CENTRAL EUROPE – MODERNISM AND THE MODERN MOVEMENT AS VIEWED THROUGH THE LENS OF TOWN PLANNING AND BUILDING 1895 - 1939

A Thesis submitted for the degree of Doctor of Philosophy

By

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ABSTRACT

This thesis sets out to re-locate and redefine the historical arguments around the development of the Modern Movement in architecture. It investigates the development of architectural modernism in Central Europe from 1895-1939 in the towns and cities of the multinational Habsburg Empire, in a creative milieu in which opposition, contrast and difference were the norm. It argues that the evolution of the Modern Movement through the independent nations that arose from the Empire constituted an early and significant engagement with urbanisation, planning and architectural modernism that has been largely overlooked by western scholarship.

By reviewing the extant literature in discussion with Central European authorities and by drawing upon a little known range of sources, this thesis brings into focus the role of key individuals such as Plečnik, Fabiani and Kotěra and it explores the significance of developments in town planning in places like Zagreb and Ljubljana. In restoring some of this missing detail and revisiting some of the key sites, the thesis reveals how Central European individuals made early and significant contributions to the development of architectural modernism and the Modern Movement that have hitherto received little critical acknowledgement.

What this research reveals is how these figures developed what can be seen as local solutions, rooted in the context and culture of individual towns and cities and their unique histories. However more significantly, this thesis also demonstrates that these independent initiatives were formed with an understanding of - and in response to - wider national and international developments in the field of architectural modernism. In this connection, the thesis can be regarded as part of an emerging academic effort to redress the history of the Modern Movement and an attempt to set in motion a raft of suggestion for further research into this rich field of cultural endeavour.

Contribution to Knowledge

1 Brings into focus again the role of individuals in the development of modernism and the Modern Movement, such as Plečnik, Fabiani and Kotěra.
2 Consideration of the career lines of individuals in Central Europe and the relationship to events in Western Europe. Discernment of patterns of relationships and their significance. Otto Wagner and Maks Fabiani, where Fabiani is clearly established as contributor to the seminal volume.
3 Facilitates in English of a number of sources which otherwise might be inaccessible. Three of these are:

a. Regulacija deželnega stolnega mesta Ljubljane, (The Regulation and planning of Ljubljana, 1899.) facsimile reprint Arhitekturni muzej Ljubljana, zanj: Peter Krečič, Ljubljana 1989 (Architectural Museum Ljubljana, Director: Peter Krečič, 1989). Informally translated as, Regulation (Improvement) of Provincial Parts of the Town (City) of Ljubljana.
In addition to the reprints of text, diagrams and plans there is discussion between Peter Krečič, Breda Mihelič, Marko (sic) Pozzeto and Nace Sumi which illuminates further Fabiani's role as a city planner. The entire text was translated into English by Peter Krečič specifically for this work and as far as is known has not appeared in English translation previously.

b. Two unpublished papers, also translated into English, which helped in establishing events prior to the re-planning of Ljubljana, 1899:
Urban Planning and Architectural Development in Ljubljana after the Earthquake of 1895. Peter Krečič, Ljubljana, 1995.
Ljubljana - An example of Central European City Planning, undated. This work is a preparatory study which is the kernel for the study of street plans of Roman Emona as featured in Jože Plečnik and Ljubljana an Architect and His City, Plečnik's Ljubljana: Classical Urban Design Revisited, Peter Krečič and Robert Gilkey Dyck, Graz, 2003.

Finally a translated summary of Za obnovu zagrebacke Zelene Potkove (A Proposal for the Restoration of the 'Green Horseshoe' Zagreb), Izvorni znanstveni rad (Original scientific paper) Snješka Knežević, Zagreb, 12th April 1996, translated summary Peter Krečič, 2001.

4 A very clear steer in responding to the motivations that Norman Davies responded to in seeking to re-centre the locus of an historical study of the players at the time.

Conclusions

The response to this question was more obscure than initially thought. The research undertaken has identified that these individuals developed local solutions rooted in the context and culture of the towns and cities. What is also shown, however, is that these initiatives were part of a wider response to national and international developments over time.

