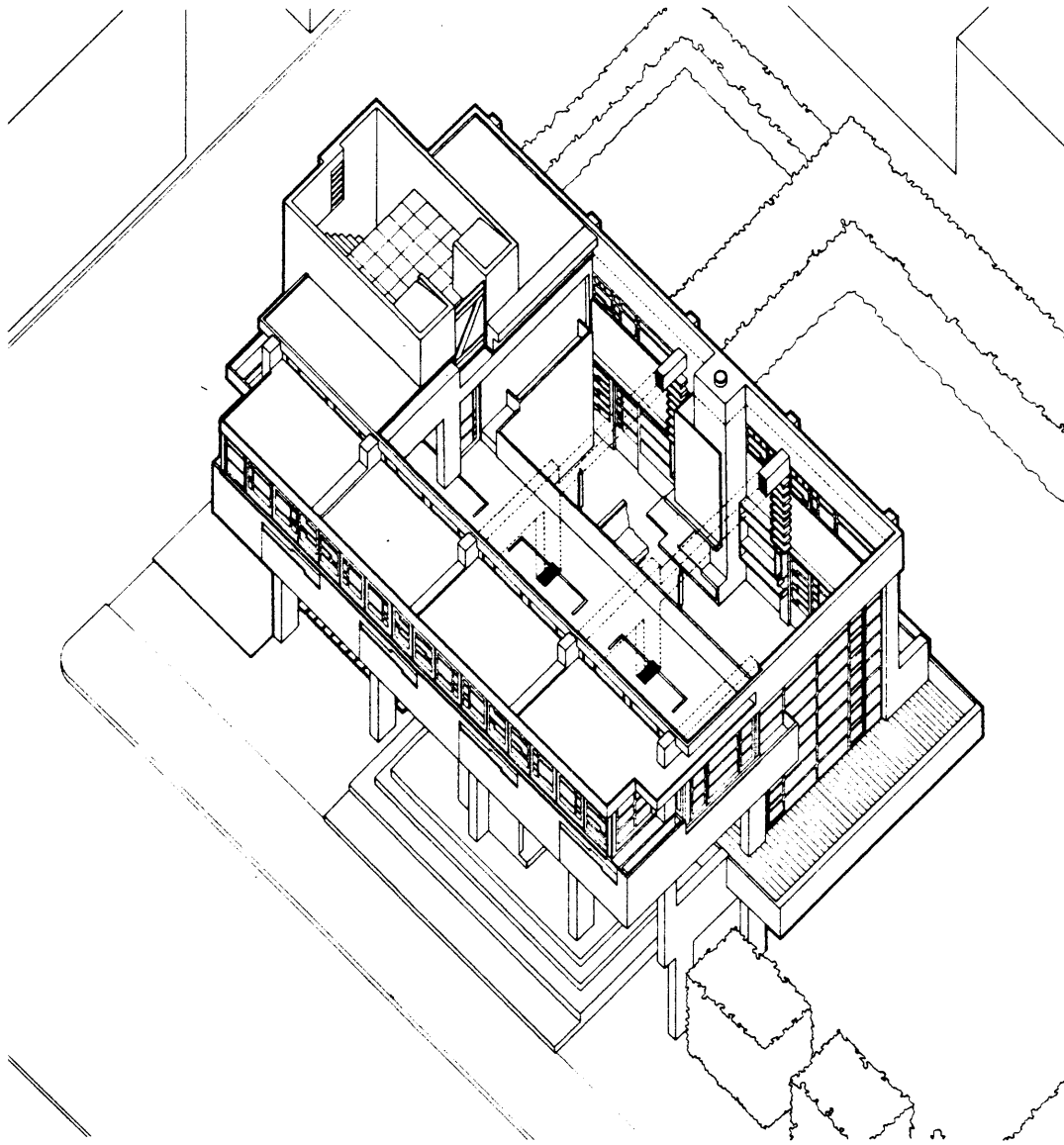
44. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, south elevation



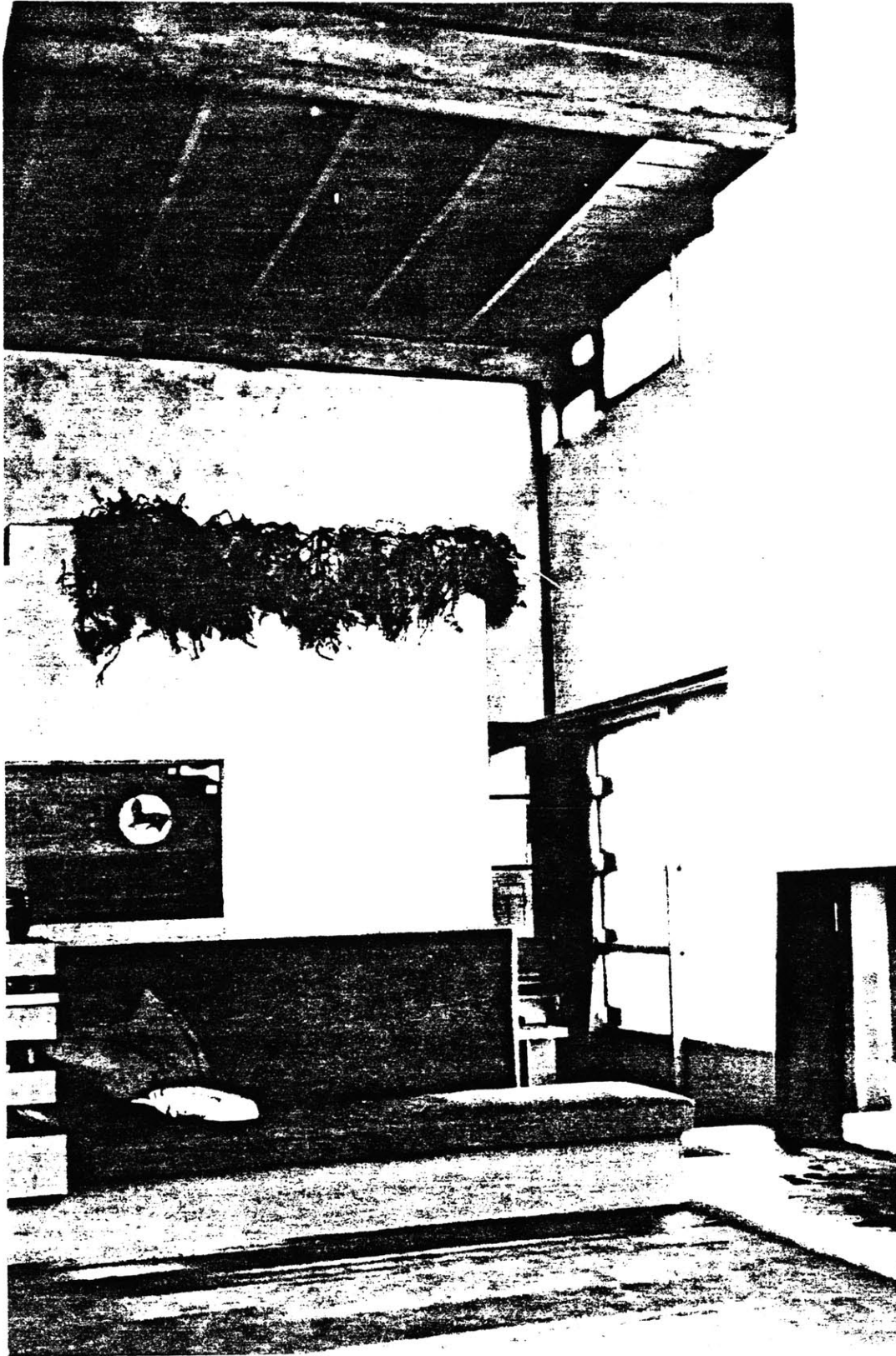
45. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, west elevation



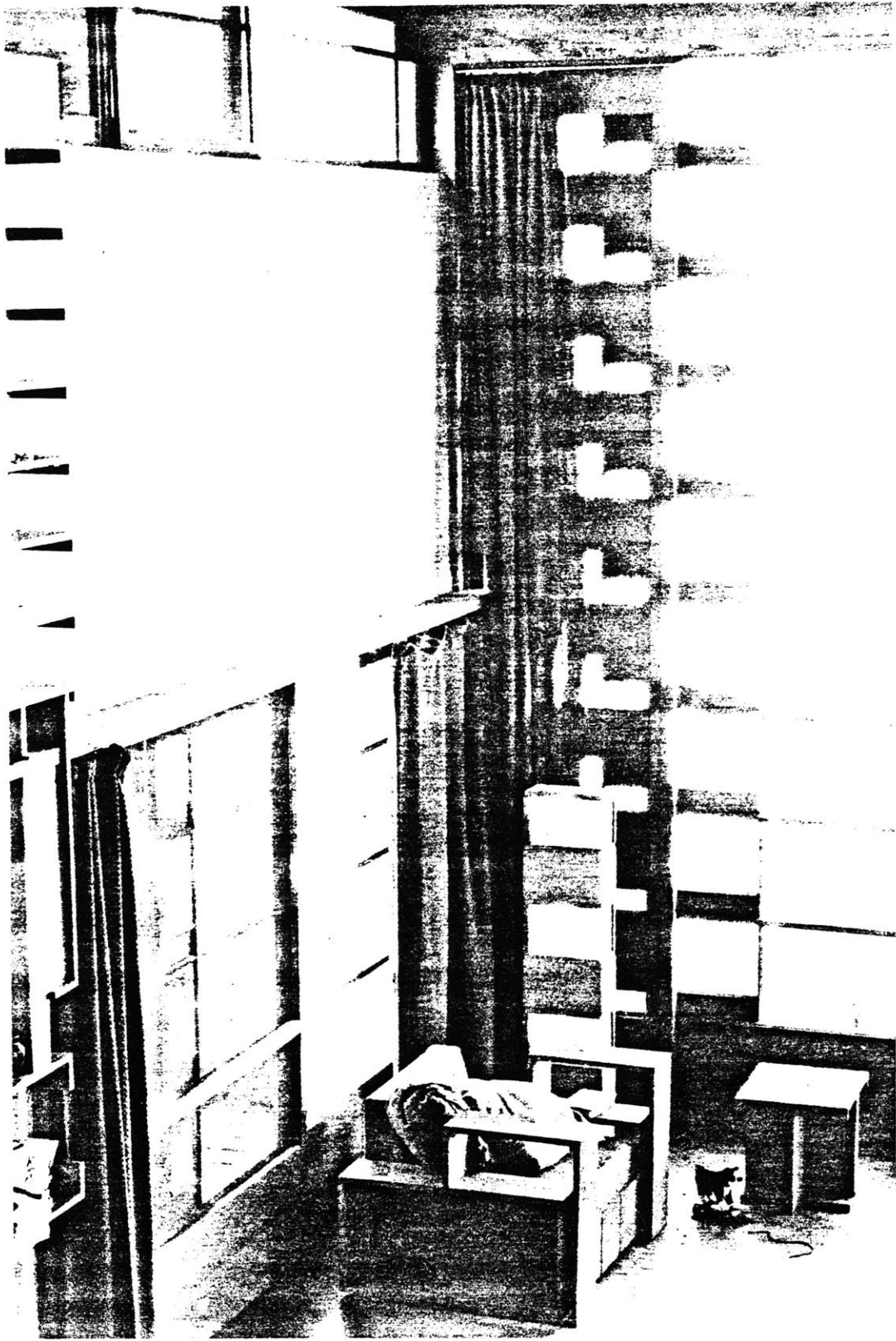
46. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, east elevation



47. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, axonometric drawing



48. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, living room



49. R. Schindler, Beach house for Dr. Lovell, Newport Beach, 1922-26, living room



### 3.3. HOUSE FOR J. J. BUCK, LOS ANGELES

#### 3.3.1. INTRODUCTION

The search for a new spatial articulation of the single family house was substantial throughout the oeuvre of Schindler. His contribution to the development of modern architecture in America and his unusual background make him a contradictory figure within the group of the other leading modern architects. Almost never using the term International Style, Schindler saw modern architecture in a much more fluid context. He wrote in spring 1932:

"The source of architectural form is the spirit, and its meaning is a cultural one. This is completely forgotten by the modern "functionalist", who is not an architect at all, but an engineer who has taken to building houses. By being master of our technique and our modes of production he weaves his product into the fabric of contemporary civilization, but can never pretend to be an agent of culture at a time when such a culture does not exist. We are so excited about the marvels of the new mechanical toys which have been presented to us by our inventors that we entirely forget such things as architectural problems.

The line of development of a contemporary architecture lies outside the turmoil of publicizing an international style. I feel that the present status of architecture is one of experimentation with a new medium. Only with the rise of a new culture will the medium be able to convey a meaning." 1

Continuing, Schindler insisted that modern architecture is concerned not with "a style" directed toward astounding originality but with the development of space.

"The architectural design concerns itself with space as its raw material and with the organized room as its product. ... New architectural problems have arisen, and their infancy is being safeguarded with a mask of practicability by the engineer." 2



The design of the Buck residence is of key interest for Schindler's work in the early 30s, since it comes immediately after the great debate about the International Style Exhibition at the Museum of Modern Art in New York, held in March 1932.

The April issue of Shelter - A magazine of Modern Architecture, for example, was completely devoted to that exhibition.<sup>3</sup> The editorial board comprised Maxwell Levinson as editor and George How, Henry-Russell Hitchcock, Alfred H. Barr Jr., and Philip Johnson as associated editors (only for the April issue). This issue of Shelter presents a range of explications and criticism of new architecture, ranging from the conservative viewpoint of the traditionalists to the comment by Frank L. Wright entitled "Of Thee I Sing."<sup>4</sup> As a document of the International Style in America this April-issue of Shelter is equalled only by the catalogue of the exhibition itself, prepared by Hitchcock and Johnson.

The exhibition of the International Style clearly marked a kind of turning point in the campaign for the acceptance of modern European architecture in the United States. The situation about the selection process of the architects who participated in the exhibition, however, was not entirely clear. The selection committee had refused works by people who were well known to all at that time, but their architectural language was considered "impure" to the idea of the International Style. These rejected architects - to name but a few - were Alfred Clauss, Walter Bearman, William Muschenheim, Rudolph Schindler, Oscar Stonorov, Elroy Webber, Kim Weber, and Richard Wood.

Commercial trade publications such as American Architect, Pencil Points, Architectural Forum, and Architectural Record (the latter one was regularly read by Schindler, as one may judge from his personal file of cuttings) started to publish European avant-garde architecture after this exhibition.

In Germany the architectural avant-garde faced severe problems in the same year the International Style exhibition took place in New York.<sup>5</sup>

In October 1932, after the National Socialist Party had taken over the government of Anhalt, Germany, the Bauhaus was moved to Berlin. In April 1933 it was closed by the National Socialist Party, and ironically from April 1933 onward the building of the Bauhaus at Dessau was used for the training of political leaders. Although the school was closed, its teaching and methods continued to exercise a wide influence. Most of the Bauhaus teachers left Germany after 1933; Walter Gropius, the former Bauhaus director, left Germany for England in 1934. Within this larger architectural history the design of the Buck house reveals its position in modern architecture.

A look at the oeuvre catalogue of Schindler shows that during the early 1930s the number of unrealized projects outnumbered the realized projects.<sup>6</sup> This fact certainly reflects the restrained economical situation in the United States during the depression. In 1929 the stock market crashed and the following depression had a very strong impact on the California economy. The number of unemployed in Los Angeles in 1934 reached 300,000. With the exception of the motion picture industry, California's extensive oil industry, and the tourist industry, California faced difficult times. In the field of politics a number of more radical issues gained relevancy. In 1934, Upton Sinclair with his left-socialist political program narrowly missed election as governor of California.

Although the depression was catastrophic for the building industry young professionals and well-to-do continued building houses. Schindler's commissions and his clients of the 1930s reflect the social and political tendencies of that time. In general they were young professionals, such as lawyers and teachers. Their political convictions were rather liberal, usually Democrats rather than Republicans. Against this background Schindler can be regarded as someone who continued his experiments within a small group of liberal clients.

### 3.3.2. ANALYSIS

I

Schindler's first large residential commission in the early 1930s was the Buck house of 1934. Before that time he had worked on several small-scale projects for single family houses like the Elliot house (1930), and the Oliver house (1933).

The Buck house is located at the corner of Genesee Avenue and 8th Street in Hollywood, Los Angeles, with the site offering no particular view. Genesee Avenue is a typical residential street of that part of Hollywood, the neighborhood consisting of three-and four-bedroom middle class houses built in various revival styles. Gebhard describes the Buck house as

"one of Schindler's finest houses, a cultural-historic monument of the city. All privacy on the exterior with just a touch of Streamline Moderne decoration, the interior space opens through great panels of glass into the garden area." 7

Discussing the Buck house a careful examination of the original sources dealing with the building process of the project is of great importance. The sources still available today consist of sketches, plans, photos of the time of completion (1935), and a very short correspondence between the client and the architect. 8  
A letter from April 25, 1934, contains the agreement concerning the design and the planning of the new house. The client, Mr. Jack J. Buck, was supposed to do all the drafting work, handle the bids and contracts, and supervise the construction work. 9

Very few sketches from the Buck house can be found today. One preliminary design for the Buck house was very different from the final solution, showing the house set back from the street very close to the rear of the lot line, a simple rectangle in overall configuration. A reconstruction of the entire design process and the discussion between the client and the architect is impossible due to the lack of original information.

On the other hand, original material from the final project is extensive. In the Schindler archive, there are fifty contemporary photos of the Buck house; surprisingly there are no interior photos in this group or from later times.

The earliest references to a design for the house are undated and unsigned; but it is most likely, considering the correspondence, that the design process did not start before the spring of 1934. The total number of plans and sketches for the Buck house is eighteen, comprising four preliminary sketches and designs, one presentation drawing, one perspective drawing, and ten working drawings, numbered one to ten.<sup>10</sup> In contrast to the first scheme the final drawings of 1934 reveal a highly complicated, untraditional plan, and a vivid cubist massing of elements which reflect a strong awareness of European modernism. The early elevation sketches for the entrance façade already show the dominance of the strip window in this house.

Illustrations of the Buck house were published in the Architect and Engineer (San Francisco),<sup>11</sup> in Architectural Forum (Boston),<sup>12</sup> and in the Studio Yearbook of Decorative Art (London).<sup>13</sup>

The article in Architectural Forum describes the Buck house as a solution to the problem of a house which contains a separate apartment for relatives of the owner.

"While the problem of providing accommodations for elderly parents or other members of a family is by no means uncommon, it is only infrequently that one finds it given consideration by architect or client. Here a solution has been found in the planning of a second floor apartment, complete in itself, with separate outside stairs in addition to those which lead to the owner's own quarters. Like all of architect Schindler's work, this house is a strongly personal solution and anything but copybook "modern." The house opens on a private garden, and the large glass areas are shielded from the sun by overhangs. The living room on the garden side is glazed from floor to ceiling."<sup>14</sup>

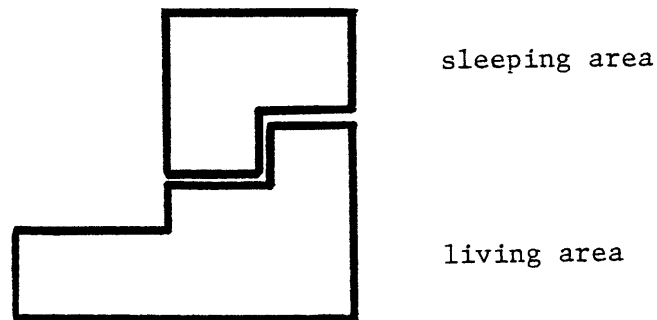
## II

The outside of the Buck house reflects in many ways the rhythmical and hierarchical spatial concept of the interior. Schindler's visual concept is impressive but only the floorplan and the section reveal the masterly handling of space (figs. 51, 52). Arranged around two patios the plan of the first floor is L-shaped with the three-car garage as an annex to it. The second floor plan consists of a U-shaped one-bedroom apartment. The main entrance from 8th Street opens into a hall which is lighted from the south through huge glass panels. The ceiling of the hall is very low (about seven foot) giving a feeling of protection and intimate scale. From this hall one can either turn to the left, entering the living room with its high ceiling, or to the right, to enter the formal dining room which is separated from the breakfast room by a translucent wood and glass screen. Since these public rooms are not separated by doors, their spatial distinction is made by means of changing ceiling heights, and different situations of lighting. A visitor most likely would turn directly to the living room since the light is penetrating through the huge floor to ceiling glass panels from the south, making this the brightest room in the house. The huge glass panels are made possible by a tiny I-section steel column which stands behind the third window frame as one enters the living room. <sup>15</sup>

The lighting situation is of key importance in the living room. Light penetrates the room from all four sides: glass panels to the south and the west are opposed by clerestory windows at the north and the east. The way in which these clerestories are placed within the corners of the wall give the room a multiple direction. There is no traditional corner motive in the living room, but every corner seems to be dematerialized and non-existent. Another important issue is the change of the roof level which reflects spatial zoning on the first floor. When a buffer of transitorial space (i. e. an entrance to a room) occurs the roof level changes in height. This change is

articulated by three dimensional spatial cutouts in the alternating roof levels and the clerestory windows. In this sense, the Buck house takes up of Wright's objective of the destruction of "box-like" spaces, the creation of a continuity between the inside and the outside, and the identification of building with the ground. Schindler's identification with Wright is more evident in the inside of the house than on the elevations. The way light and space are treated in this project reveals Schindler's strong affinity to Wright's theory of interlocking space.