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Thanks also to my brother Professor Barry Davies who compelled me to write this work after I had complained about the lack of information regarding the subject. Finally, to my wife Gillian and son Matthew without whose help and co-operation this work would not have been possible.

AUTHOR'S DECLARATION

I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been accepted for the award of any other degree or diploma at Buckinghamshire New University/Brunel University or any other educational institution, except where due acknowledgement is made in the thesis. I also declare that the intellectual content of this thesis is the produce of my own work, except to the extent that assistance from others in the project's design and conception or in style, presentation and linguistic expression is acknowledged.

Signed…….Bernard Davies……..

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INTRODUCTION

Introduction

Central Europe Defined

This thesis investigates the development of architectural modernism and the Modern Movement in Central Europe from 1895-1939. It examines the ideas of modernism through the lens of town planning and building, primarily in the towns and cities of the multinational Habsburg Empire. Also considered is the later evolution of the Modern Movement through the independent nations that arose from the Empire.

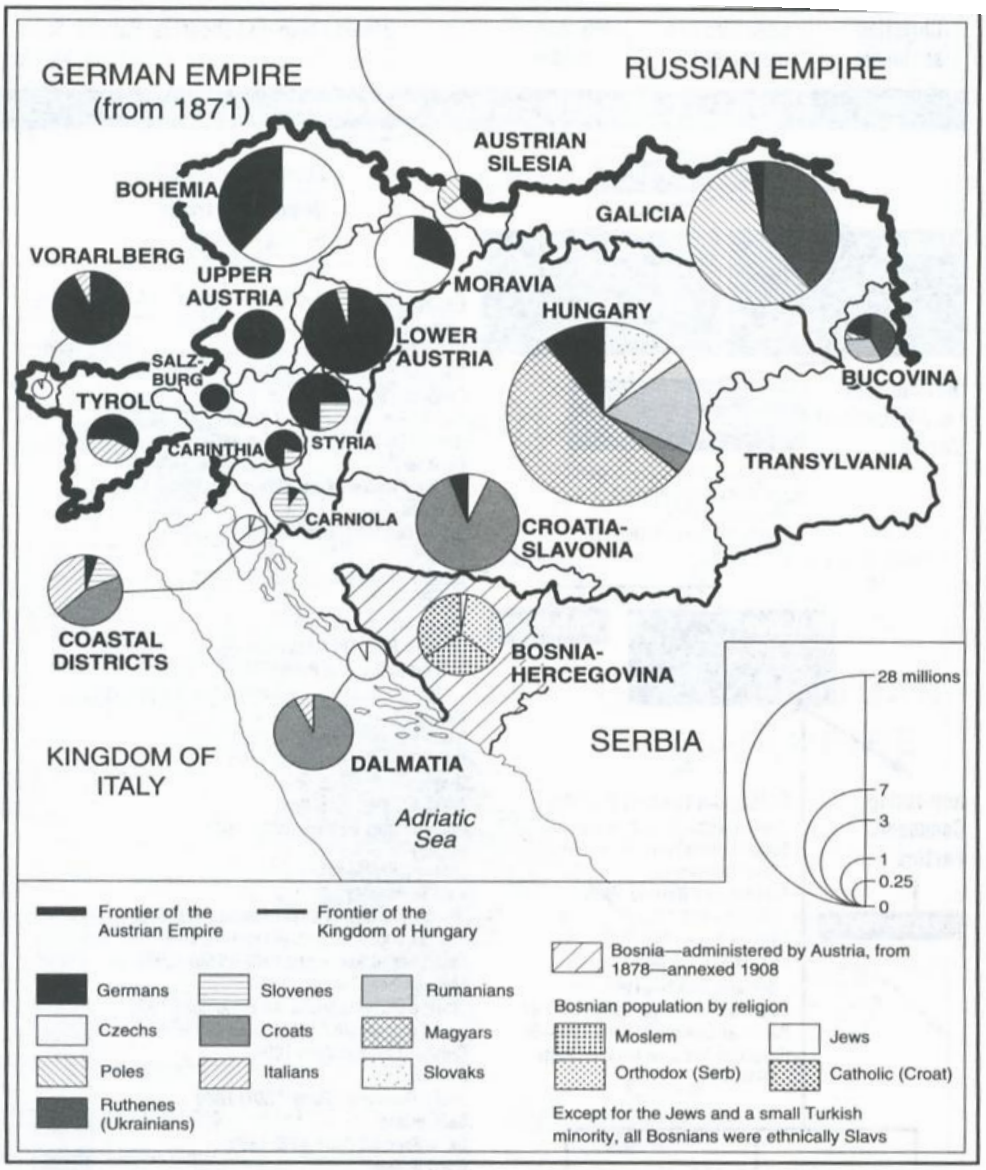
Given the geographical and chronological extent of this period, it is impossible to generalise consistently about developments. Prague, Ljubljana, Wroclaw and Vienna (for example) differed greatly as to the geopolitical, economic and social conditions that existed locally. Each of these cities generated their own particular local responses to urbanisation and architectural modernism. However, it is possible to identify central themes in the development of the cities of the Hapsburg Empire. We can follow cross-cultural influences in the establishment of aesthetic and technical developments in Central European architecture and planning during this period. The notion of 'Central Europe' is problematic, and some of the difficulties discussed later can be resolved by delimiting the study to the lands of the Habsburg dynasty.

The Empire, a multicultural and multilingual society in Central Europe (I.1), displayed an early engagement with urbanisation, planning and architectural modernism. This, it is argued here, led to a creative milieu where opposition, contrast and difference were the norm. This work investigates some of the cross-pollination that occurred.

Much of this milieu remains unknown (or at least unacknowledged) by the authors of standard 'histories of architecture.' The preference for generalisation identified by Jencks (p.6) leads the authors to an underlying assumption that the 'truth' of the histories is firmly established in time and place by the authors' own selection of who and what is important. Unfortunately, within this selective editing, much that may be significant may be lost.

In restoring some of this missing, but significant, detail a number of questions needs to be posed. This is particularly so in relation to the generation of early urban plans in cities such as Zagreb and Ljubljana, which progressed to a widespread urban culture of architectural planning throughout Central Europe.

I.1 The Dual Monarchy: The Nationalities of Austria-Hungary, 1867-1918



- To what extent did the towns and cities of Central Europe, as historical domiciles of learning and culture, generate architectural solutions that were particular to an ethnic understanding or a perceived cultural imperative?
- How did the towns and cities of the (former) Empire seek to establish their own individual positions as modern cosmopolitan centres, while at the same time revisiting their individual histories in pursuit of a national style?
- Were the ideas of Otto Wagner in the *Grosstadt* (the Great City) as utopias of city dwelling on a comparatively vast scale, accepted and supported beyond Vienna?
- Was there a preference for architectural development that safeguarded historical buildings, while at the same time integrating the necessary transport and communications infrastructure for modern living?
- Did the impetus for the development of the Modern Movement in Central Europe depend on Western European ideas, or was the perception of Phillip Johnson (voiced at the time) a more geographically and culturally accurate attribution? By inference, are the 'others' identified below worthy of far greater scrutiny?

> Gropius and others created Modernism in architecture before the First World War in Central Europe, and it was accepted elsewhere from the late 1920s onwards.[1]

Johnson's use of '[C]entral Europe' to denote little more than a geographical position, rather than referring to nationality and culture, is representative of a misunderstanding in the 'West' of what Central Europe connotes. Therefore there is a need to define 'Central Europe' not only geographically, but also historically, ethnically and culturally.

The concept of *Mitteleuropa* (literally Middle-Europe) has been the subject of intense academic debate. The term's conceptual root in German politics perhaps occasions a great deal of angst. Certainly, the term *Mitteleuropa* is used in particular contexts in English as a loan word; elsewhere it is replaced or translated by the more familiar 'Central Europe.' Which countries are included in the description *Mitteleuropa*, but excluded from a definition of 'Central Europe,' depends (broadly) on whether one approaches the question from a Germanic or Slavic perception. In resolving this interesting (but divisive) debate, it is possible to arrive at a position that uses arguments from both positions equally. In such a resolution, the region is seen as an historical buffer zone between Western and Eastern powers, where *Mitteleuropa*/Central Europe is defined as having three distinct characteristics:

- a cultural *Gemeinschaft,* [community] in the heart of Europe, with common values, common traditions, and a common history,

- a common market or free trade zone,

- a region with common political interests primarily directed against Russia in the East and France in the West.[2]

Clearly Slav and German people share these three distinct characteristics to some extent, as confirmed by Milan Kundera, the Czech writer (p.7). However, the last geopolitical characteristic of the Brechtefeld definition would appear to be conditioned by the author being of German descent. This is revealed by France replacing Germany as the historical 'West' against which Central Europe acts. This allows all of Germany–Austria to be placed in 'Central Europe.'