The arrangement of the bedrooms, breakfast room, and the kitchen reflect the daily patterns of family life. Arranged along a small private hall, the three bedrooms and the two bathrooms form an L-shaped area which is set apart from the L-shaped living and dining area.



All the bedrooms have their main windows opening to the south or south-east, and two out of three bedrooms in the original plans, had a door leading to the garden. For reasons not documented, the bedroom next to the rear patio as finally built, has no direct access to the garden. The circulation pattern of the house is very economical. The front hall is spatially part of the living room, the possible overlapping of different uses converts the hall into a buffer space. The small hall in the back leading to the bedrooms is the only space serving exclusively for circulation.

The first and second floors of the Buck house are two independent living units. One enters the second floor apartment by ascending the exterior staircase to the left of the garage, and after arriving on a small open landing, one enters directly into the living room. From the landing a small door also leads directly into the kitchen. The whole apartment consists of a large living room, breakfast room, kitchen, and one bedroom with adjunct bathroom. The living and breakfast rooms open on a small porch which itself is connected by a small stair to the rear patio. Living room and bedroom are divided by two spatial elements. First, by a wood and opaque glass screen, and second, by a shift in the floor level with the bedroom being three steps above the living room. The reason for this shift is clear when looking at the longitudinal cross section of the house. Using the different ceiling heights of the garage and the kitchen on the first floor, Schindler located the second floor living room directly above the garage, and placed the bedroom over the kitchen. Doing this he achieved a "Raumplan" situation in the tradition of Adolf Loos, using the Raumplan-idea to realize the most economic solution. The rooms of the first floor and the rooms of the second floor are interlocked by means of a split level system, giving each room the corresponding ceiling height needed (fig. 52). All rooms in the Buck house were very clearly conceived as a sequence of spaces, enhanced by every possible device in the use of light and volumetric arrangement. The white plastered walls of the interior reflect all alternations and variations of the light. Especially on the ground floor the rooms are in contrast and in harmony with each other, and enhance their complementary qualities through different lighting situation, and harmonize on the other hand through the continuous white walls. In every detail the Buck house has been designed according to the principles of Schindler's space architecture.

### III

The elevations of the Buck house express clearly the interior spatial configuration. Approaching the house from 8th Street the three most characteristic features of the elevation are the towering element of the second floor bedroom, the horizontal strip windows, and the entrance which is set-back deeply into the massing of the house (figs. 53, 54, 55). The roof of the entrance hall is twenty-four inches lower than the overall roof on the first floor (fig. 52 top drawing, and fig. 55). As a result one can look through the open space created by the two different roof levels when standing at the entrance door of the house. The total impression of the elevation along 8th Street is so varied by means of asymmetrically placed windows that it is surprising to discover that the dining room is almost exactly in the middle of the façade. The elevation on Genesee Avenue today is largely hidden by trees and bushes, but in 1935 the great panels of glass opening into the garden area could be seen from the street (figs. 56, 57, 58). The two other elevations can hardly be seen, since the house is built so close to the neighboring properties. The general view of the white plastered cubist forms and the horizontal strip windows readily suggest a classification of the house within the International Style. A more detailed consideration, however, reveals a number of unusual spatial and formal articulations.

The single most striking characteristic is how corners are treated in this building. A feeling persists that the walls have not been built, but consist of large sheets of a thin white material joined at the corners in a very non-tectonic way. This feature most strongly distinguishes him from the other European modern architects showing their work in New York at the "International Style" exhibition.<sup>16</sup>

The corners in traditional masonry architecture visually reflect the support of the floors, but in the Buck house the corners are treated in such a way as to suggest the use of a new building technology, with the cantilevering soffit suggesting



the use of reinforced concrete (figs. 55, 58).

Actually the house combines concrete walls for the foundation and cement floors for the cellar. Exterior walls are of stucco on a wood frame; the inside is finished plaster. The first floor construction consists of ready cast concrete joists, the second floor construction consists of wood joists. For the roof construction Schindler used wood joists with white-finished composition roofing. All windows are sash-sheet metal, cadmium plated, and were designed by the architect. The entrance door and single doors are wood.

As far as the construction method is concerned the Buck house belongs to a new phase in Schindler's architectural work. The Lovell Beach house was the last building where Schindler used concrete as the primary structure. Already in the Manola Court Apartments for H. Sachs in Los Angeles (1926-1940), Schindler used stucco-on-wood-frame. Using a concrete structure for small buildings in the late 1920s became too expensive since the concrete structures are more labor intensive compared to the wood frame system. The houses of the late 1920s like the Grokowsky house in South Pasadena, California (1928), and the Wolf house in Avalon, Catalina Islands (1928) were also built with the wood-frame system.

The visual result of the white plastered walls and the irregularity of the elevations is very striking. All elevations combine a number of different window-openings, including horizontal strip windows, great panels of glass, small conventional windows, and clerestory windows. The windows in the Buck house reveal the dramatic interior spatial concept. No other building designed by Schindler offers this multiple quality of light penetrating through the whole interior of the house. The entrance elevation facing nearly north steps back in a zig-zag line in order to adjust to the oblique line of 8th Street. It has very few openings, only the dining room faces onto the street with a large corner window. A small horizontal strip window gives light to the main living room on the first floor.

The living room on the second floor above the garage is also lighted by a horizontal strip window. Next to the garage a small exterior staircase leads to the second floor apartment. The horizontal character of the façade is not disturbed by the staircase, since it is integrated within the horizontality of the elevation by means of a cantilevering beam which "frames" the staircase.

On the other hand the elevation facing south is completely glazed with the living room, breakfast room, and the two major bedrooms opening onto a common private patio. It is nearly impossible to describe the cubist and sculptural way in which Schindler handled the courtyard elevation (figs. 57, 58).

First, the height of the living room extends over 1/3 the average roof height; at the corner next to the fireplace a cascade of changing volumes literally comes into existence, creating a small space which is connected to the larger living room.

Second, a covered terrace is placed in the corner where the living room wing meets the bedroom wing, with its roof low enough to admit light through clerestory windows to the bedrooms lying beyond. Third, the south corner of the master bedroom steps out of the overall building lines as to accentuate the edge by duplicating it (figs. 51, 57).

One of the most characteristic architectural elements already mentioned is the disintegration of the edge definition. This is accomplished in three ways: first, the extension of the inside to the outside, second, the bringing of the outside to the inside, and third, having both occur at once.

For the living room Schindler uses different heights of windows not only to dissolve the corners, but to intensify these corners by giving them a direction. In this connection it is equally significant that the windows are set flush into the walls, and that cantilevering elements over the windows create a very strong sculptural image. Since the windows are treated as continuous glass openings (which also turn the corner) a very strong distinction is made between the wall and its openings.

The garden is divided into four areas, the front garden (facing 8th Street corner Genesee Avenue), the kitchen garden (facing 8th Street), the main patio and the rear patio, with the main patio being oriented to the south. There are many ways in which the house and the garden are related to each other. Visually there are no axes connecting the elevations and the garden, but spatially the living room extends into the patio by means of the large glass windows. Beside one bedroom all rooms have direct access to the garden.

#### IV

Investigating the historical architectural significance of the Buck house three topics come into focus.

First, the crisis of the International Style as the new utopia in the 1930s; second, the possible influence of European architecture on the Buck house; and third, the importance of the Buck house in its contemporary context of modern American architecture. In discussing the first topic a quotation from Tafuri's Architecture and Utopia outlines the economic and social crisis of the International Style in Europe:

"It is interesting to observe how contemporary historical study has tried to explain the crisis of modern architecture, which is considered to have begun about 1930 and to have been constantly accentuated up to our own day. Almost all the initial blame for this crisis is attributed to the political involutions of European fascism on the one hand and to Stalinism on the other. Systematically ignored, however, is the appearance, just after the great economic crisis of 1929, of decisive new protagonists: the international reorganization of capital, the affirmation of systems of anticyclical planning, and the realization of the First Soviet Five-Year Plan.

It is significant that almost all the objectives formulated in the economic field by Keynes' General Theory can be found as pure ideology in modern architecture. 'Free oneself from the fear of the future by fixing the future as the present' (Negri): the basis of Keynesian interventionism is the same as that of modern art. And in a precisely political sense it is also at the base of Le Corbusier's theories of

urbanism. Keynes reckons with the 'party of catastrophe' and tries to control its menace by absorbing it at an always new level. Le Corbusier takes account of the reality of class in the modern city and transposes the conflicts to a higher level, giving life to the most elevated proposal for the integration of the public, involved as operators and active consumers in the urban mechanism of development, now rendered organically 'human.'

Thus our initial hypothesis is confirmed. Architecture as ideology of the plan is swept away by the reality of the plan when, the level of utopia having been superseded, the plan becomes an operative mechanism.

The crisis of modern architecture begins in the very moment in which its natural consignee - large industrial capital - goes beyond the fundamental ideology, putting aside the suprastructures. From that moment on architectural ideology no longer has any purpose. The obstinate insistence on seeing its own hypotheses realized becomes either a surpassing of outdated realities or an impotunate disturbance." 17

Taking the economic and political situation as critical in the production of architecture, Schindler's situation in California differs widely from that of his European contemporaries. The great economic crisis of 1929 was similar in Europe and America. But the political situation differed. In America there was little institutional or political disparagement of modern architecture as occurred in Germany or Austria. For Schindler it was possible to continue the architectural experiments despite the restricted economical situation.

Schindler's personal clippings of the years 1931-1935 contain a wide collection of European avant-garde architecture. 18

Other than American architectural periodicals the most informative magazine about modern architecture in his clippings was the Japanese magazine Kokusai - Kentiku - Kyokai, 19 and the German magazine Die Form. 20

During the early 1930s Kokusai - Kentiku - Kyokai presented the most important European projects, including architects like Mendelsohn and Chermayeff, Le Corbusier, Welzenbacher, Salvisberg, Brinkmann, van der Rohe, Scharoun, Haefli, Lurçat, Schuster, Margold, Riha, and Raymond. One can assume after

examining Schindler's personal clippings that he was very aware of what happened in Europe and which tendencies the modern movement took.

His own work of that time consists of the house for Elliot (1930), the house for von Koerber (1931), Sardi's restaurant (1933), the house for Oliver (1933), and the house for J. J. Buck (1934).<sup>21</sup>

It is very difficult to compare the American architecture of the mid 1930s with European modern architecture of the same time, since most of these projects in Europe remained unbuilt. Generally however, Schindler's Buck house is built in the tradition of and formally indebted to the vocabulary of the European modern movement. But through the use of several architectural elements (speaking on an iconographical and iconological level) in the Buck house Schindler achieved a very personal and independent interpretation of the so-called International Style. The house is not "pure" in the sense that it represents one architectural style like "de Stijl," "Cubism," "International Style," or "Streamline Moderne;" Schindler's design principles developed directly from his teachers in the Modern Movement. His development seems to be more "personal" than "international," more indebted to certain architects than to a style.

As mentioned before, the Buck house was published during Schindler's life in only three magazines. However, the house had some distinct regional influence in Southern California, since young architects like Gregory Ain and Raphael Soriano worked as draftsmen in the office of Schindler. Ain worked several times for Schindler during the years 1929 to 1932.<sup>22</sup> In 1932 Ain worked for a period of six weeks for Schindler, preparing drawings for a prototype model service station for the Standard Oil Company of California. Ain was introduced to Schindler through a lecture on "Space Architecture" which he heard while a student at UCLA. Later Ain worked for Neutra, but he continued to visit Schindler at his Kings Road studio.<sup>23</sup> Ain seems to have taken over Schindler's drawing style of the 1920s and 1930s using Schindler's rather dramatic presentation of

buildings, and the many pattern devices to depict walls, roofs, windows, and elements in the landscape (figs. 59, 60). Soriano worked for Schindler as a draftsman from 1933 until 1938.<sup>24</sup> Conceptually, his work reflects the ideas of Schindler; but Soriano's use of building materials is more indebted to Neutra. Another young architect deeply influenced by Schindler was Richard Lind, who built a number of fine houses in the late 1930s. In Lind's architecture the cubist-like massing of the exterior comes closest to what Schindler did at the same time. Other than this very small group of avant-garde architects in Los Angeles, there was little recognition of Schindler's work of the mid-1930s. His architecture never had the impressive instantaneous impact of Neutra, since Schindler used an architectural vocabulary which was not part of the machine aesthetic of the Streamline Modern. To follow Schindler as a scholar was probably more difficult than to follow Neutra's adopted International Style. Ain for example recalled in an interview with Hariette von Breton in 1975, that he was impressed by Schindler's lecture on "Space Architecture" at UCLA, but that he did not fully understand what Schindler was talking about.<sup>25</sup> This statement of Ain seems characteristic in that many architectural critics and architects did not understand Schindler. Henry-Russell Hitchcock for example wrote in 1940:

"The case of Schindler I do not profess to understand. There is certainly immense vitality, perhaps somewhat lacking among many of the best architects of the Pacific Coast. But this vitality seems in general to lead to arbitrary and brutal effects. Even his work of the last few years reminds one inevitably of the mid-twenties. Schindler's manner does not seem to mature. His continued reflection of somewhat hectic psychological air of the region, from which all the others have attempted to protect themselves, still produces something of the look of sets for a Wellsian 'film of the future.'" 26

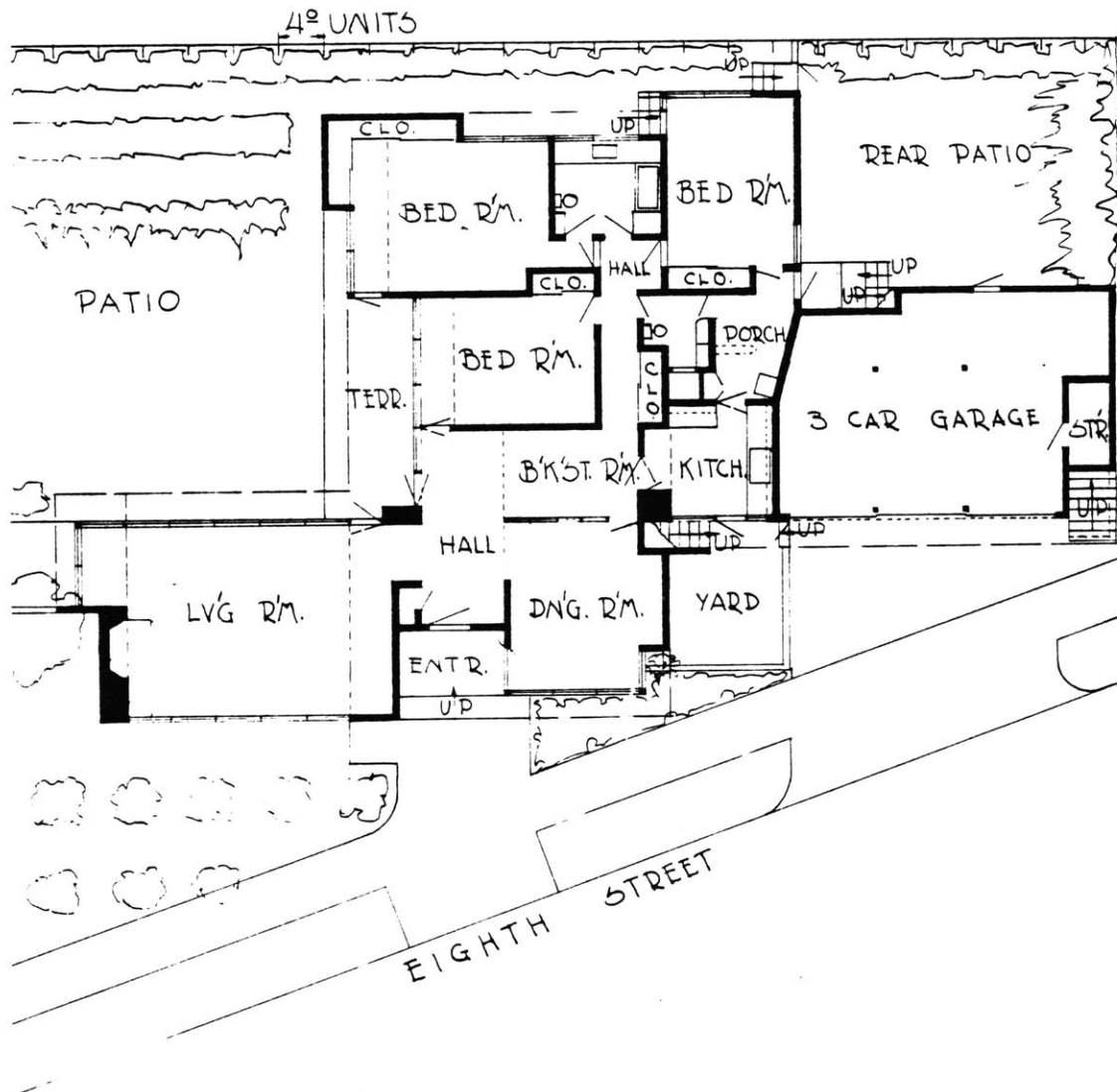
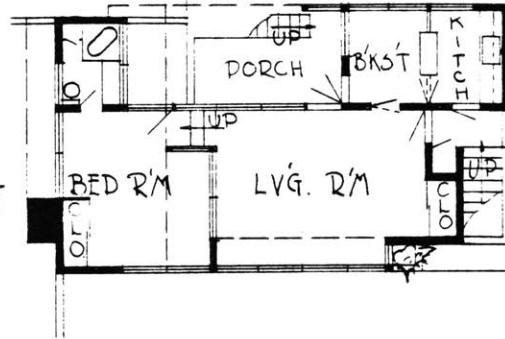




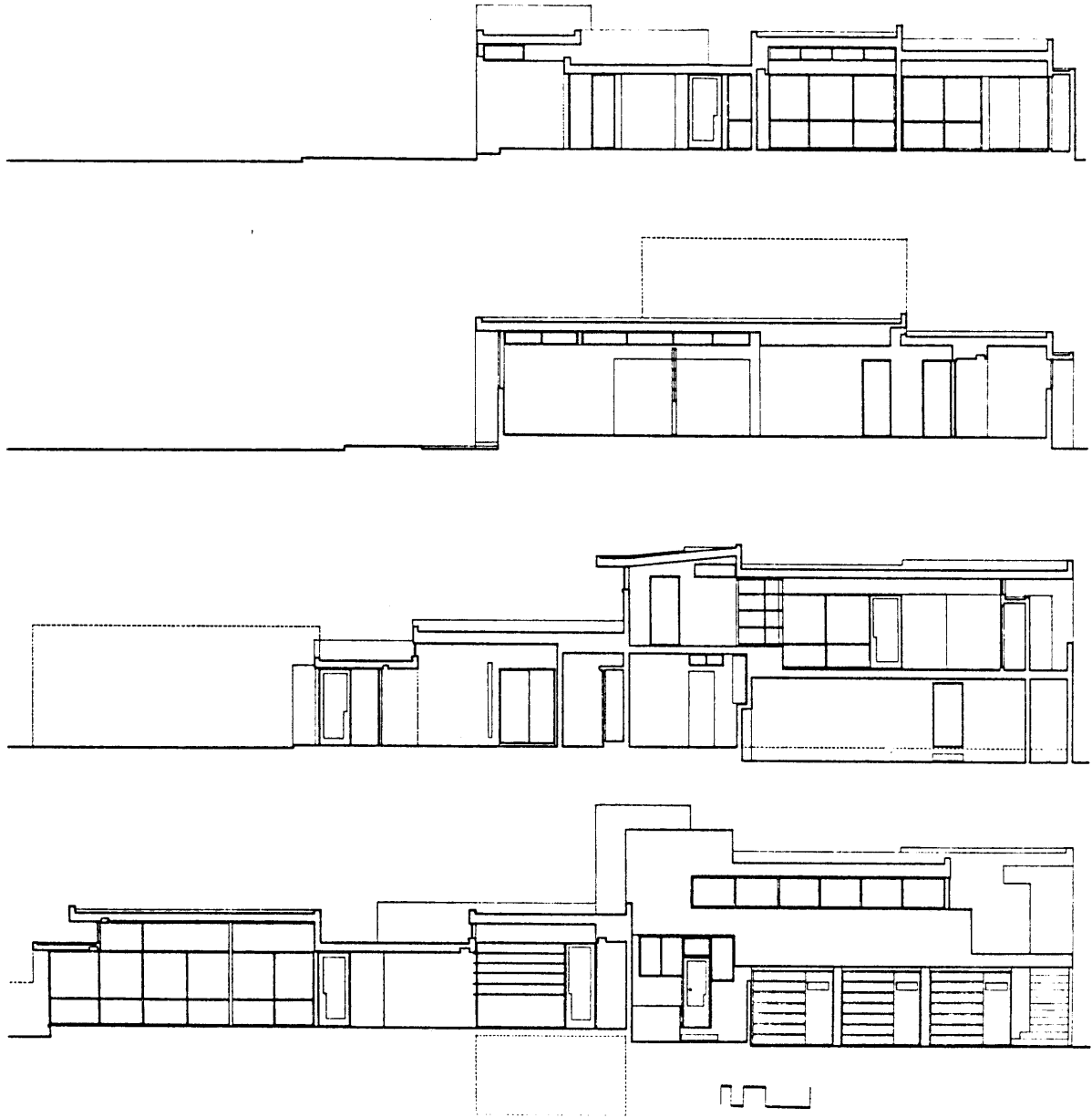
50. R. Schindler, Buck house, Los Angeles, 1934, site plan



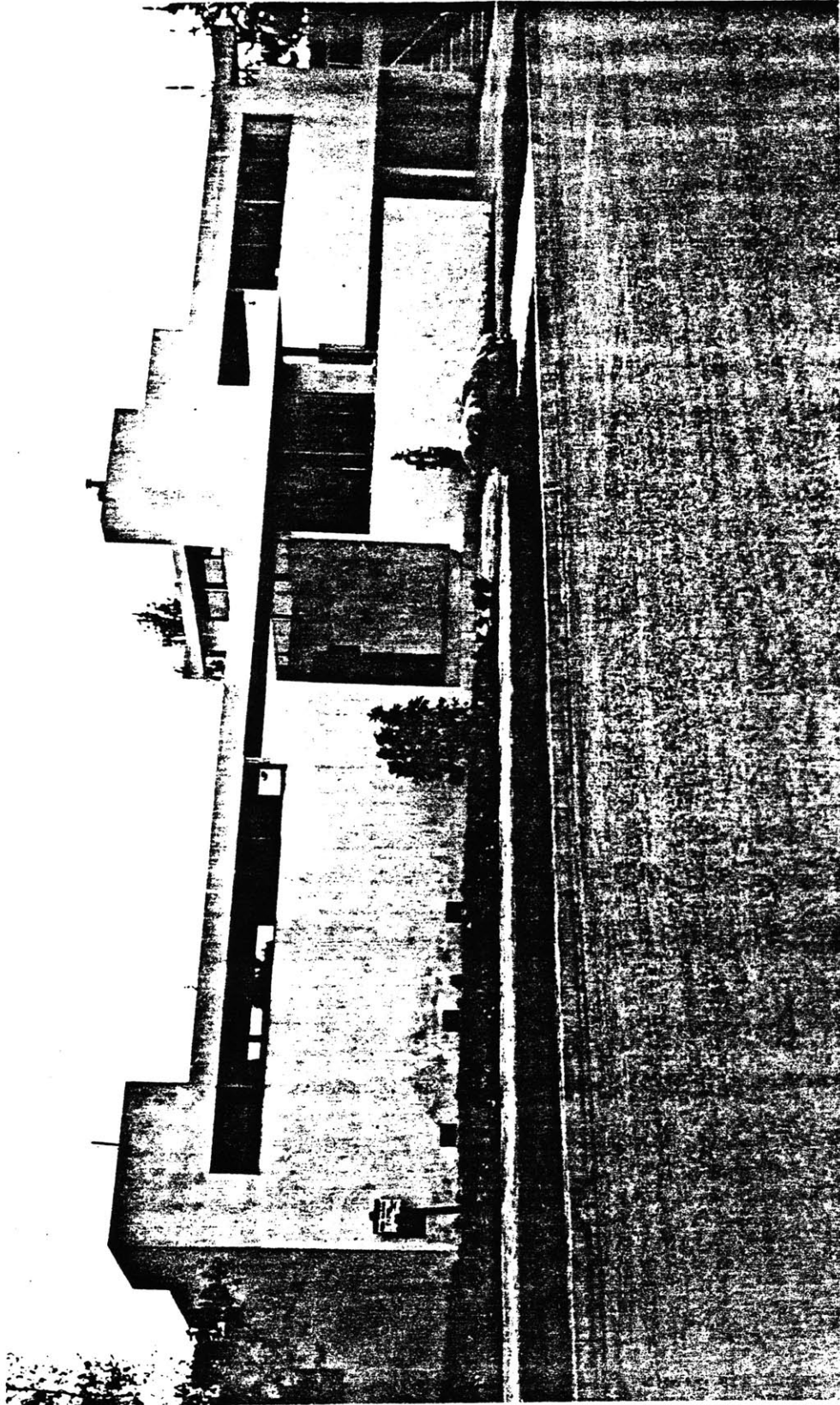
RESIDENCE OF:  
 MR. & MRS. J. J. BUCK  
 LOS ANGELES, CALIF.  
 R.M. SCHINDLER, ARCHITECT  
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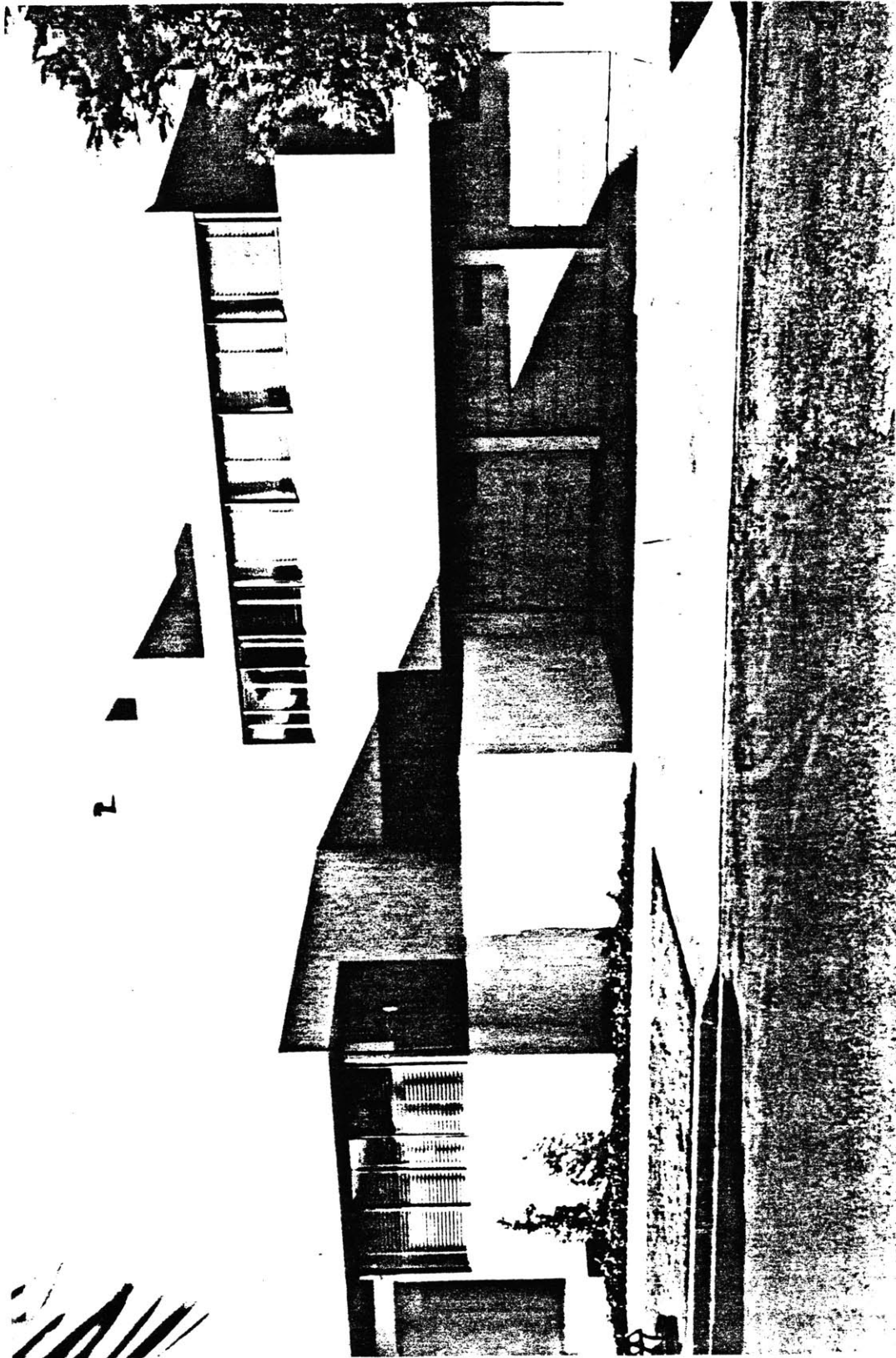
51. R. Schindler, Buck house, Los Angeles, 1934, plans



52. R. Schindler, Buck house, Los Angeles, 1934, sections



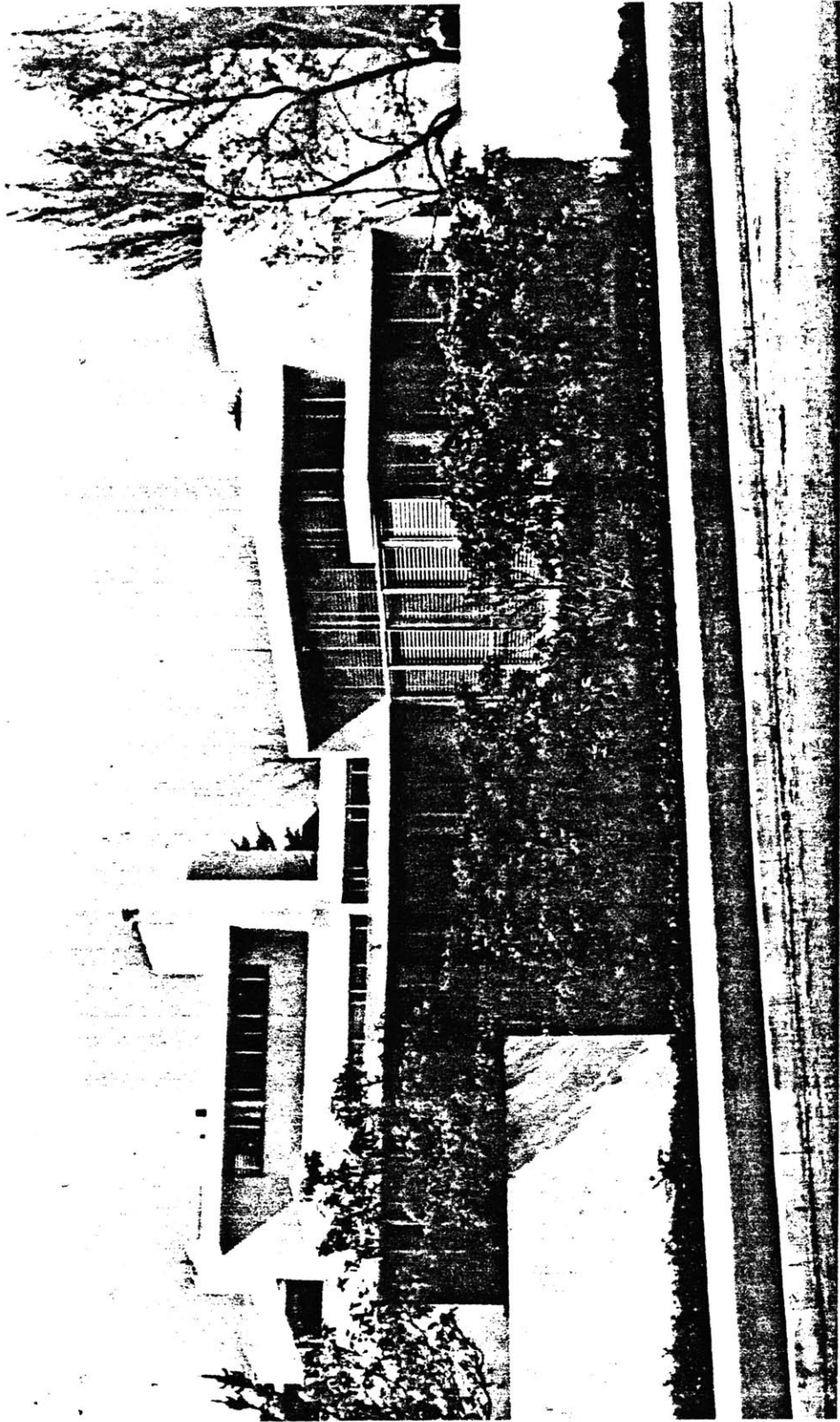
53. R. Schindler, Buck house, Los Angeles, 1934 street elevation



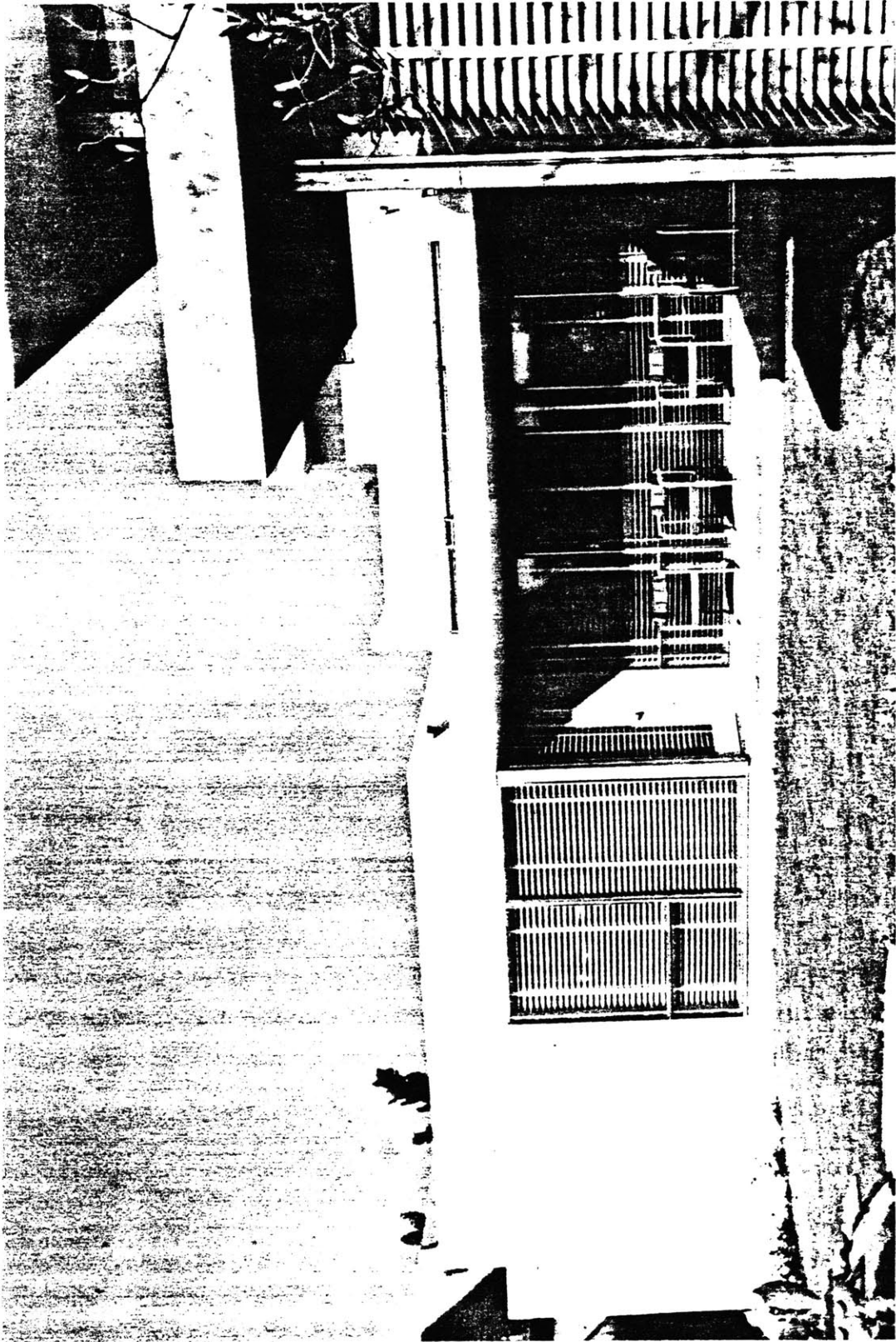
54. R. Schindler, Buck house, Los Angeles, 1934, street elevation



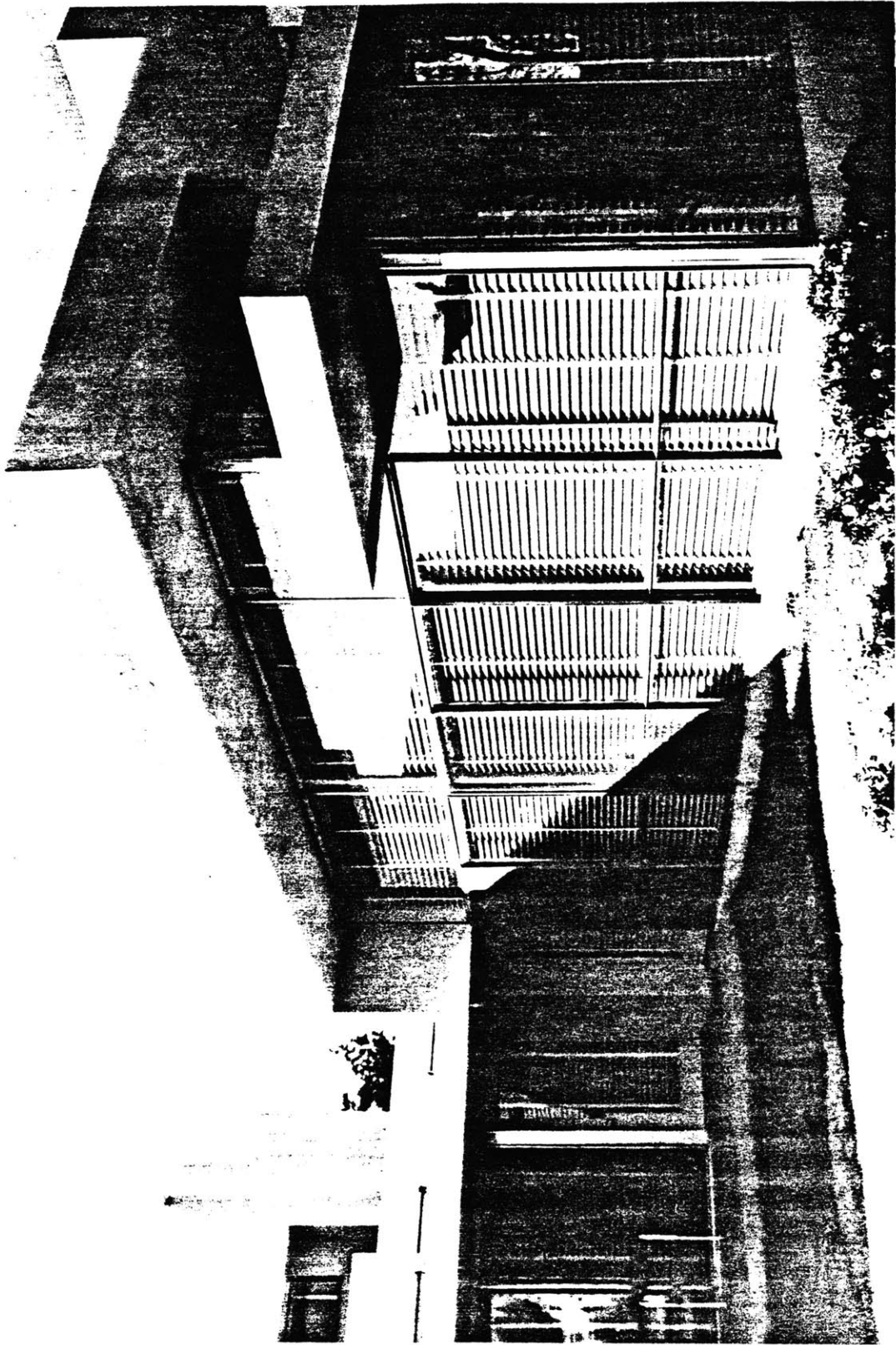
55. R. Schindler, Buck house, Los Angeles, 1934, street elevation, corner detail



56. R. Schindler, Buck house, Los Angeles, 1934, garden elevation

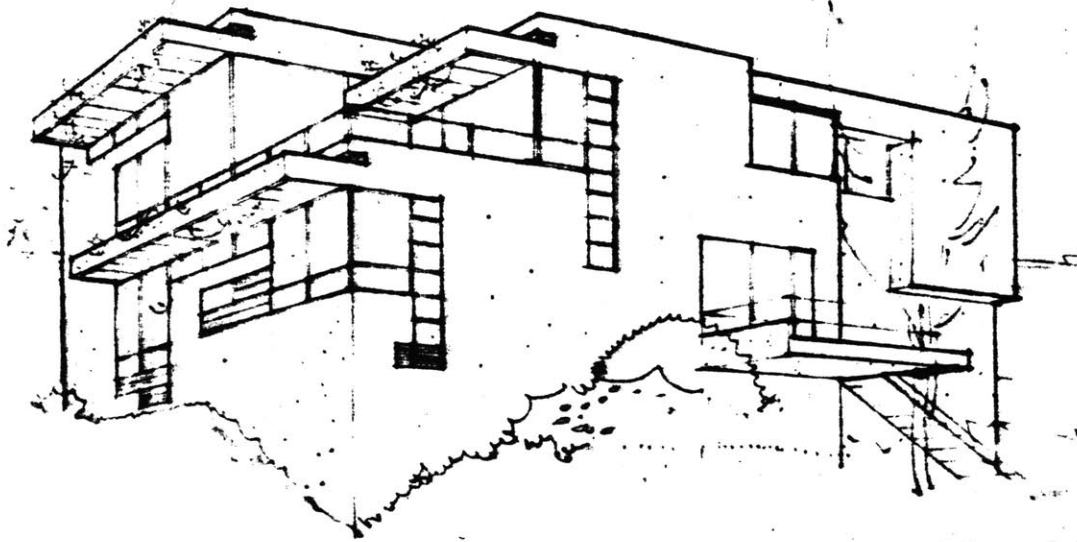


57. R. Schindler, Buck house, Los Angeles, 1934, garden elevation



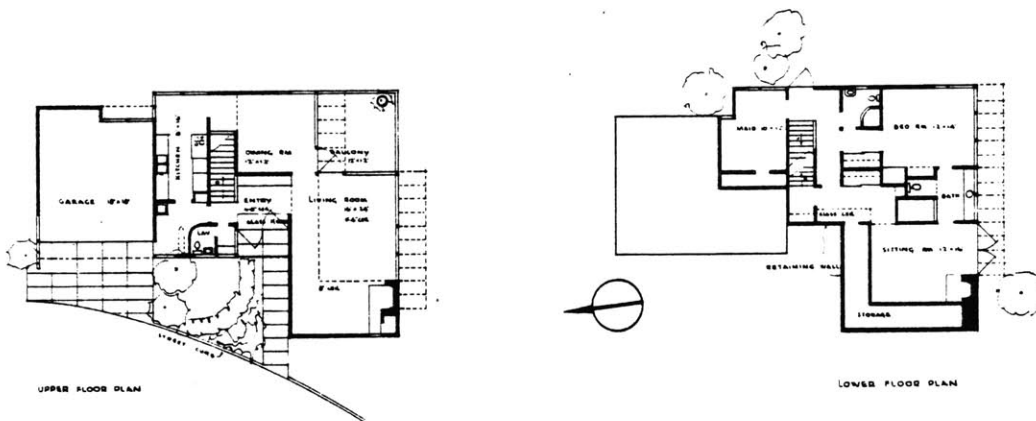
58. R. Schindler, Buck house, Los Angeles, 1934, garden elevation, corner detail





ERNEST HOUSE FROM S.E.  
 Gregory Ain Jan 1937

59. Gregory Ain, Ernest residence, Los Angeles, 1937, elevation



60. Gregory Ain, Ernest residence, Los Angeles, 1937, plans

### 3.4. HOUSE FOR ADOLPHE TISCHLER, BEL AIR

#### 3.4.1. INTRODUCTION

Architecturally speaking, in Los Angeles the Second World War was merely an interlude, for the buildings designed after 1945 were much the same as those of the pre-war time.

The numerous armament industries established in the Los Angeles metropolitan area during the war encouraged the spread of the city even in the years immediately after the war. Within the post-war economic boom, the growth of Los Angeles continued; the building industry received large commissions for public buildings, the new freeway system, and for large scale residential projects. For Southern California and Los Angeles the late 1940s marked the beginning of a vast single-family housing boom, conceived on a scale previously unknown to California.

Schindler's post-war work, from 1945 until his death in 1953, does not reflect the prosperous economic situation; his building commissions do not increase in size or number during these years. The popularity of Schindler as reflected by publications in architectural periodicals had already declined by the early 1940s. At the same time as the yearly A.I.A. convention took place in California in 1941 Pencil Points published a list of "significant buildings" of the area to be visited by the Institute members and guest architects. This list included the names of forty offices and architects in California and included such names as Frank L. Wright, Lloyd Wright, John Lautner, Raphael Soriano, and Paul Laszlo, but did not include the name of Rudolph Schindler.<sup>1</sup>

Although Schindler had established a number of conceptual and formal interpretations of the single-family house, he did not get involved in the numerous projects for the acres of middle and upper income houses built in the suburbs of Los Angeles.

The buildings and commissions built by Schindler in the 1940s

include the Bethlehem Baptist Church, Los Angeles (1944), and the three houses in Studio City, the Presburger house (1945), the hillside house for M. Kallis (1946), and the R. Lechner house (1948).

The buildings mentioned are all very much indebted to the Moderne although they cannot be labeled International Style. With the project for the Adolphe Tischler house at Bel Air (1949-50) "Schindler returned with renewed vigor to his expressionistic phase of the twenties." <sup>2</sup>

The atmosphere of the dissonance and ambiguity, the excellent siting of the house, and the rich complexity of internal space make the Tischler house an outstanding project of Schindler's late years.

#### 3.4.2. ANALYSIS

I

The Schindler house is located at 175 Greenfield Avenue, Bel Air. South of Greenfield Avenue there is a steeply ascending slope, and at one of these sites the Tischler house was built in 1949-1950. North of Greenfield Avenue the sites are flat and even. The conditions of the site were dominating for the design of the house, and the Tischler house represents one of the finest site-related hill houses built after World War II in the United States. The other residential houses on Greenfield Avenue designed in various revival styles take no advantage of the unusual situation offered by the sloping site, but rather reject the character of the site by placing the house on a man made flat plateau, and disregarding the natural splendour of the site.

Documentations about the design process of the Tischler house include preliminary sketches, plans, working drawings, photos, and three letters from the Los Angeles City Department of Building and Safety concerning the use of building materials. <sup>3</sup>

was very much of a romantic; Schindler was more an artist than an architect-engineer." <sup>7</sup>

Concerning the design process the site was most important to Schindler and he used to visit the site at different times during the day in order to design according to the natural conditions.

## II

The Tischler house is very easily seen when walking along or driving through Greenfield Avenue, for the white cubic form of the building is set very close to the street.

The first impression is dominated by the huge window on the top floor and the T-form white sculptural element above the two-car garage. Originally the garage was conceived as an open car-port (figs. 61, 62, 63).

The garage doors which were added later give the façade a bulkiness and a heavy base which was not intended by Schindler. For the conceptual design of the street elevation and for its sculptural composition the heavy closed base as it appears today is in contradiction to the intended elegance of the cantilevering second and third floor resting on a thin, carefully molded concrete pier. The house was not intended to "sit on the ground," but to rest on a concrete pier from where the actual lived-in spaces of the house cantilever. <sup>8</sup>

The elevation facing Greenfield Avenue is the only visible façade from the street, the others are not visible because of the steep slope and the trees.

In contrast to his previous buildings Schindler used an almost exactly symmetrical street façade for the Tischler house. The white plaster starts at the second floor wrapping the whole building. Small horizontal windows are placed symmetrically on the second floor with wooden triangular bris-soleils cantilevering out from the façade over the windows. The third floor street elevation is completely glazed with a tall vertical window towering above in the center. However, the symmetry is lost on

In the Schindler archive are ten sketches showing the early stages of the Tischler house, ten working drawings dated 1949, one perspective drawing of the final project, and two preliminary site plans dated 1949. There are seven photos (dated 1950), five showing the exterior and two giving an interior view of the living room.

Mr. and Mrs. Adolphe Tischler, who gave Schindler the commission in 1949, still live in the house. Information about the planning and building process can thus rely strongly on the personal comments of the owners.<sup>4</sup> According to Mr. Tischler, he contacted Schindler during 1948 and 1949. Mr. Tischler is an artist and a silversmith; through his interest in arts, he frequently read the magazine California Arts and Architecture. It was through publications of Schindler's earlier works in this magazine that the Tischlers decided to call upon Schindler as the architect.

Through these publications the Tischlers were familiar with the beach house for A. Kaun in Richmond (1936), the McAlmon house in Los Angeles (1936), the Harris house in Los Angeles (1942), and the Benatti cabin at Lake Arrowhead (1934-37). Beside that they visited other houses of Schindler by themselves.

But Schindler was not the only architect considered to design their house. The Tischlers selected Schindler out of a group of three architects that also included Richard Neutra and Craig Ellwood. Schindler was the chosen architect because he was "the most sympathetic" to the Tischlers.<sup>5</sup>

It took Schindler six months to develop and complete the plans and also six months to build the house.

"By June, July 1950 the house was finished."<sup>6</sup> Mr. Tischler describes the working and design attitude of Schindler by comparing him with Neutra. "Neutra built his house; Neutra was much more businesslike; Neutra was more realistic." In contrast, "Schindler was more sympathetic to the individual wants and needs (of the client); Schindler left out the business; Schindler

the third floor since the horizontal strip windows gradually decrease in size from the right side to the left side (fig. 61). Although the windows form a continuous window sequence, the term "horizontal strip window" may be misleading. In the plan the windows create a huge bow window, following the line of the main wall. The intersection of the varying window heights with the horizontal wooden structure of the front elevation is described by Gebhard as reminiscent of de Stijl

"In striking contrast to his earlier buildings, the front elevation of the Tischler house became a de Stijl stage set, expressing exactly those qualities which had so much disturbed Hitchcock in 1940." 9

More important than the question to what degree the front elevation was de Stijl or not (since the other elevations are certainly not de Stijl), <sup>10</sup> is the articulation of the hipped roof with its corrugated blue fiberglass material.

Mr. Tischler had bought the lot before consulting an architect. He wanted for his new house a flat roof, not knowing that a building code restriction existed for this area demanding no flat roofs. But for Schindler this restriction seemed to have been more a challenge than a handicap. Actually the hipped roof cannot be seen from the street at all, one can only see the roof when standing on the lawn of the upper garden terrace. The roof itself is made out of translucent fiberglass flooding the interior of the house with an unusual amount of light. The dramatic effect of the roof structure cannot be anticipated from the exterior (fig. 64).

The side façades are insignificant as concerns architectural innovation; they can best be described as restrained and simple. The overall appearance of the house is determined by a combination of white plaster and the gray painted wood finish. Schindler himself gave a description of the Tischler house and what he considered important. <sup>11</sup>

Description by R. M. Schindler:

"Residence for Mr. and Mrs. A. Tischler

Architect: R. M. Schindler, 1950

Lot: The lot slopes steeply up from the street two stories high, and flattens out somehow above that level.

Program: A dwelling for a small family with a workroom for the husband who is a silversmith.

Layout: The main part of the house was placed on the top level of the lot, which was graded for a lawn and a badminton court. Below it is the work room, and then a carport on the street level.

Structural scheme: The building uses concrete block walls for a base with a wood "Schindler Frame" and stucco exterior. The roof is made of a plastic translucent material, "Alsynite."

Architectural scheme: The usual utilitarian garage was abandoned for a half round carport, surrounded by an area of planting, so as to make the home-coming a pleasant experience.

The work room above faces away from the street into the same planting area.

The house is placed at an angle to the street so as to give the principal windows an outlook down the street and down the garden areas behind the neighboring houses.

The living room received a blue plastic material as a roof covering. This introduces color into the atmosphere, rather than on the wall surfaces. The walls of the living room are black with silver lines, and centered around a fireplace with a silver hood. Woodwork is of Douglas fir, with a gray stain."

In contrast to the distinct sculptural form of the house, the garden is very informal and it is divided into three areas. To the right side of the garage there is the front garden with a small semicircular path leading up the slope to the main entrance. Trees and bushes give the garden a somewhat rural character. To the left side of the garage the steep slope forms a buffer zone between the street and the lawn of the upper part of the garden. The dining room and the master bedroom open on to this upper garden. The bedrooms of the children also have direct access to the garden.

### III

"When you walk into a Schindler house, you always feel something is happening. It is the way he uses space."

Adolphe Tischler, artist and silversmith,  
owner of the Tischler house.

As one walks up the semi-circular path which leads from the two-car garage to the main entrance, one first passes the entrance to the studio of Mr. Tischler. A bridge-like element connects the path with the studio, which is located directly under the living room. The studio-apartment consists of two rooms, a small bathroom and a larger room, "the studio," the window of which surprises the visitor in facing away from the street, looking toward the slope and the concrete block foundation of the fireplace.

Walking up the steps to the main floor one arrives on a little platform, from where one enters the house (fig. 65). Much as in his earlier houses, Schindler abandons the entrance hall and leads the visitor directly into the main living room. Entering the house, the view is at first blocked by the massive free-standing fireplace which forms the center of the living area. A wooden balustrade visually divides the entrance space from the living area, and forces the visitor to move to the center of the house before turning into the living room. The first impression upon



entering the house is one of spaciousness, grandeur and generosity (fig. 66).

The bright light creates the illusion of a room being bigger than the actual size. The number of windows is greater than the number of wall-elements, and visually the whole room is extended into the garden area and the surrounding landscape (fig. 67). Beside the visual openness, the single main architectural element in the Tischler house is the roof of corrugated fibreglass panels. Originally the whole roof consisted of blue fibreglass but it turned out to be too bright for a room to live in. The Tischlers removed more than half of the blue panels and painted the walls brown in order to absorb the light (they did not approve Schindler's suggestion to paint the walls black with silver lines). Nowadays the walls are still painted dark brown and a large evergreen elm, a sycamore and a birch tree shield the room from overly abundant or harsh light. But the blue filtered light remains the principal characteristic of the room. With the changing of the natural light and the motion of the sun, the blue filtered light creates continuously surprising effects, and also creates the illusion of a permanently sunny day. The blue fibreglass serves as a metaphor of the natural sky. The tent-like shape of the roof also stresses the metaphoric and romantic idea of the roof as firmament.

In this house Schindler introduced two architectural elements which were widely neglected at that time: the use of colored glass, and the reintegration of a gabled roof to contemporary architecture. Throughout the movement of the so-called International Style the use of colored glass was regarded impure and as an issue of ornamentation. Frank Lloyd Wright's use of colored glass in his early projects may have been a source of inspiration for Schindler, but this may be only one possible interpretation. Conventional and also every-day architecture in Los Angeles used colored glass for commercial and decorative purposes throughout the 1930s and 1940s. The overall shape of the Tischler house, however, is very much reminiscent of the

Packard house (1924) with its two-story living room and the two-story windows.

Analysing the interior space of the Tischler house, a look at the floor plans reveals the formal simplicity and the spatial complexity. The floor plan is divided into the living area, directed toward the street, the dining area with direct access onto the porch and the garden, the kitchen facing the entrance garden, and the three bedrooms.

The center of the living room is formed by an open fireplace, dividing living area, entrance hall, and dining area. Covered with a highly polished aluminum hood, the fireplace was designed to blend with the originally conceptualized black painted walls which were intended to be decorated with silver lines.<sup>12</sup> The combination of the two colors suggest an iconography of the silversmith. The fireplace thus constitutes the central focus of the living room.

The walls dividing the kitchen and the master bedroom from the living area are not solid from floor to ceiling; the upper part of the walls is glazed in order to assure the transparency of the roof structure throughout the house. Therefore when sitting in the living room, the space is not discrete, not limited by walls, but rather seems unlimited, open ended. The kitchen, for example, has a window facing to the dining room, enabling the person working in the kitchen to socialize with people in the living and dining area and to enjoy the view across and throughout the whole house.

In contrast to his well known contemporaries, Schindler ended up by selecting that which was most complex and seemingly contradictory from each of his teachers. From Wright he acquired the ideal of the interweaving of interior space, and from Loos he derived his commitment to complex vertical space and the economical use of space. In the Tischler house these issues are realized in a very elaborate way. The vertical space in the house is articulated through carefully placed windows letting the light define spaces rather than the walls. The interweaving of interior

space is achieved through a transparency of the house rather than a spatial continuity articulated by the walls. What was said about the Buck house and the desintegration of the edge definition is equally valid for the Tischler house. The extension of the inside to the outside, the bringing together of the outside to the inside and having both occur at the same time is especially true for the arrangements of the living room windows facing Greenfield Avenue. The overhanging roof and the integration of the windows in the roof structure conveys the idea of spatial continuity and continuous space.

The high vertical window of the living room, for example, is in fact a projection of the gable end of the space within; the lower, horizontal, square-shaped windows extend in their turn into a semi-open trellis and thus become the terminating motives of the gable roof.

Schindler has built many houses on hill slopes, and all of these follow one of the three possible schemes. There is the group of houses moving up from the slope (as for example the Olover house, 1933, the McAlmon house, 1935, and the Rodakiewicz house, 1937); the houses moving down with the slope (as for example the Wolf house, 1928, and the Walker house, 1935); and the houses standing "vertically" out from the slope (as for example the Tischler house, 1949). The gable roof of the Tischler house emphasises the formal duality between the natural slope and the man-made house; but within this contradiction the building and the site articulate a new harmony.

#### IV

Discussing the relation of the Tischler house to other works of Schindler and other contemporary buildings, Reyner Banham speaks of the outstanding spatial and aesthetic qualities of Schindler's work - early and late.

"The terraced Wolf house on Catalina Island, together with the Oliver, Rodakievicz, and Buck houses, constitute a body of work that needs shame no architect in the world in those years, and by the time the CBS building arrived (CBS Headquarters building by William Lescase, Los Angeles, 1936, note by the author), Schindler had finished with the style the world called International and believed to be a post-war European invention, and had set out in search of a more complex use of space and a more liberated aesthetic - as in the Kallis studio of 1945 or the Tischler house five years later, three years before his death." 13

To evaluate the historical contributions of Schindler, his work has to be seen in relation to the works of his contemporaries. A time-table describing the events of the late 1940s will best serve this purpose. This time-table contains selected buildings designed in the United States between 1946 and 1950, and gives reference to a few European buildings of the same time period (see time-table next page).

1946	1947	1948	1949	1950
Erich Mendelsohn, Maimonides Hospital (1946-1950), San Francisco;	Richard Neutra, Tremaine house (1947), Santa Barbara;	Eero Saarinen, General Motors Technical Center (1948-1956) Warren;	TAC (Walter Gropius), Harvard Graduate Center, (1949-1950) Cambridge; Charles Eames, Eames house (1949) Santa Monica; Rudolph Schindler, Tischler house (1949-1950) Bel Air; Harwell H. Harris, Johnson house (1949-1951) Los Angeles;	Ludwig Mies van der Rohe, Lake Shore Drive Apartments Chicago; Erich Mendelsohn, Russel house (1950-1951) San Francisco; Le Corbusier, Notre Dame du Haut (1950-1954) Ronchamp; Alvar Aalto, Town hall Säynätsalo (1950-52) Säynätsalo;
Richard Neutra, Kaufmann Desert house (1946-1947) Palm Springs;	Marcel Breuer, Breuer house (1947) New Canaan;			
Mies v. d. Rohe, Farnsworth house (1946-1950) Fox River;	Alvar Aalto, Baker house MIT (1947-1948) Cambridge;			
Philip Johnson, Glass house (1946-1949) New Canaan;				
Le Corbusier, Unité d'habitation (1946-1952) Marselles;				

In contrast to the experience of Walter Gropius, Erich Mendelsohn, Mies van der Rohe, Ludwig Hilbersheimer, Marcel Breuer, Lazlo Moholy-Nagy, Josef and Anni Albers, and Gyorgy Kepes, the political situation of Nazi-Germany and the Second World War did not effect Schindler. As a consequence, Schindler's work was more continuous and little influenced by political and economic issues. A very different type of consistency was carried out by Schindler to take up the discussion of architecture in the United States. For him the confrontation with the climate and the ecology of Southern California proved determining. In the few works carried out after 1945, he remained faithful to the modern movement, though uncertain in architectural language. He pursued his concept of "space-architecture," but the architectural language was changing from a more formalized to a more personal language.

Architectural materials and elements like windows, doors, and roofs became in Schindler's later design more standardized (ready made objects instead of custom made objects), and formal details were eliminated in the pursuit of economy. Schindler's critique of the International Style also led to a rejection of the glass and steel architecture and the Tischler house can be seen as the antipode of the Farnsworth house by Mies van der Rohe.

The development of the two architects have - paradoxically - two historical roots in common. They both share the heritage of the classical Beaux-Arts tradition (Mies - Behrens - Schinkel; Schindler - Wagner - Semper) and their projects of the 1920s (Mies van der Rohe's courtyard houses and the brick country house; Schindler's Kings Road house and Pueblo Ribera) both share the spatial concept of the continuous wall as the space forming element.

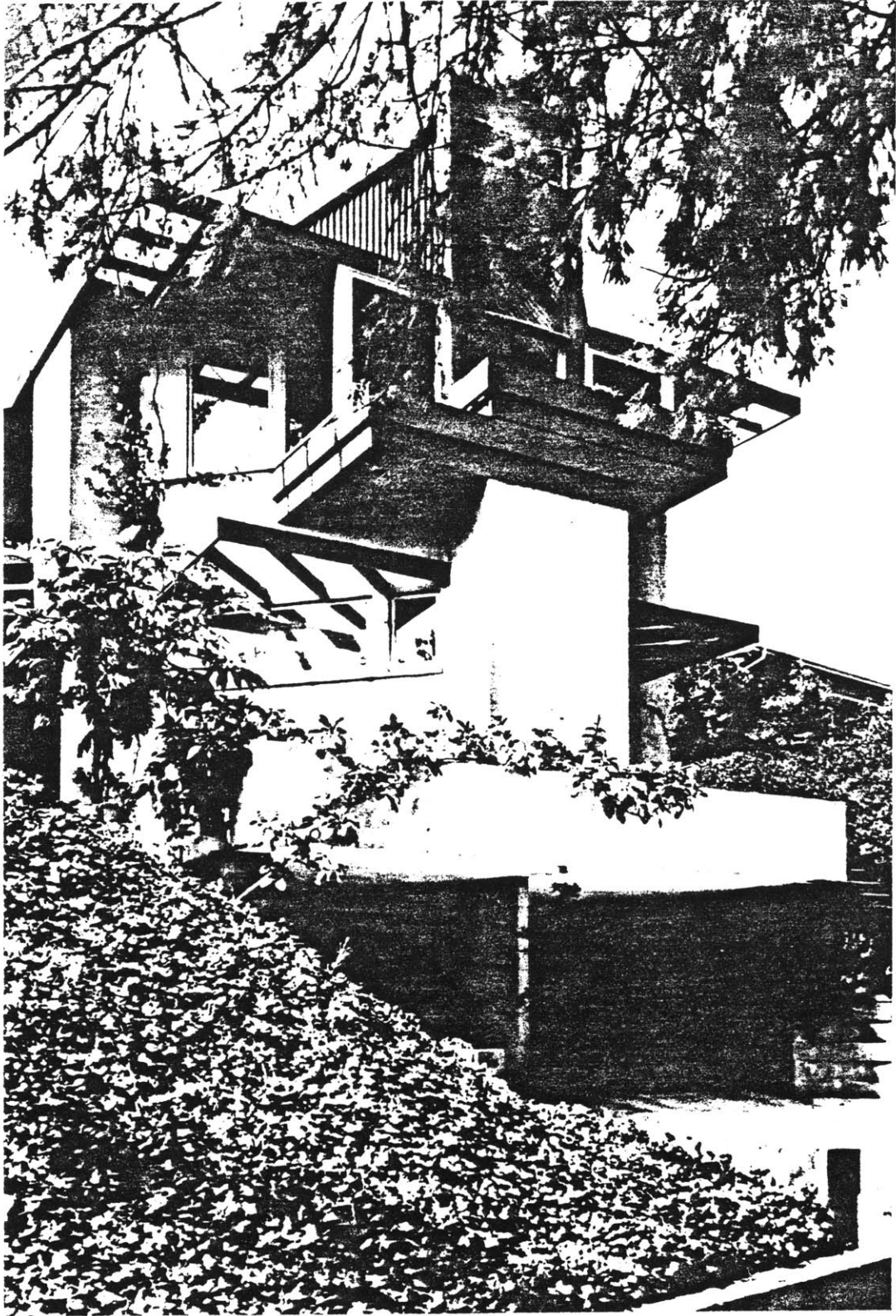
In very general terms, one could describe Mies as the architect conceptually building a "Raumhuelle" (indefinite space) whereas Schindler could be described as the architect conceptually building a "Raumgestalt" (articulate space).

In discussing Schindler's critique of the International Style it is important to mention that, from the end of World War II the experimentation of the "master architects" was matched by a general indictment of the intellectual premises of the established modern movement, especially on the part of the younger generations. Avant-garde architecture seemed to be all but bankrupt, especially regarding its claims to playing a guiding role in the process of planning and social progress. The rejection of the rational Modern Movement in favor of the so-called organic method whose premises can be found in the work of Frank L. Wright, found a similar articulation between 1945 and the mid 1950s on the West Coast of the United States in what became known as the "Bay Region Style."

The most notable representative of the Bay Region Style were William Wilson Wurster and Harwell Hamilton Harris. Rudolph Schindler esteemed the work of Harris very much. Above all, the ideas of a site-related, neo-humanistic and regional architecture appealed to Schindler.<sup>14</sup> However, the formal language of Schindler's later work cannot be described as being part of the Bay Regional Style. There are similarities concerning materials and site planning, but Schindler's architecture always remained distant to the Bay Regional Style.

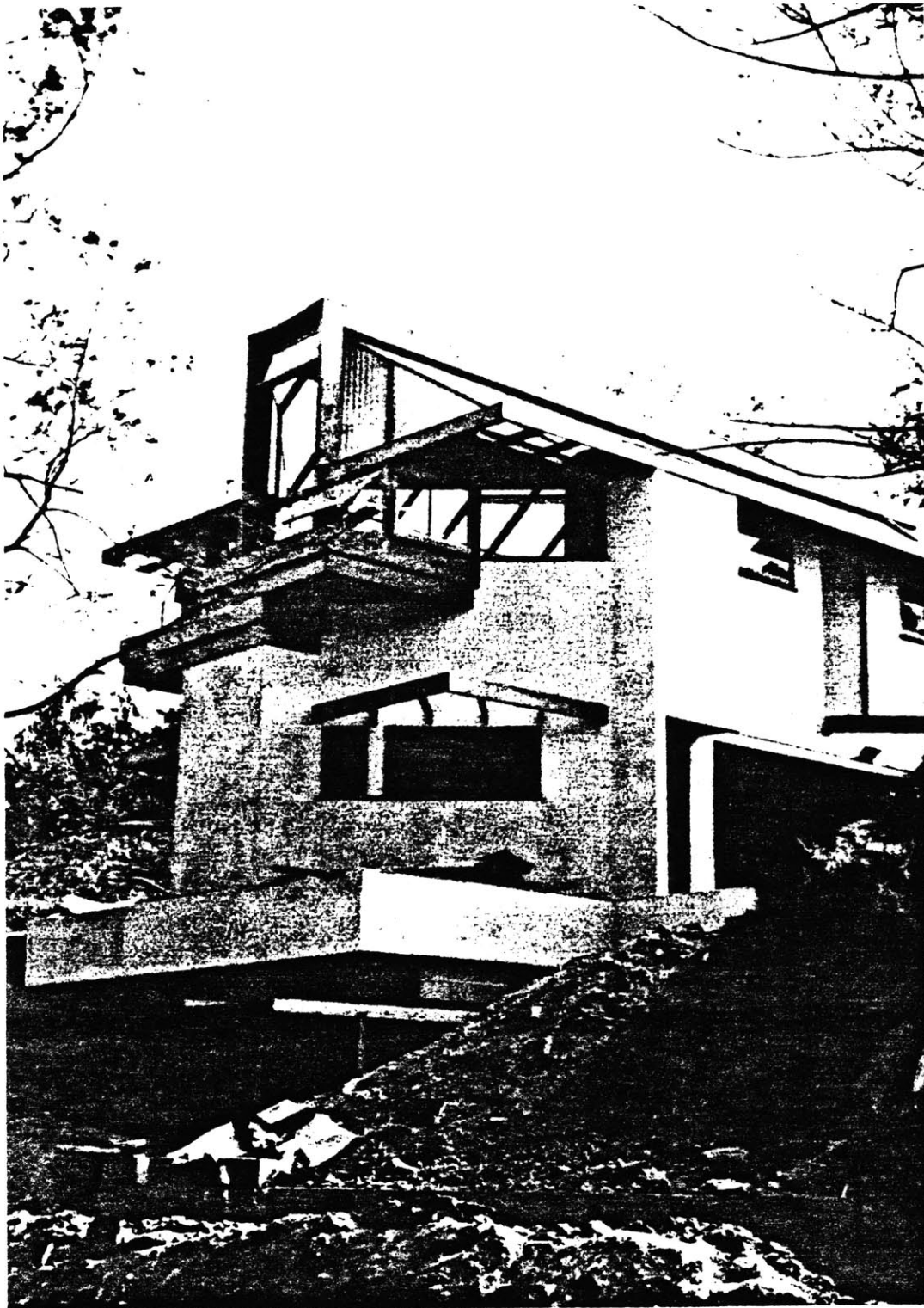
The redwood and shingle Bay Tradition established itself in the early twentieth century, and was formally indebted to the Shingle Style, the Art Nouveau, the Arts and Crafts movement, and to a certain extent to the Japanese architecture. In the 1940s Wurster, Bernardi and Emerson, and Gardener Daily adapted the features of the so-called International Style to the Maybeckian redwood tradition. Schindler, on the other hand, never attempted to blend his designs with a vernacular redwood shingle style.

The Tischler house represents a turning point in Schindler's architectural development, and it is only due to his early death in 1953 that he was not able to elaborate on his new concept.

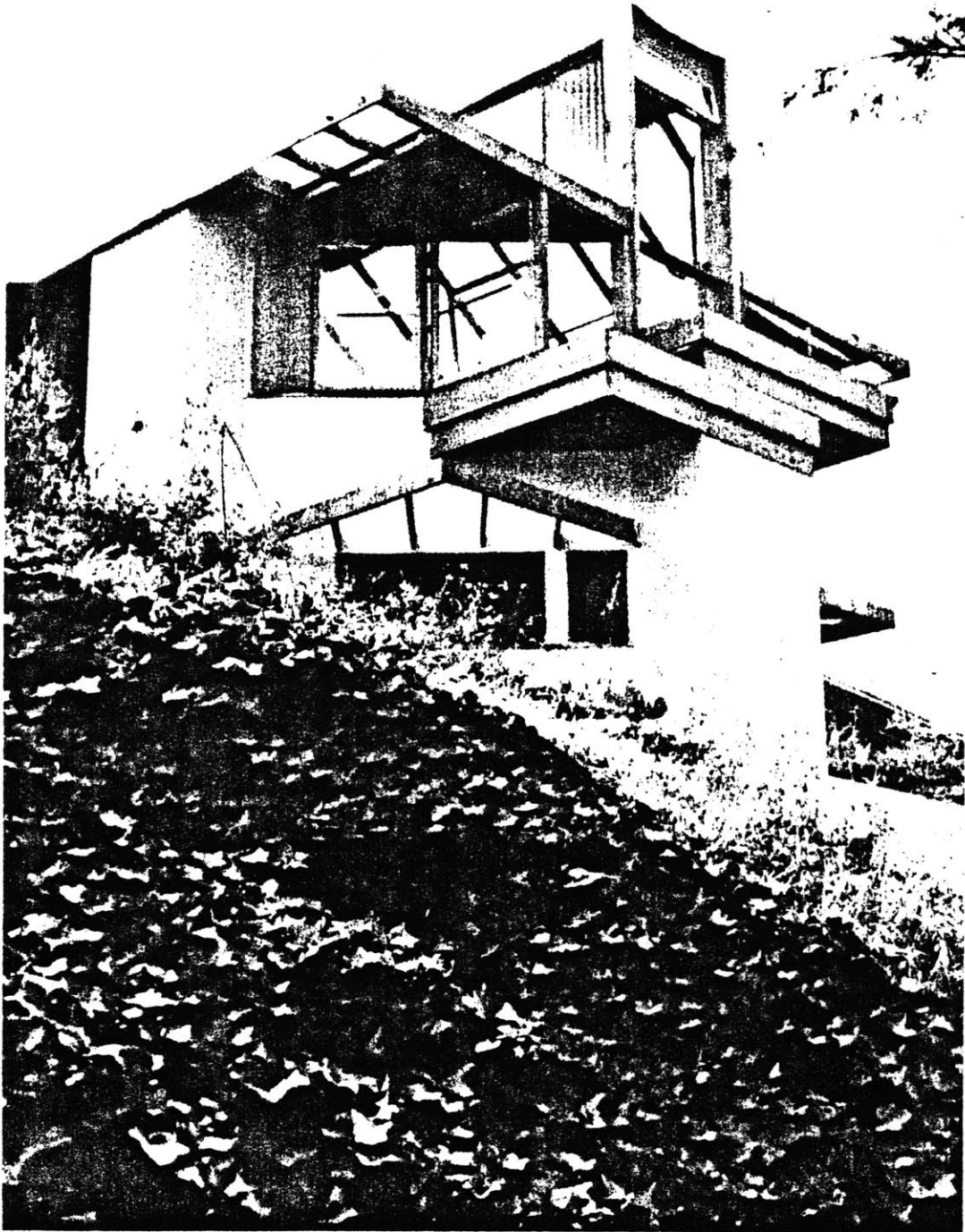


61. R. Schindler, Tischler house, Bel Air, 1949-50, street elevation

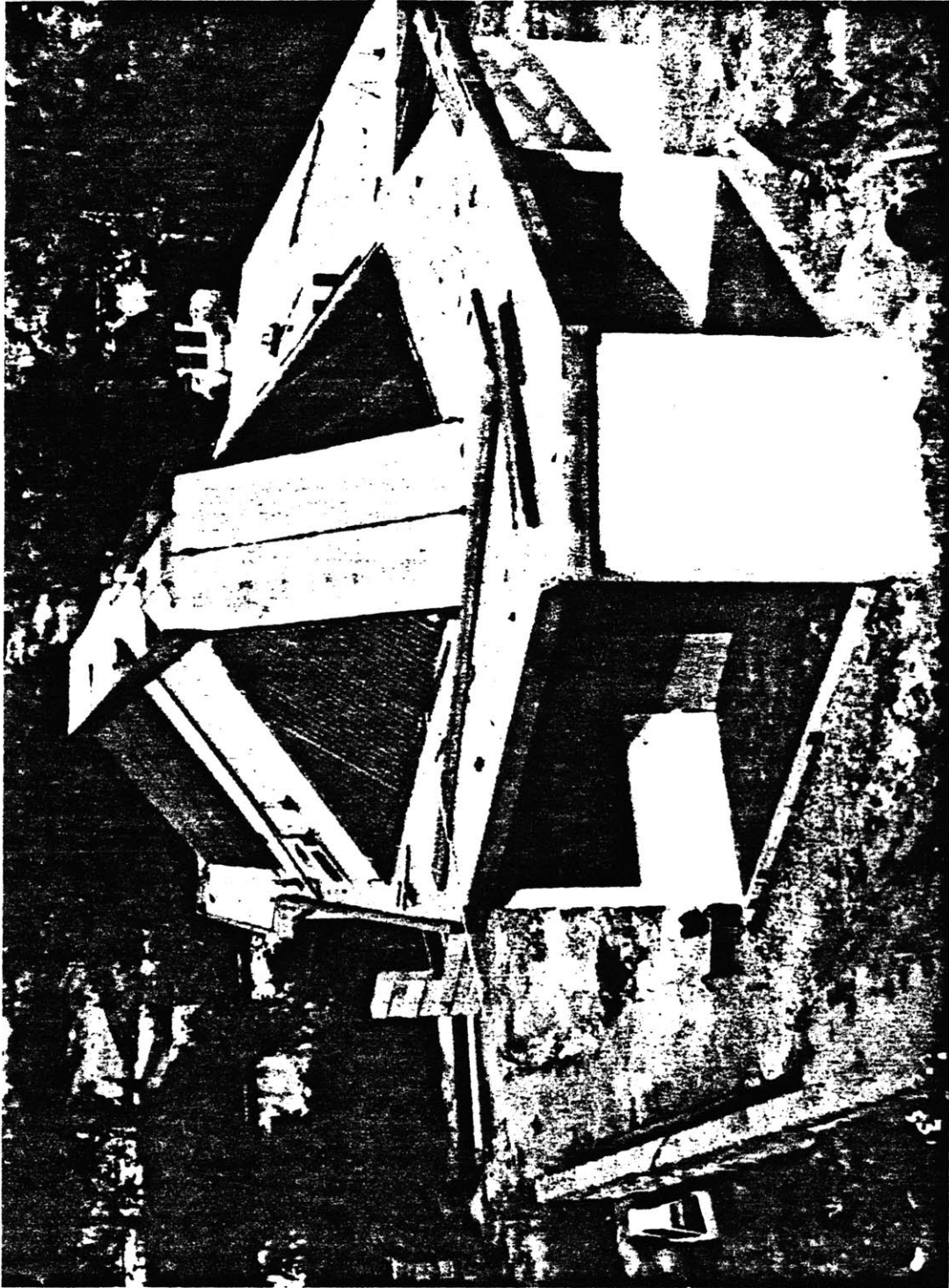




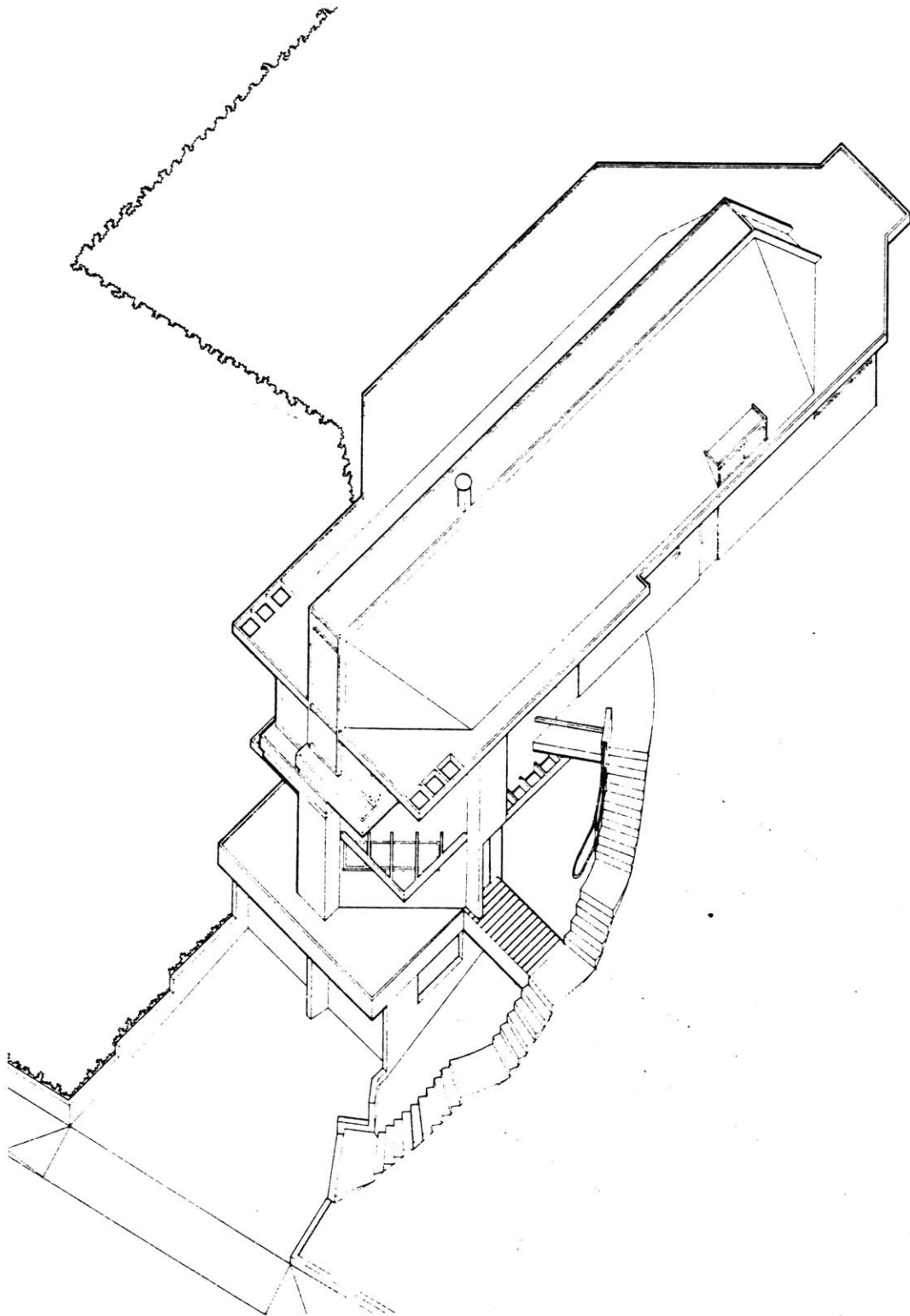
62. R. Schindler, Tischler house, Bel Air, 1949-50, street elevation, construction photo



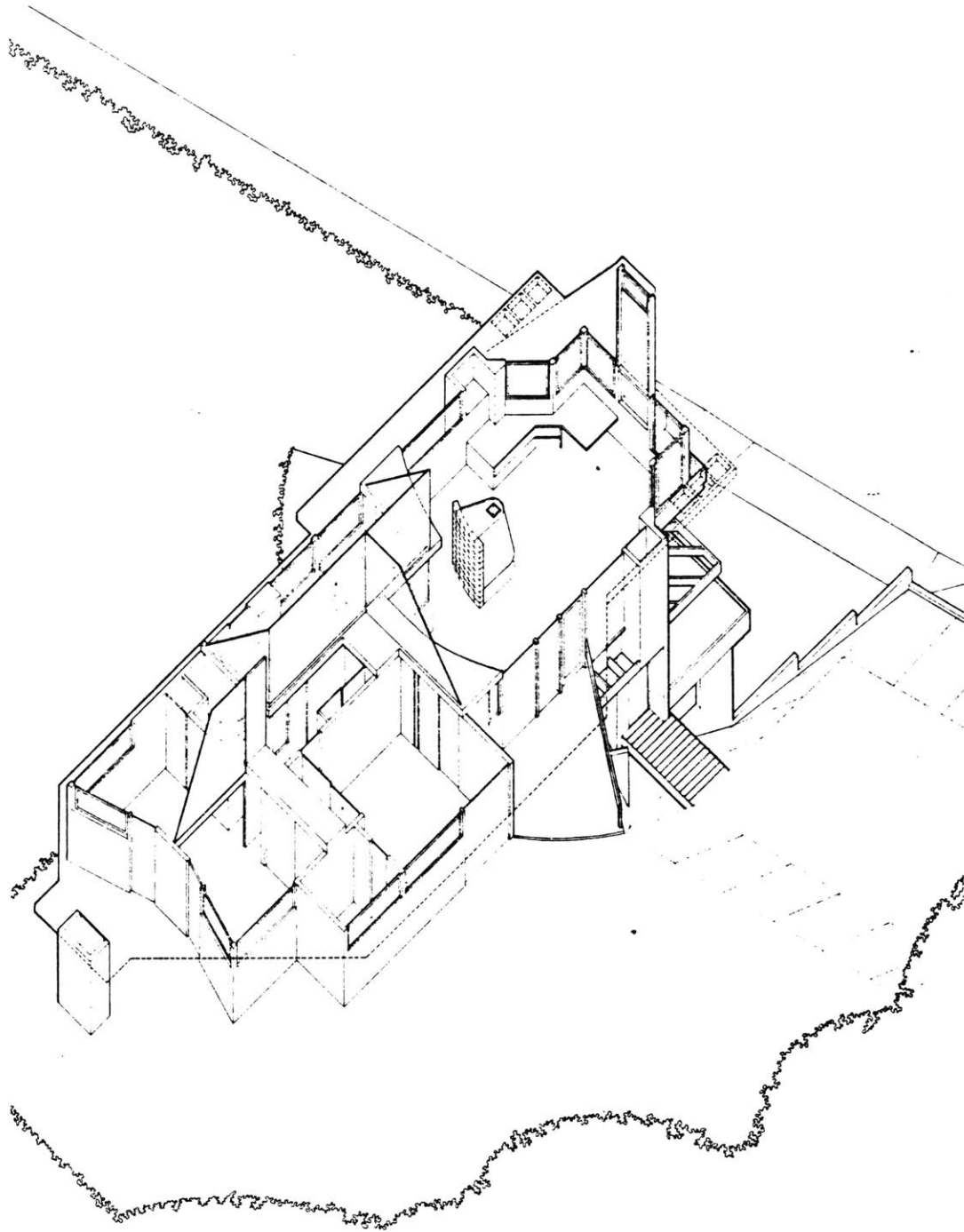
63. R. Schindler, Tischler house, Bel Air, 1949-50, street elevation, construction photo



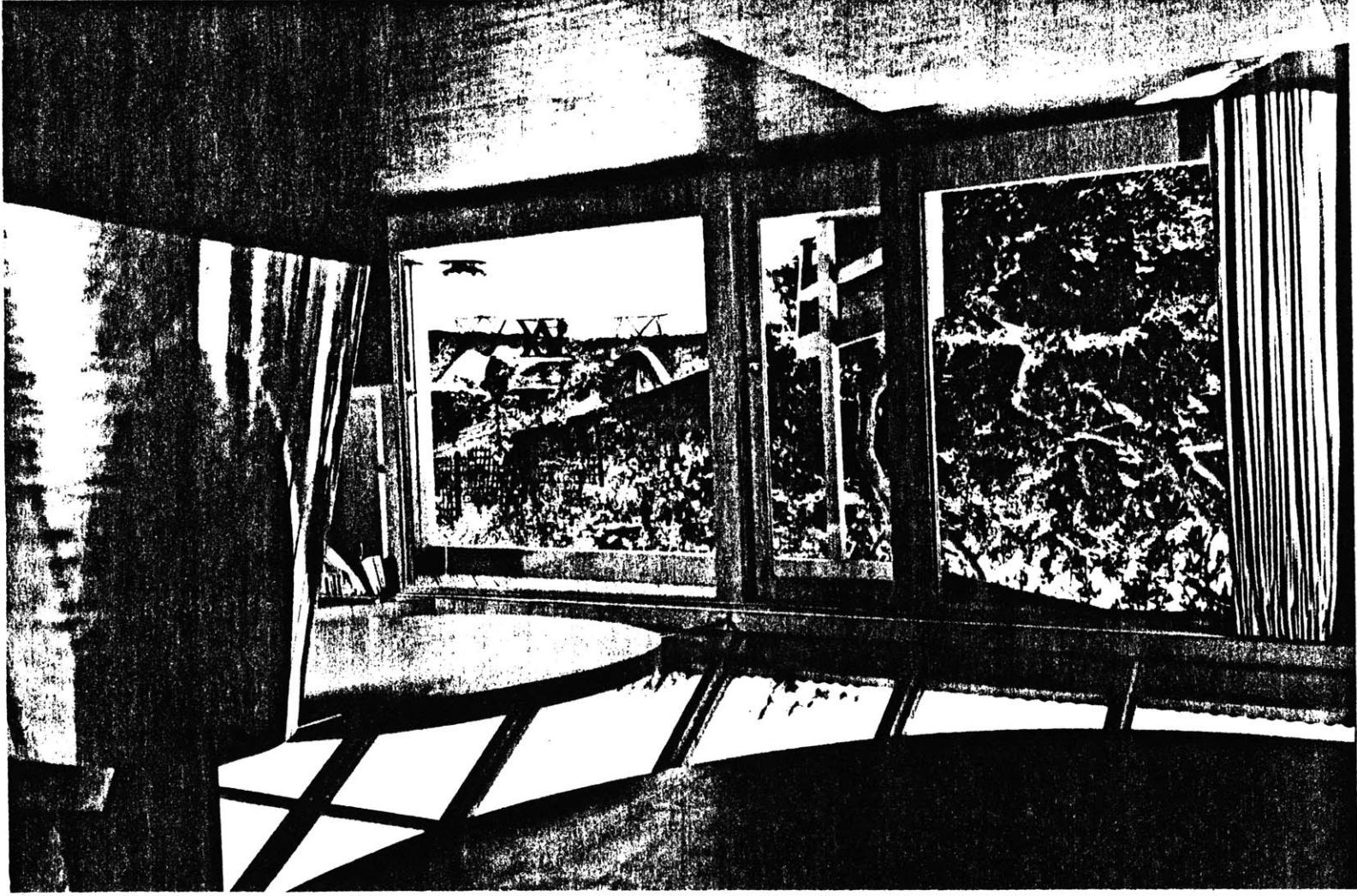
64. R. Schindler, Tischler house, Bel Air, 1949-50, garden elevation, construction photo



65. R. Schindler, Tischler house, Bel Air, 1949-50, axonometric



66. R. Schindler, Tischler house, Bel Air, 1949-50, axonometric



67. R. Schindler, Tischler house, Bel Air, 1949-50, living room



"R. M. Schindler was among the great pioneers of modern architecture in this country. His work was not only great in itself but had a lasting influence for the good in later modern development. His single minded devotion to the main principles of architecture was extraordinary and should serve as an example to the younger architects of our time."

Philip C. Johnson

"R. M. Schindler was the least understood and the least appreciated of all the American pioneers of modern architecture. He was imaginative - creating houses distinguished by remarkable and significant shapes. Admirably adapted to their sites: he was an important theoretician and idealist, writing inspiringly on architecture. His indomitable faith in the dynamism and creative force of modern architecture brought cheer and hope to many architects and designers in the depression period. In future years his imaginative cubism, his daring creation of dynamic architectural forms, and his many writings will, I believe, be more seen as the truly important contribution to 20th century architecture that they are."

Talbot Hamlin <sup>1</sup>

#### 4. CONCLUSION

At the end of this study of Schindler's work it seems appropriate to recall the major issues of his architecture. Apart from his theoretical writings Schindler's place in architectural history is due to his distinguished articulation of spatial conceptions designing residential buildings for avant-garde intellectuals. The fact that Schindler's body of work is almost entirely devoted to residential buildings may appear at first to reveal the limits of his architectural abilities but actually turns out to be his



strongest achievement. In designing over one hundred residences Schindler achieved a competence of spatial articulation which allowed him to orchestrate the smallest detail to support his notion of space architecture. Although most of his buildings are small, their interior space reflects a complexity and sometimes monumentality hardly anticipated from the outside. His hill houses are perfectly planned for their sites, revealing spectacular views onto the city or the landscape. It is the bringing together of the outside and the inside which makes his houses grow beyond their actual size. In doing so, two architectural ideas are pertinent to all of Schindler's design. First, he adapts the Raumplan-idea of Loos creating very elaborate and economic spatial sections, and second, he continues Wright's idea of breaking up the box and the continuity of spatial articulation.

Schindler's early work therefore is strongly indebted to Wright as far as spatial composition is concerned, but the materials and the technology applied reflect his personal ambitions, and certainly can be traced back to the enthusiasm of the Wagnerschule dealing with new technology.

In terms of the Modern Movement the house was "a machine to live in," for Schindler the house was a "flexible background for a harmonious life" (Manifesto). For Schindler, accordingly to his writings, the house was the temporal fabric in which life's dignity and modesty as well as the new body culture was mirrored. It meant that planning took place during a period of continuous expansion of individualism. The size and the scope of the projects therefore were fixed just as the social and economic framework was accepted by the architect.

In terms of design Schindler's development from his own house to the Buck house reflects his growing awareness of spatial articulation rather than technological or structural experiments. The breakdown of the dominance of the International Style was anticipated by Schindler as early as 1934 in his article

"Space Architecture," and led to the design of a number of buildings which, by the standards of the orthodox modernists, were considered to be impure.

With respect to what has been said so far the work of Schindler from 1945 on constituted both a continuity and an alternative. The relation of continuity and alternative is regarded as a major issue. What Schindler formally achieved after 1945 was the rejection of the International Style in favor of a new - then unclassified experimental and alternative architectural language. Today, nearly thirty years after Schindler's death and with Robert Venturi's discovery of the "ordinary and the beautiful," and his preference of the "hybrid" rather than the "pure," the late work of Schindler appears in a new historical context. Venturi characterizes his position:

"I am for richness of meaning rather than clarity of meaning; for the implicit function as well as the explicit function. I prefer "both-and" to "either-or," black and white, and sometimes gray, to black or white. A valid architecture evokes many levels of meaning and combinations of focus: its space and its elements become readable and workable in several ways at one." 2

What Schindler's post-war architecture had in common with then contemporary developments was a generic naturalism and an avowed fidelity to what has been called psychological functionalism. 3 On the other hand Schindler was quite certainly alien to all merely programmatic appeals; he was intent on carrying further the lines of a language he was already searching for in the early 1940s.

"The criticism use only functional considerations as a frame reference, and do not venture into the realm we 'contemporary architects' are ultimately striving for: 'organic design.'" 4

In the best of Schindler's work his architecture proved to be readable in several keys; in these structures the naturalistic pole loses much of its strength, and resolves itself into a succession of ambiguity and allusive forms. But especially in the 1950s his architectural language becomes increasingly personalized. In his approach there also arises a conflict between the structure of the organism and its articulation which in turn leads to expressionistic elements in his architecture. It is evident, for example in the Tischler house, that the correlation between structure and space is intended to create spatial sequences rather than to articulate structural expression.

In a sense, for Schindler the relationship between space and materials is a continuous theme in his architecture. Despite changing materials like cast concrete, prefabricated concrete panels, wood-frame-plaster-skin design, exposed wood-frame construction, Schindler uses and exploits building techniques to create architectural space rather than to limit architecture to the means of the building techniques.

In this sense Schindler is a true disciple of Frank Lloyd Wright, who, in his lecture on the "Arts and Crafts of the Machine" said that:

"If the artist will only open his eyes he will see that the machine he dreads has made it possible to wipe out the mass of meaningless torture to which mankind, in the name of the artistic, has been more or less subjected since time began; for that matter, has made possible a cleanly strength, an ideality and a poetic fire that the art of the world has not yet seen; for the machine, the process now smooths away the necessity for petty structural deceits, smooths this wearisome struggle to make things seem what they are not, and can never be; satisfies the simple term of the modern art equation as the ball of clay in the sculptor's hand yields to the desire - comforting forever this realist, brain-sick masquerade we are wont to suppose art." 5

The progress in building technology frees the architect from being dependent on technological and structural aspects. For

Schindler technology is not a limitation within its means but an enrichment for the modern architect to design space. As Schindler wrote already in his Manifesto in 1912 structural features were regarded as serving elements of architecture:

"The twentieth century is the first to abandon construction as a source for architectural form through the introduction of reinforced concrete.

The structural problem has been reduced to an equation. The approved stress diagram eliminates the need to emphasize the stability of the construction.

Modern man pays no attention to structural members.

There are no more columns with base, shaft and cap, no more wall masses with foundation course and cornice.

He sees the daring of the cantilever, the freedom of the wide span, the space-forming surfaces of the thin wall screens.

Structural styles are obsolete.

Functionalism is a hollow slogan used to lead the conservative stylist to exploit contemporary techniques." 6



CHAPTER IV

APPENDICES



## CHAPTER IV

### 5. APPENDICES

#### 5.1. FOOTNOTES

##### Footnotes to INTRODUCTION

- 1 to name but a few, Austria: Josef Frank, Clemens Holzmeister, Frederik Kiesler, Ernst Plischke, Joseph Urban; Germany: Ernst May, Erich Mendelsohn, Ludwig Hilbersheimer, Walter Gropius, Ludwig Mies van der Rohe, Bruno Taut.
- 2 "Wagnerschule", description used to distinguish between the architectural schools of the different teachers at the Academy of Fine Arts in Vienna.
- 3 RMS, Notes on modern architecture, September 1944, unpublished writings, UCSB-SA
- 4 J. B. Bakema, "Schindler spel met de Ruimte", Forum (Amsterdam), vol. 16, no. 8, 1961, pp. 253-63  
Reyner Banham, "Rudolph Schindler - A Pioneer without Tears", Architectural Design (London), vol. 37, Dec. 1967, pp. 578-79  
Walter Segal, "The least Appreciated: Rudolph Schindler: 1887-1953", The Architects Journal (London), vol. 149, Feb. 1969, pp. 476-79
- 5 Robert Musil, The Man without Qualities, London 1961, p. 12
- 6 Irme Lakatos, "History of Science and its Rational Reconstructions", Boston Studies in the Philosophy of Science, VIII, 1971
- 7 Ibid., pp. 106-108
- 8 Stanford Anderson, Conventions, Canons, and Criticism, Prospectus of MIT/HTC Conference, Spring 1982
- 9 UCSB-SA, lecture by RMS (1930)



Footnotes to 1.1.

- 1 Five California Architects, p. 192; in contradiction to this statement see Schindler, p. 186 "By the time he died in April 1953, Schindler had..."
- 2 Vienna to Los Angeles, p. 19
- 3 Five California Architects, p. 153  
"Schindler graduated from the Academy in June, 1914." This statement is contradictory to the student registration list of the Academy of Fine Arts in Vienna. By June 1914 Schindler was already in the United States.
- 4 Panos Koulermos, Stefanos Polyzoides, "R. M. Schindler, Architect, Notes on his work", A + U (Architecture and Urbanism), 1975:11, pp. 120
- 5 Mayr and RMS, "Clubhouse for Actors, Vienna", DA 1912, vol. 29
- 6 Five California Architects, p. 153
- 7 Vienna to Los Angeles, p. 23
- 8 Schindler, p. 37
- 9 Vienna to Los Angeles, pp. 32-33. This "joint account" also gives evidence of the trust and confidence Frank Lloyd Wright had to Schindler, since Schindler managed the economic situation of the studio.
- 10 Five California Architects, p. 155; also see Vienna to Los Angeles, pp. 31-32

Footnotes to 1.2.

- 1 For a very complete description of Vienna and its politics and culture of the Fin-de-siècle period see Carl E. Schorske, Fin-de-siècle Vienna, politics and culture, New York: Knopf 1980. Also Albert Fuchs, Geistige Stroemungen in Oesterreich, 1867-1918, Vienna 1949. Rupert Feuchtmueller and Wilhelm Mrazek, Kunst in Oesterreich, 1860-1918, Vienna 1964
- 2 Austrian New Wave, publication of The Institute of Architecture and Urban Studies (IAUS), New York 1981, pp. 3-4
- 3 A study on the Viennese Secession may be initiated by Ludwig Hevesi, Acht Jahre Sezession, Vienna: Konegen 1906
- 4 Oesterreichisches Museum fuer Angewandte Kunst, Die Wiener Werkstaette, catalogue, Vienna 1967
- 5 For further reference to Josef Hoffmann, see Eduard Sekler, Josef Hoffmann, Salzburg and Vienna: Residenz 1982; this is the most complete book written about the architecture of Hoffmann. For reference to Kolo Moser, see Kolo Moser, Flaechenschmuck, Vienna 1900
- 6 J. A. Lux, Joseph Maria Olbrich, Berlin: Wasmuth 1919; Robert Clark, Joseph Maria Olbrich, Ph. D. Dissertation, Princeton 1974. These two books give a very good understanding of the work of Olbrich and his time being in Germany.
- 7 The two most elaborate books on Adolf Loos are written by Heinrich Kulka, Adolf Loos, Vienna: Schroll 1931; and Burkhardt Rukschiko and Roland Schachl, Adolf Loos, Salzburg: Residenz 1981
- 8 Saemtliche Schriften, pp. 302-318
- 9 Heinrich Kulka, Adolf Loos, Vienna: Schroll 1931, pp. 13-15
- 10 The notion of the moral tone in architecture however is not new. John Ruskin speaks in The Seven Lamps of Architecture (first published 1849) about the idea that architecture expresses the society, and that good architecture (morally good) is thus the expression of a good society. This is a statement which already Karl Marx rejected. See Karl Marx,

Zur Kritik der politischen Oekonomie, erstes Heft, geschrieben 1858-59, reprint, Berlin (DDR): Dietz 1974, p. 258; quoted after Julius Posener from "Vorlesungen zur Geschichte der Neuen Architektur III", in Arch +, Oct. 1981, p. 74

"...dass bestimmte Blütezeiten (der Kunst) keineswegs im Verhältnis zur allgemeinen Entwicklung der Gesellschaft (...) stehen". Marx geht weiter und sagt, dass gewisse Formen der Kunst, die wir noch bewundern, nur in primitiven Gesellschaften möglich seien: "Aber die Schwierigkeit liegt nicht darin, zu verstehen, dass griechische Kunst und Epos (...) an gewisse gesellschaftliche Entwicklungsformen geknüpft sind. Die Schwierigkeit ist, dass sie für uns noch Kunstgenuss gewähren und in gewisser Beziehung als Norm und unerreichbare Muster gelten."

Translation by the author:

"... that certain primes (of art) do not always correspond to the general development of a society." Marx continues and says, that certain forms of art we admire can only be possible in primitive societies. "It is not difficult to understand that Greek art and epos (...) are correlated to certain developments of a society. The difficulty is, that these art-objects still guarantee us "Kunstgenuss" ("pleasure deriving from art) and also still represent norm and unequalled model."

- 11 Sämtliche Schriften, pp. 276-288; this is a translation taken from Ludwig Muenz and Gustav Kuenstler, Adolf Loos - Pioneer of Modern Architecture, New York: Praeger 1966, pp. 226-227
- 12 See also Felix Augenfeld, one of the last living Loos students, "Erinnerungen an Adolf Loos", Bauwelt, vol 72, no. 42, November 6, 1981, p. 1907

- 13 Reyner Banham, "Ornament and Crime, The Decisive Contribution of Adolf Loos", in AR, February 1957, pp. 85-88
- 14 Although Loos spoke more about American than English architecture, a critical remark concerning the influence of American and Anglo-Saxon ideas on architecture should be made. Although Loos never talked about the importance of Hermann Muthesius introducing English building tradition to the German speaking countries, it is evident through a number of interior designs that the ideas of Muthesius, Hoffmann, and Loos had similar roots. The work of Mackintosh, Voysey, Scott, and Ashbee must have been known to Loos through publications in English magazines and an exhibition in Vienna. A comparison with Voysey's interiors of the late 1890s (Broadleys house on Lake Windermere, 1898, or Moore Crag, 1899) or with the Yates house by W. H. Bidlake (specially the nook with the open fireplace annexed to the dining room) reveal striking similarities with the early design of Loos. These illustrations mentioned above are published in Hermann Muthesius, Das englische Haus, Berlin: Wasmuth 1904-1905. In the work of Voysey the two townhouses no 14 and 16 Hans road, Knightsbridge, London (1891-92) come very close to the idea of the "Raumplan" using different ceiling heights for different rooms and interlocking them spatially in a very economical way. The houses designed by Muthesius around 1905 in Berlin have a very elaborate spatial system deriving directly from their English models. Muthesius and Loos admired the English way of life and their architecture was only different on the interpretational level.
- The English habit of being "inconspicuous" is noted by Muthesius as well as Loos; something that is conspicuous is not noble. The same refers to a person as to a building. Adolf Loos, "Die Herrenmode", May 22, 1898, Saemtliche Schriften, p. 21; "Ein kleidungsstueck ist modern, wenn man in demselben im kulturzentrum bei einer bestimmten gelegenheit 'in der

besten gesellschaft' moeglichst wenig auffaellt." (A piece of clothing is modern when one who wears it can travell in the highest cultural circles and be present at the best social occasions and yet remain inconspicuous.)

Footnotes to 1.3.

- 1 Act of appointment in the archive of the Administration of the City of Vienna, Zl. 6798/1894.

The voting took place May 13, 1894, and the professors of the faculty voted 11:3 in favour of Otto Wagner. The other candidates were Friedrich Schachner and Emil Ritter von Foerster, both received 8:6 votes. See also Otto Graf, Die vergessene Wagnerschule, Vienna: Jugend und Volk 1969. In the same year Wagner was appointed as "ordentlicher Professor und Leiter einer Spezialschule fuer Architektur an der Akademie der bildenden Kuenste in Wien."

This short bibliography can be seen as an introduction to Otto Wagner and the "Wagnerschule":

Otto Wagner, Einige Skizzen, Projekte und ausgefuehrte Bauwerke, Vienna: Schroll, I volume 1890, II volume 1897, III volume 1904, IV volume 1922;

Otto Wagner, Moderne Architektur, Vienna: Schroll 1895, second issue 1898, third issue 1901, fourth issue 1914: with the new title: Die Baukunst unserer Zeit. This is an expanded edition of the text book Wagner published first in 1895 under the title Moderne Architektur. Wagner changed the title from architecture to "the art of building" (Baukunst), he said, under the impact of Hermann Muthesius' polemic, Baukunst, nicht Stilarchitektur, an important document in the revolt against the historical aesthetic.

Joseph August Lux, Otto Wagner, Munich: Delphinverlag 1914;

Hans Tietze, Otto Wagner, Vienna: Rikoverlag 1922;

Wagnerschule 1890, Vienna: Schroll 1890;

Wagnerschule 1897, Vienna: Schroll 1897;

Wagnerschule 1902, Vienna: Gerlach 1902;

Wagnerschule 1903-04, Leipzig: Baumgaertner 1903-04;

Wagnerschule 1905-06 and 1906-07, Leipzig: Baumgaertner 1910;

Hans Ostwald, Otto Wagner, Ein Beitrag zum Verstaendnis seines kuenstlerischen Schaffens, Dissertation ETH Zurich, (Baden 1948);

Otto Antonia Graf, Otto Wagner, phil. dissertation, University of Vienna, 1963;

Heinz Geretsegger and Max Peintner, Otto Wagner, Salzburg: Residenz 1964

- 2 Wagner's nineteen commissions until 1894 included eight speculative apartment buildings, a theatrebuilding in the Wasagasse in Vienna, a synagoage in Budapest, an alternation of an existing public indoor swimming pool, two decorations for

for public celebrations (Festdekoration fuer den Markartfestzug, und Festdekoration zum Empfang der Prinzessin Stephanie), a banking office building, three residential houses, and a tomb. Quoted from Heinz Geretsegger and Max Peintner, Otto Wagner, Salzburg: Residenz 1964

- 3 For the importance of that building confer Otto Graf, Otto Wagner, phil. dissertation, Univerity of Vienna, Vienna 1963
- 4 Geretsegger, Peintner, Otto Wagner.  
Wagner taught from 1894-1912 with the year 1912 being an additional honorable year. At the age of seventy, professors are reseigned from their academic positions. From 1912-15 Wagner was an honorable professor, and continued the classes for those students, who had registered befor his demission.
- 5 List of students, source: Registration forms no. 128-146 of the Academy of Fine Arts in Vienna. The year 1913-14 is not listed officially.
- 6 The most outstanding contribution to the "Wagnerschule," see Otto Graf, Die vergessene Wagnerschule, Vienna: Jugend und Volk 1969
- 7 Students registration forms no. 128-146, Academy of Fine Arts, Vienna
- 8 see bibliography, footnote no. 1
- 9 "Gentlemen, this is an architect who is better than I."
- 10 There is a second project existing on which Schindler worked in 1912; it is the Clubhouse for Actors, Vienna, which he designed when working in the office of Mayr and Mayer. Comparing this project with the "Hotel Rong" project of 1912 and Schindler's thesis of 1912-13, it seems evident, that this design reflects more the intentions of his employer than himself, and therefore this should not be counted toward the other Schindler projects.
- 11 These two proverbs were often used by Wagner to characterize art and architecture.

- 12 Wagnerschule 1902-03 and 1903-04, p. 3  
"All works of the Wagnerschule are led by this modern spirit of permanent progress...The purpose of the Wagnerschule is to train the observation, perception, and the realization of the human needs, and to solve these problems...But it is not the intention of the Wagnerschule to search for a 'typus', or to search for a 'new style'..."
- 13 Saemtliche Schriften, pp. 302-318
- 14 For further discussion about the "Hotel Rong" project see Schindler, pp. 14-15, and Otto Graf, Die vergessene Wagnerschule, p. 34
- 15 Schindler, Gebhard described the project as "Dobergasse 40", actually it is Neustiftgasse 40. There is no project by Wagner named "Dobergasse 40."
- 16 Wagnerschule 1902-03 and 1903-04, pp. 19-20  
"The modern technology gives presently the architect the means to build constructions in any form and dimension he wants which in former times were determined by the inner and outer Gestalt of each building by necessity."
- 17 Manfredo Tafuri, Architecture and Utopia, Cambridge: MIT press 1979, p. 50
- 18 The term engineer-architect should only emphasize the fact, that these architects used technological considerations determining their design, and should not suggest any value judgement.
- 19 The term artist-architect should only emphasize the fact, that these architects were concerned with the artistic tradition besides using technical considerations determining their design, and should not suggest any value judgement.
- 20 "Historicism," the complexity and also misleading notion of this term is apparent. Using this term in this context, I will not refer to Karl Popper's notion of historicism, or Ranke's notion of historicism, but to the art-historical understanding of "making reference to the 'past'".



Footnotes to 1.4.

- 1 Vienna to Los Angeles, p. 63
- 2 Frank Lloyd Wright, Ausgefuehrte Bauten und Projekte, Wasmuth Berlin, 1910. (rpt. as Buildings, Plans and Designs of Frank Lloyd Wright, New York, 1963, rpt. Chicago, 1976)
- 3 Schindler did not work fully six years for Wright, since he started his own practice in 1921, working for his own clientel.
- 4 The amount of literature about Wright is enormous. The major books and articles concerning Wright are listed below

works by Wright:

An Autobiography, New York: Duell, Sloan and Pearce, 1943  
Building, Plans and Designs, (Reprint of Wasmuth monograph of 1910), New York: Horizon Press, 1943

Frank Lloyd Wright on Architecture: Selected Writings, 1894-1940, edited by Frederick Gutheim, New York: Duell, Sloan and Pearce, 1941

The Future of Architecture, New York: Horizon Press, 1953

Genius and Mobocracy, New York, Sloan and Pearce, 1949

The Living City, New York: Horizon Press, 1958

The Natural House, New York: Horizon Press, 1954

A Testament, New York: Horizon Press, 1957

Writings and Buildings, selected by Edgar Kaufmann and Ben Raeburn, New York: Meridian Books, 1960

works about Wright:

Allen H. Brooks, The Prairie School, Toronto: Univ. of Toronto Press 1972

Finis Farr, Frank Lloyd Wright, a Biography, New York: Scibners 1961

Henry-Russell Hitchcock, In the Nature of Materials, New York: Duell, Sloan and Pearce 1942

Grant C. Manson, Frank Lloyd Wright to 1910, the First Golden Age, New York: Reinhold 1958

- John Lloyd Wright, My Father Who Is On Earth, New York:  
G. Puntman's Sons 1946
- Otto Antonia Graf, Frank Lloyd Wright, Architektur einer  
vierfachen Freude, Wien 1979-80
- 5 Writings and Buildings, pp. 18-19
- 6 see the book with the similar title by H.-R. Hitchcock,  
In the Nature of Materials: The buildings of Frank Lloyd  
Wright, 1887-1942, New York 1941
- 7 Robert C. Spencer Jr., "The work of Frank Lloyd Wright - from  
1893 to 1900", a prairie school press reissue; This monograph  
was originally published as part of June 1900 issue of  
The Architectural Review (Boston).
- 8 Ibid., p. 62
- 9 Plato, Symposion, 205 b
- 10 Martin Heidegger, The Question Concerning Technology, pp. 10-11
- 11 Writings and Buildings, pp. 277-278,  
from: What is Architecture
- 12 Ibid
- 13 A Testament, pp. 19-20
- 14 Ibid., p. 134, concerning the ornament:  
"Ornament if organic was never on the thing but of it;  
therefore little of the ornamentation of the Greek  
orders seemed more than merely pictorial. Charming but  
appliqué. This thought had appeared and remained with me:  
any true plasticity would be a quality of the thing  
itself, never be on it (applied to it). This meant  
positive negation of most classic ornament of the many  
'classic' styles. Plasticity therefore dictated ornament  
as one with structural or interior quality; its place  
was intrinsic. Yes. In architecture ornament should be  
organic in character: See nature!"
- 15 Ibid., p. 26, the photos are chosen by Wright himself.  
"The Winslow house - my first house on my own. It  
became an attraction, far and near - a statement  
startling and new. The sense of shelter emphasized -

the frieze beneath the overhanging eaves - the walls perforated by a single opening giving decorative value to the surfaces in which they occurred, etc. The house was sold forty years after it was built, for more than three times its cost."

16 Ibid., p. 53

17 Ibid., p. 66

"1906. Unity Temple, Oak Park, Illinois. 'So far as I know the first concrete monolith to come from the forms as architecture completely finished. The work was cast in wooden forms or boxes - and the forms bear the impress of that technique. The plan first began the destruction of the box, and the emphasis of interior space as the reality of the building subsequently carried on. The entrance is between the temple and the secular rooms. Here electric lighting took visible form in wiring and became a decorative feature of the structure.'"

18 Ibid., p. 76

"1909. ' The Robie house, a masonry structure of tawny brick and stone with red tile roof, eaves of copper, woodwork of oak throughout. This became known in Germany as Dampfer architecture. It was a good example of the prairie house of that period.'"

19 see Paul Gilbert and Charles Bryson, Chicago and its Makers, Chicago: Felix Mendelsohn Publication 1929; as well as Frank Randall, History of the development of building construction in Chicago, New York: Arno press 1972

20 Schindler, p. 196

Gebhard David, Schindler, New York 1972, p. 196

1915: Eleven-story hotel, Chicago (project)

Bar, Chicago (project)

Homer Emunim Temple and School, Chicago (project)

1916: Store front, Chicago (project)

Central administration building, Chicago (project)

Hampden Club (?), Chicago (realization)

- 1917: Buena Shore Club, Chicago (realization)  
1919: One-room apartments, Chicago (project)
- 21 Five California Architects, pp. 153-154
- 22 The time period which Schindler worked for Wright remains unclear; see Vienna to Los Angeles, p. 64, Wright claims that Schindler has worked for him until 1923 supervising the Hollyhock house.  
See also Schindler, p. 42; "During 1920-22 (even as late as '23) Schindler continued to work for Wright. He did the drawings for a small 'temporary' one-room house for J. B. Irving at Wilmette (1920) and the working drawings for the unbuilt 'Actors' Abode' (apartments for actors) and the terrace stores for Olive Hill (1920). With the help of Lloyd Wright he produced the working drawings for the first of the precast concrete block houses, the Millard house at Pasadena (1923). Schindler worked on a variety of different schemes for the Eagle Rock house of C. P. Lowes."
- 23 Five California Architects, p. 154
- 24 Frank Lloyd Wright, An Autobiography, New York: Duell, Sloan and Paerco 1943
- 25 Five California Architects, p.154
- 26 Pauline Gibling-Schindler, Los Angeles Architect, June 1977
- 27 Ibid.
- 28 Wright, An Autobiography, p. 228 (225-238)
- 29 For a complete discussion of the Barnsdall project see Kathryn Smith, "Frank Lloyd Wright, Hollyhock House and Olive Hill, 1914-1924," Journal of the Society of Architectural Historians, March 1979, pp. 15-33
- 30 Wright, An Autobiography, p. 227

Footnotes to 2.1.

- 1 Hans Hollein, "R. Schindler" Aufbau (Vienna), no. 3, 1961, pp. 102-108. In 1961 the manifesto was published in parts (translated into German) for the first time in this article by Hans Hollein.
- 2 This reprint is from the UCSB-SA
- 3 The Wagnerschule, Vienna from 1898-1907 gives a thorough survey of the writings.
- 4 Wagnerschule 1902, Vienna 1903, pp. 64-65; translation by the author:  

The style of the farmhouse does not reflect the idea that the building should fit into its environment, but its form is rather the result of practical considerations and constructive problems. ... It is completely wrong and an unmodern point of view to hide the penetration of highly civilized people into nature by dressing them in a farmer's costume. This kind of proceeding does not lead to the aim of hiding them. A building designed in that manner at best makes the impression of a 'Salontiroler' (a person dressed like a Tyrolian farmer, pretending to be one).
- 5 Joseph August Lux, "Das Hotel, ein Bauproblem", Der Architekt (Vienna), XV, 1909, p.17; translation by the author:  

These are the three principles on which the problem is based: that the house functions, like a machine, like a perfectly constructed apparatus, that its interior decoration corresponds to a railroad sleeping car (wagon-lits), that it corresponds in terms of hygiene and cleanliness to clinical standards. Therefore it will be a synthesis of a clinic, a railroad sleeping car and a machine.
- 6 "sachlich" - as referring to the matter of the thing itself. i. e. expressing and revealing the true concerns indigenous to the problem.

- 7 Hermann Muthesius, "Stilarchitektur und Baukunst", 1903, first published in a shorter version in 1901. Quoted from Julius Posener, Anfaenge des Funktionalismus, Berlin Frankfurt, Vienna: Ullstein 1964, p.160
- 8 Otto Graf suggests that Schindler could have redesigned his school projects while living in the United States. See also Otto Graf, Die vergessene Wagnerschule, Vienna: Jugend und Volk 1969, p.34
- 9 Manifestos, p. 13
- 10 Hermann Muthesius, Das Englische Haus, Berlin: Wasmuth 1904-05
- 11 Manifestos, pp. 14-17
- 12 Julius Posener, Anfaenge des Funktionalismus, Berlin, Frankfurt, Vienna: Ullstein 1964, pp. 74-74
- 13 Ibid., pp. 68-69
- 14 Manifestos, p. 18
- 15 Saemtliche Schriften, pp. 276-288
- 16 Manifestos, p. 25
- 17 Writings and buildings, pp. 55-73.  
The lecture was addressed by Frank Lloyd Wright to the Chicago Arts and Crafts Society, at Hull House, March 6, and to the Western Society of Engineers, March 20, 1901. It was printed for the first time in the book mentioned above. It is unlikely therefore that Schindler knew about this lecture.
- 18 Posener, Anfaenge des Funktionalismus, quotation from p. 24, see also pp. 150-175
- 19 Frank Lloyd Wright, Ausgefuehrte Bauten und Projekte, Berlin: Wasmuth 1910
- 20 H. P. Berlage, "Neuere amerikanische Architektur," Schweizerische Bauzeitung, Sept. 14, and 21, 1912, pp. 148-150, 165-167, 178
- 21 Ibid.
- 22 UCSB-SA, text written as in the original
- 23 Richard Neutra, Wie baut Amerika?, Stuttgart: Hoffmann 1927

Footnotes to 2.2.

- 1 These articles were published in the Sunday Magazine section of the Los Angeles Times, and have been reprinted in Oppositions, Fall 1979:18, pp. 74-85
- 2 Manifestos, pp. 99-101
- 3 Ibid., pp. 95-97
- 4 Ibid., p. 66
- 5 Ibid., pp. 78-80
- 6 Ibid., pp. 87-88
- 7 It would lead too far to discuss the whole problem of the relationship between the glorification of health and the atheistic attitude of modern 20th century life and architecture. However, with the rejection of transcendency, health as the physical and mental well-being of our body (in ancient Greece youth and eternal health embodied divinity) became the main important issue of life. The importance of the "Gesundheit" correlates to the image of the mechanistic and functionalistic image of the world. Health and nature in their own rights guarantee that life "functions" as well as the materialistic world of the objects.
- 8 These six articles are presented at the end of chapter 2.2., reprint from Oppositions 18
- 9 RMS, "Ventilation," Los Angeles Times, March 14, 1926
- 10 RMS, "Plumbing and Health," Los Angeles Times, March 21, 1926
- 11 RMS, "About Furniture," Los Angeles Times, April 18, 1926
- 12 Georg Simmel, Die Grosstadt und das Geistesleben, Dresden 1903; English translation, The Metropolis and Mental Life, in The Sociology of Georg Simmel, translated and edited by Kurt H. Wolff, New York: Free Press 1950, pp. 409-424.  
"The essence of the 'blasé' attitude consists of the blunting of discrimination. This does not mean that the objects are not perceived, as in the case with the half-wit, but rather, that the meaning and differing values of things, and thereby the things themselves, are experienced as insubstantial. They appear to the blasé

person in an evenly flat and grey tone; no one object deserves preference over any other. This mood is the faithful subjective reflection of a completely internalized money economy ... 'All things float with equal specific gravity in the constantly moving stream of money. All things lie on the same level and differ from one another only in the size of the area which they cover.'"

The "blasé" attitude and the egocentric concern with ones own body are at first sight contradictions, but actually they lead from one to the other: "Koerperkultur" could represent an escape-mechanism from reality.

13 Saemtliche Schriften, pp. 48-54, written June 19, 1898

14 Ibid., pp. 70-77

15 Ibid., p. 52. Translation by the author:

"Every chair should therefore be practical. If one would build only practical chairs for the people, that would give them the possibility to furnish their homes without the help of an interior decorator."

16 Ibid., p. 73. Translation by the author:

"Some times ago I asked an American lady what she considered the most remarkable difference between Austria and America, answered she: 'the plumbing! - the plumbing equipment, the heating system, lighting, and the water-supply system.' Our faucet, waterclosets, washing-tables etc. are far, far behind the English and the American plumbings."

17 Ibid., p. 74. Translation by the author:

"Besides from academies one should build public bathing houses and besides from professors on should employ bath attendants. A higher culture would then be followed by a higher art, which would reveal itself without the help of the goverment (state)."



Footnotes to 2.3.

- 1 The exhibition was held at the Museum of Modern Art, New York, in February 1932
- 2 Henry-Russell Hitchcock, Philip Johnson, The International Style: Architecture Since 1922, New York: Norton & Company, Inc. 1932, p. 35
- 3 Ibid., p. 36
- 4 Ibid., p.37
- 5 Ibid., pp. 40-77
- 6 Ibid., pp. 56-57
- 7 Ibid., p. 33
- 8 UCSB-SA, letter between RMS and Philip Johnson; see also Schindler, p. 116
- 9 A reprint of this article is at the end of this chapter, UCSB-SA.
- 10 Ibid.
- 11 Hermann Minkowski as quoted in Encyclopaedia Britannica, William Benton (publisher), Chicago, London, Toronto, Geneva, Sydney, Tokyo, Manila, Johannesburg 1973, vol. 20, p. 1070
- 12 Martin Heidegger, Building, Dwelling, Thinking, Tuebingen 1954, p. 154
- 13 Ibid., pp. 157-158
- 14 RMS, "Space Architecture" Dune Forum, Febr. 1934, pp. 44-46
- 15 Ibid.
- 16 Ibid.
- 17 Karl Popper, Conjectures and Refutations, London, New York 1962, pp. 33-59. This article was presented as a lecture at Peterhouse, Cambridge, in summer 1953, reflecting the ideas which Popper had elaborated during the past thirty years.
- 18 Ibid., p. 48

Footnotes to 2.4.

- 1 Fortune Magazine, April 1933
- 2 UCSB-SA, letter from the Department of the Interior to RMS, dated January 10, 1934.

"...We have looked over your sketches and descriptions of your proposed construction. Our problem here are to build houses in a cost range in some cases as low as 800 dollars: however, in other cases probably 2,500 dollars per unit can be appropriated. We note that you have stated prices from 1,600 dollars to 1,800 dollars. We assume that you would be willing to take contracts, or guarantee these prices in the event your plan of buildings or your designs were accepted in a project, and especially in your section of the country. We would however call to your attention the fact that your designs show rather small kitchens. We believe it very important that kitchens in subsistence homesteads should be the largest room in the house, as this becomes the workshop for the entire family. ..."
- 3 Agreement between Neal Garret, city of Glendale, county of Los Angeles, state of California, and R. M. Schindler, city of Los Angeles, county of Los Angeles, state of California, with Schindler as "the licensee."

This 13 page document is at UCSB-SA.
- 4 UCSB-SA
- 5 S. Giedion, Walter Gropius, New York 1954, and Gustav Adolf Platz, Die Baukunst der neuesten Zeit, Berlin: Propyläen Verlag 1927

Footnotes to 2.5.

- 1 RMS, "Reference Frames in Space," AaE, vol. 165, April 1946, pp. 10, 40, 44-45;  
RMS, "Postwar Automobiles," AaE, vol. 168, February 1947, pp. 12-14;  
RMS, "Schindler Frame," AREC, vol. 101, May 1947, pp. 143-146;  
RMS, "Space Architecture," Atelier, (Sidney, Australia), vol. 13, no. 1, November 1951, pp. 10-11;  
RMS and others, "A Great Debate," (on the United Nations building), AF, November 1950, pp. 15;  
RMS, "Houses U.S.A.," letter to the editor, AF, vol. 87, August 1947, p. 22;  
RMS, "Visual Technique," (unpublished manuscript), Los Angeles 1952
- 2 Manifestos, pp. 148-149. The appeal was signed by: Otto Bartning, Willi Baumeister, Eugen Blanck, Walter Dierks, Richard Doecker, Egon Eiermann, ... Rudolf Schwarz, Max Taut, Heinrich Tessenow, Hans Warnecke.
- 3 Ibid., p. 148
- 4 RMS, "Architect - postwar - post everything," PP, vol. 25, October 1944, pp. 16-18, and November 1944, pp. 12-14
- 5 RMS, "Reference Frames in Space"
- 6 Ibid.
- 7 RMS, "Postwar Automobiles"
- 8 Ibid.
- 9 Manifestos, pp. 150-151
- 10 Schindler, pp. 203-204

Footnotes to 3.1.

- 1 At UCSB-SA there is the complete collection of drawings which were found in the office of the late RMS.
- 2 UCSB-SA
- 3 Neither Esther McCoy in her book Five California Architects, nor David Gebhard in his book Schindler, mentioned or published that alternative plan for the Kings Road house.
- 4 UCSB-SA; there is a small perspective sketch of the Schindler house for a hillside situation drawn on one of the elevation study drawings.
- 5 As it will be evident in later projects Schindler considerably changed his plans in his later years after submitting them to the official building committee.
- 6 Letter to RMS from Mr. Orland T. Palmer from August 6, 1928, who was the owner of the lot on Kings Road adjoining Schindler's property to the south. Mr. Palmer complains about the fact, "...that the bamboo from your property is creeping over to mine. You, of course know how difficult it is to clear property of the roots of the bamboo, ..." - UCSB-SA
- 7 RMS, explanation to the 831 Kings Road house, 1922, UCSB-SA
- 8 see Saemtliche Schriften
- 9 UCSB-SA
- 10 The building code of Los Angeles then only allowed one kitchen for each house, since this was a single-family residence area. This was aimed to avoid multi-family housing in the neighborhood. This statement rises the question, if Schindler would have built two kitchens if allowed by law.
- 11 UCSB-SA
- 12 This can still be recognized in the former Schindler-studio, Kings Road house.
- 13 William Benton (publisher), Encyclopaedia Britannica, Chicago, London, Toronto, Geneva, Sydney, Tokyo, Manila, Johannesburg 1973, vol. 14, p. 318  
Los Angeles; Climate: Little variability is the chief characteristic of the climate at Los Angeles and in

Southern California generally. Winter is a season of moderate rainfall, 14.5 in. (368.3 mm.) yearly being the average. There is relatively little rain from May to October. Winter days are sunny and warm and the nights are often cold, with occasional frost in December and January. The 50-year average of the records of the U.S. Weather Bureau shows the mean temperature to be 62.4° F (16.7° C). There is a 72% possibility of daily sunshine, an average of 179 clear days each year, and only 37 days with more than .01 in. of rain.

The average wind velocity of only 6.1 mph, one of the lowest in any major U.S. city, has directly contributed to one of Los Angeles' most pressing modern problems, heavy air pollution leading to smog.

14 UCSB-SA

15 RMS, The Manifesto, UCSB-SA

16 Gottfried Semper, Wissenschaft, Industrie und Kunst, Mainz: Neue Bauhausbuecher 1966, p. 16

"Nur einen Herrn kennt die Kunst, das Beduerfnis. Sie artet aus, wo sie der Laune des Kuenstlers, mehr noch, wo sie maechtigen Kunstbeschuetzern gehorcht. Ihr stolzer Wille kann wohl ein Babylon, ein Persepolis, ein Palmyra aus der Sandwueste erheben, wo regelmaessige Strassen, meilenweite Plaetze, prunkhafte Hallen und Palaeste in trauriger Leere auf die Bevoelkerung harren, die der Gewaltige nicht aus der Erde zu stampfen vermag - das organische Leben griechischer Kunst ist nicht ihr Werk, es gedeiht nur auf dem Boden des Beduerfnisses und unter der Sonne der Freiheit."

17 Otto Wagner, Die Baukunst unserer Zeit, Vienna: Schroll 1914, p. 103

" Ein guter, grosser Gedanke ist noch, bevor der Stift zur Taetigkeit tritt, zu fassen und reiflich zu erwaegen. Ob sich derselbe blitzartig zeigt oder langsam erklaert, ob er des Durchdenkens und des Ausfeilens im Geiste wert ist, ob er bei der ersten Fixierung als Treffer oder Niete

erscheint, ob er wieder und immer wieder neu gefasst werden muss, ist gleichviel. So viel ist aber sicher, dass ein gluecklicher Grundgedanke und seine reife geistige Durchbildung heutzutage schwer ins Gewicht fallen und weit mehr zur Wertschaetzung eines Werkes beitragen als die ueppigen Blueten, welche das natuerliche unbewusste Koennen des Kuenstlers erspriessen laesst. Ein gewisses praktisches Element, mit welchem die Menschheit heute durchtraenkt ist, laesst sich eben nicht aus der Welt schaffen und jeder Baukuenstler wird sich endlich zu dem Satze bequemen muessen: 'Etwas Unpraktisches kann nicht schoen sein.' "

- 18 Reyner Banham, Los Angeles - the Architecture of the Four Ecologies, London 1971, pp. 182-183

Footnotes to 3.2.

- 1 Letter from Dr. P. Lovell to RMS, dated June 2, 1941; UCSB-SA  
The Neutra house was sold shortly after that letter, the  
beach house at Newport is still in the possession of the  
Lovell family.
- 2 Although today there is no doubt about the importance of this  
house, in 1932 the house was not included in the exhibition  
"The International Style" at the Museum of Modern Art, New York.
- 3 Schindler, p. 80
- 4 The collected material is at UCSB-SA
- 5 The discussion about the reasons why Dr. Lovell commissioned  
Neutra instead of Schindler for his city house is ongoing.  
Mrs. Neutra told the author in a discussion on January 16,  
1982, that Dr. Lovell commissioned Neutra in the expectation  
that Neutra would care more about the costs and the detailing  
of the house.  
Prof. Thomas Hines from UCLA holds the opinion that Dr. Lovell  
assumed that both architects were working on his project, since  
at that time both architects shared a common office.  
Esther McCoy holds the opinion that by 1927 the relationship  
between the Lovells and Schindler had cooled, but that the  
Lovells nevertheless have asked Schindler to start with the  
design process for their town house.  
When finally Neutra received the commission, Schindler's wife  
Pauline described the situation: "There was not an open rift  
but a dark cloud slowly began to descend." The final break  
between Schindler and Neutra was caused by the travel  
exhibition of the League of Nations project through Europe,  
which was presented in Europe only under the name of Neutra.  
To present an answer to this problem seems to be impossible,  
possible seems only the juxtaposition of the different  
subjective statements. See also Vienna to Los Angeles, pp. 68-69.
- 6 Vienna to Los Angeles, p.66
- 7 The photos published in Five California Architects and in

Schindler do not show any illustrations from the façades other than from the beach and the entrance.

8 UCSB-SA

9 The article was entitled "Unusual Home is Built of Concrete and Glass," Popular Mechanics Magazine (Chicago), vol. 48, June 1927, p. 969

10 "A Beach House for Dr. P. Lovell at Newport Beach, California," AR, vol. 66, no. 3, September 1928, pp. 257-261.

This was the only extensive article about the Lovell Beach house published in an American architectural magazine. The article presented the three floor plans, cross section, two exterior, and two interior photos (entrance elevation, beach elevation, two-story living-room showing the large ocean window, and two-story living-room showing the fireplace).

11 Sheldon Cheney, The New World Architecture, London, New York, Toronto: Longmans, Green and Co. 1930.

This extremely well illustrated book was published one year after Hitchcock's Modern Architecture, presenting a more complex and elaborated image of the modern architecture in Europe and America. Illustrations of Schindler's Lovell Beach house are on p. 235, opposite of Gropius' house in Dessau (1926), and an interior view is on p. 286.

12 see also chapter 2.2

13 The five projects are:

1924: - vacation house for Dr. Lovell, Wrightwood, destroyed

1925: - bedroom for Dr. Lovell, Los Angeles, destroyed

- ranch house for Dr. Lovell, Fallbrook, destroyed

- furniture for the children's workshop, Dr. Lovell, Los Angeles, destroyed

1926: - beach house for Dr. Lovell, 1242 Ocean Ave., Newport Beach

14 UCSB-SA

15 Vienna to Los Angeles, pp. 66,67

16 For the discussion about the Lovell town house by Neutra see Vienna to Los Angeles, pp. 68, 69



- 17 The idea of the week-end house and the summer house was pervasive throughout the late 19th and 20th century.
- 18 RMS, "Shelter or Playground," (Care of the body), Los Angeles Times Sunday Magazine, May 2, 1926
- 19 UCSB-SA
- 20 The author had the opportunity to examine all sketches at UCSB-SA
- 21 Henry-Russell Hitchcock, Modern Architecture, New York: Payson & Clarke Ltd 1929
- 22 Schindler, p.77
- 23 Reyner Banham, Los Angeles - The Architecture of Four Ecologies, London 1971
- 14 This study of de Stijl is heavily indebted to H. L. Jaffé's book De Stijl 1917-1931, Amsterdam 1956
- 25 To relate the name of de Stijl to Amsterdam and the name of the Wendingen movement to Rotterdam is common practice, however, de Stijl also corresponds to the city of Utrecht. There seems to be a tendency to simplify artistic movements by connecting them to a single city.
- 26 The group of artists and architects who formed the de Stijl movement in Leiden (1917) included Vilmos Huszar, Antonie Kok, Piet Mondrian, Jacobus Johannes Oud, and Theo van Doesburg. Subsequently Robert van't Hoff, Gerrit Thomas Rietveld, Bart van der Leek, and George Vantongerloo joined the group. The group published a journal with the same name in October 1917.
- 27 Berlage published as early as 1912 (September 14, and 21, 1912) an article about Frank Lloyd Wright in Schweizerische Bauzeitung, and also lectured about American architecture, Sullivan, and Wright.
- 28 For further discussion about de Stijl see Theo van Doesburg, Grundbegriffe der neuen gestaltenden Kunst, Frankfurt: No. 6 of the Bauhausbuecher 1925

- 29 The Russian constructivists, the painters Malevitch and Lissitzky also regarde space as infinite space.
- 30 Schindler's personal file cuttings of architectural magazines at UCSB-SA are now organized in folders arranged in chronological sequence starting with the years 1912-1920, 1921-1925, 1926-1930, ...and continue then in five years intervalls.
- 31 These Japanes magazines suggest a connection to Antonine Raymond who lived in Japan at that time. Schindler could have met Raymond while working with FLW on the Imperial Hotel in Tokyo. However, there is no evidence about this connection. Raymond does not mention Schindler in his autobiography.
- 32 Manifestos, pp. 99-100

Footnotes to 3.3.

- 1 RMS, "Points of View Contra", Southwest Review, vol. 17, Spring 1932, pp. 353-354
- 2 Ibid., p. 354
- 3 Schindler had published an article two months before in that magazine. The name of the magazine at that time was T-Square (formerly T-Square Club Journal). RMS' article "A Cooperative Dwelling" appeared in T-Square, vol. 2, no. 2, February 1932, pp. 20-21
- 4 FLW, "Of Thee I Sing", T-Square, vo. 2, no. 4, April 1932, pp. 10
- 5 The closing of the Bauhaus was of intrinsic importance for the European architecture. Although the exhibition of the modern European movement was called "International Style," the influence of the German speaking countries is obvious. From the fifteen countries represented, the architecture of five countries came directly out of the German speaking culture (austria, Czechoslovakia, Germany, Switzerland, - Spain was only represented because of the German Pavillion by Mies van der Rohe). From the 54 architects represented, 31 came from the German speaking culture.
- 6 The oeuvre catalogue presented in David Gebhard's book on Schindler counts for the years 1930-1933 twelve small realized works and twenty-six unrealized projects. See also Schindler, pp. 200-220
- 7 David Gebhard, Robert Winter, A Guide to Architecture in Los Angeles and Southern California, Santa Barbara and Salt Lake City: Peregrine Smith Inc. 1977, p. 183
- 8 All sources are collected at UCSB-SA. The correspondence between Buck and RMS only consists of two letters.
- 9 See letter of RMS to Buck, USCB-SA, dated April 25, 1934. A second letter dated October 17, 1934, certifies that RMS was also to provide the architect's supervision of the construction work.

- 10 Visiting UCSB-SA I had the possibility to study very closely the sketches and plans. It is, however, impossible to reproduce most of the plans because of the fragile condition of the paper and their bad conditions for reproduction.
- 11 RMS, "Buck house, Oliver house, Wolf house", AaE, vol. 123, December 1935, pp. 16-21, 26-27
- 12 RMS, "Buck house, Los Angeles", AF, vol. 65, pt. 2, October 1936, pp. 264-265
- 13 RMS, "Buck house, Fritzpatrick house", Studio Yearbook of Decorative Art, London 1938
- 14 RMS, "Buck house, Los Angeles", AF, vol. 65, pt. 2, October 1936, p. 264
- 15 This I-section steel column is not shown in the presentation drawings by RMS.
- 16 For this reason it is interesting to recall the design of Mies van der Rohe for the Lange house, Krefeld, Germany (1928), and the Tugendhat house, Brno, Czechoslovakia (1930). Also the design of Gropius for the city employment office, Dessau, Germany (1928), and the Siedlung Toerten (cooperative store and apartments), Dessau, Germany (1928) reveal the more elementary treatment of masses in the International Style.
- 17 Manfredo Tafuri, Architecture and Utopia, Cambridge: MIT press 1976, (translated from the Italian by Barbara Luigia La Penta), pp. 134-136
- 18 UCSB-SA, collection of personal clippings for the years 1931-35
- 19 This Japanese magazine was edited by M. Koyama, and described itself as the magazine for the international architectural society.
- 20 Other architectural periodicals in Schindler's clippings from 1931-35 are: The Tuileries Brochures (New York: The Marchbank Press), Architecture Aujourd'hui (Paris), Moderne Bauformen (Berlin).
- 21 This is of course not a complete list of Schindler's work of the early 1930s, but represents the most important buildings.

- 22 Restauration of the R. M. Schindler house, published by the  
Friends of the Schindler house, Los Angeles 1980, p. 14
- 23 Henriette von Breton, David Gebhard, Lauren Weiss, The  
Architecture of Gregory Ain, Exhibition catalogue, University  
of California, Santa Barbara 1980, p. 11
- 24 Restauration of the R. M. Schindler house, p. 14
- 25 The Architecture of Gregory Ain, p. 11
- 26 Schindler, p. 7

Footnotes to 3.4.

- 1 "Words About California", in PP, vol. 22, May 1941, p. 292  
The architects mentioned in this article as being representative for the Los Angeles area are:  
Wallace Neff, Reginald D. Johnson, Paul R. Williams, Paul R. Hunter & Walter Reichardt, Allen G. Siple, Richard E. Lind, Frank L. Wright, Lloyd Wright, Marston & Maybury, Floyd Rible, Burton A. Schutt, Palmer Sabin, John Lautner, Raphael Soriano, Donald Beach Kirby, Paul Laszlo, John Byers, W. E. Forster, Charles O. Matcham, and Whitney R. Smith.
- 2 Hariette von Breton, David Gebhard, Architecture in California, exhibition catalogue University of California, Santa Barbara 1968, p. 24
- 3 UCSB-SA, collected papers of the Tischler house
- 4 The author had the opportunity to have extensive discussions with Mr. and Mrs. Adolphe Tischler in January 1982. The author likes to thank Mr. and Mrs. Tischler for their cooperation.
- 5 Ibid.
- 6 Ibid.
- 7 Ibid.
- 8 UCSB-SA, Schindler writes about his design concept of the Tischler house, that "the usual utilitarian garage was abandoned for a half round carport, surrounded by an area of planting, so to make the home-coming a pleasant experience." In his desing sketches Schindler always eliminates the garage in favor of a carpaort, as to stress the importance of the cantelilevering character of the house.
- 9 Schindler, p. 182  
Gebhard referres to Hitchcock's notion, that Schindler's later body of work produced something of the look of stage sets for a Wellsian "film of the future."
- 10 Referring to the original meaning of de Stijl it seems inadequate to speak of a de Stijl façade regarding Schindler's use of wood and his lack of using color.

- 11 UCSB-SA, collected papers of the Schindler house
- 12 Ibid.
- 13 Reyner Banham, Los Angeles - The Architecture of the Four Ecologies, London 1971, p. 188
- 14 In conversation with the author (January 1982) Esther McCoy acknowledged Schindler's high estimation for the work of H. H. Harris.

Footnotes to CONCLUSION

- 1 Philip Johnson and Talbot Hamlin, comments on RMS, UCSB-SA
- 2 Robert Venturi, Complexity and Contradiction in Architecture, New York: Museum of Modern Art 1966, p. 16
- 3 The term naturalism is here used in its larger content including the so-called organic architecture of FLW (definition after Zevi), and the romantic, nature-oriented Bay Regional Style of the United States West Coast.
- 4 RMS, "Postwar Automobiles," AaE, vol. 168, Feb. 1947, pp. 12-14
- 5 FLW, Writings and Buildings, pp. 55-73
- 6 RMS, Manifesto, UCSB-SA



## 5.2. WRITINGS BY RUDOLPH M. SCHINDLER

(This list includes all writings by Schindler of which we are aware.)

- 1912: "Modern Architecture: A program" (unpublished manuscript), Vienna 1912
- 1914: "Notes on Architecture" (unpublished manuscript), Chicago 1914-1919
- 1921: "About Architecture" (unpublished lecture), Hollywood 1921
- 1922: "Who will save Hollywood?" Holly Leaves (Hollywood), 3 November 1922, p. 32
- 1926: "Ventilation" ("Care of the Body"), Los Angeles Times, Sunday magazine section, 14 March 1926
- "Plumbing and Health" ("Care of the Body"), Los Angeles Times, Sunday magazine section, 21 March 1926
- "About Heating" ("Care of the Body"), Los Angeles Times, Sunday magazine section, 4 April 1926
- "About Lighting" ("Care of the Body"), Los Angeles Times, Sunday magazine section, 11 April 1926
- "About Furniture" ("Care of the Body"), Los Angeles Times, Sunday magazine section, 18 April 1926
- "Shelter or Playground" ("Care of the Body"), Los Angeles Times, Sunday magazine section, 2 May 1926
- 1930: "Civic Center Design for Richmond, California", City Planning Commission for Richmond, 15 November 1930
- 1932: "A Cooperation Dwelling", T-Square (Philadelphia), vol. 2, February 1932, pp. 20-21
- "Points of View - Contra", Southwest Review (Austin and Dallas, Texas), vol. 17, Spring 1932, pp. 353-354
- 1934: "Space Architecture", Dune Forum (Oceano, California), February 1934, pp. 44-46
- "Space Architecture", (unpublished manuscript), September 1934
- 1935: "Space Architecture", California Arts and Architecture (San Francisco), vol. 47, January 1935, pp. 18-19
- "Furniture and the Modern House: A Theory of Interior Design", Architect and Engineer (San Francisco), vol. 123, December 1935, pp. 22-25; and vol. 124, March 1936, pp. 24-28

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- 1946: "Reference Frames in Space", Architect and Engineer (San Francisco), vol. 165, April 1946, pp. 10, 40, 44-45
- 1947: "Postwar Automobiles", Architect and Engineer (San Francisco), vol. 168, February 1947, pp. 12-14
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- 1951: "Space Architecture", Atelier (Sydney, Australia), vol. 13, no 1, November 1951, pp. 10-11
- 1952: "Visual Technique", (unpublished manuscript), Los Angeles 1952

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- . Los Angeles - The Architecture of the Four Ecologies, London 1971, pp. 39, 175, 178-189
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#### 5.4. ILLUSTRATIONS

I am indebted to Stefanos Polyzoides for providing the reconstruction plans and drawings of the Lovell Beach house, the Buck house, and the Tischler house. The illustrations from UCSB-SA are available as original reprints at the MIT Rotch Visual Collection. Otherwise the illustrations were reprinted from the following sources:

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