Others hold that the region (if it is seen as such) is characterised by usage of Latin forms, adherence to Roman Catholicism, not sharing an Ottoman influence, not adhering to Orthodoxy or using Cyrillic forms. The present nations may be linked by/through the Habsburg Empire, the Hungarian monarchy, the Holy Roman Empire, the Polish-Lithuanian Commonwealth or Imperial Germany. To some degree it is easier to place bounds on Central Europe North (the Baltic) and South (the Alps) than East to West. In the East, a line runs shakily through Belarus and Ukraine (where parts of those countries formed part of a greater historical Poland), and the Rhine marks a boundary, largely with France. This boundary would, of course, be the one contested by Slavs. In Slavic conceptions (at least those of the western Slav nations), shared cultural and linguistic forms mark the distinction, with the Orthodoxy of the East and South marking the boundaries between the two chief forms of Slavic nation.

Geographical, ethnic and cultural misconceptions about the peoples of Central Europe, particularly from an American/Western perspective, are easily illustrated when Vienna is seen as Western and Prague as Eastern, despite the fact that geographically Prague is some 200 miles west of Vienna (I.2). Within the German historical view, shared by much of the population of Western Europe, the people of Vienna and Austria are presented as German speaking and from a Germanic cultural root – and they therefore are all Western.

> The allied notion of the 'Aryan race' was first used in 1848 by a German professor in Oxford, Max Muller. Every nationality in Europe was tempted to

> conceive of itself as a unique racial kinship group, whose blood formed a distinct and separate stream.[3]

This view was taken to the extreme by Englishman Houston Stewart Chamberlain working in Germany in 1899, when he narrowed the 'creative race' from Aryans to Teutons:

> True history begins from the moment when the German with mighty hand seizes the inheritance of antiquity.[4]

Using these definitions, the Northern Slav Czechs, who were the majority population in Bohemia and Moravia and who spoke a language very different from German, were from a distinctly different ethnic group to the Teutons. They could only be disenfranchised and regarded as 'foreign,' despite the geographical centrality of Prague. This type of ethnic distinction, when extended to the rest of Central Europe, marginalises the Southern Slavs, Romanians, Ruthenes (Ukrainians) and Istrian Italians and all but excludes the favoured Magyars, the ethnic Hungarians who had shared power with the Austrians from 1867.

This power sharing and thereby exclusion of others was justified by Julius Andrassay, the Hungarian foreign minister of the Austro-Hungarian Empire:

> The Germans and Magyars were to be the two Peoples of state; as for the others, the Slavs are not fit to govern, they must be ruled.[5]

This apparently unequivocal position was further complicated when increased activity in the fields of ethnography in the late 19th century revealed earlier ethnic divisions within Austria-Hungary which had caused Baron Andrian Warburg [sic] to describe Austria thus in 1842:

> A purely imaginary name, which signifies no self-contained people, no country, no nation, a conventional usage for a complex of distinct nationalities. There are Italians, Germans, Slavs, Hungarians, who together constitute the Austrian Empire, but there is no Austria, no Austrian, no Austrian nationality, nor has there ever been any save for a strip of land around Vienna. [6]

A difficulty in making observations about Central Europe is that of understanding how Vienna and Austria were (and are) perceived by the majority non-Germanic population of Central Europe. Here, Vienna is seen as the former administrative capital of the Austro-Hungarian Empire; an Empire peopled by a large range of nationalities stretching from the Tyrol in the west to Bucovina in the east. This area incorporates

much of what today is seen as Central Europe (I.2.) This view contrasts with that of the Viennese, where Vienna is presented as the capital of Austria, a distinct country with a dominant Germanic population and culture.

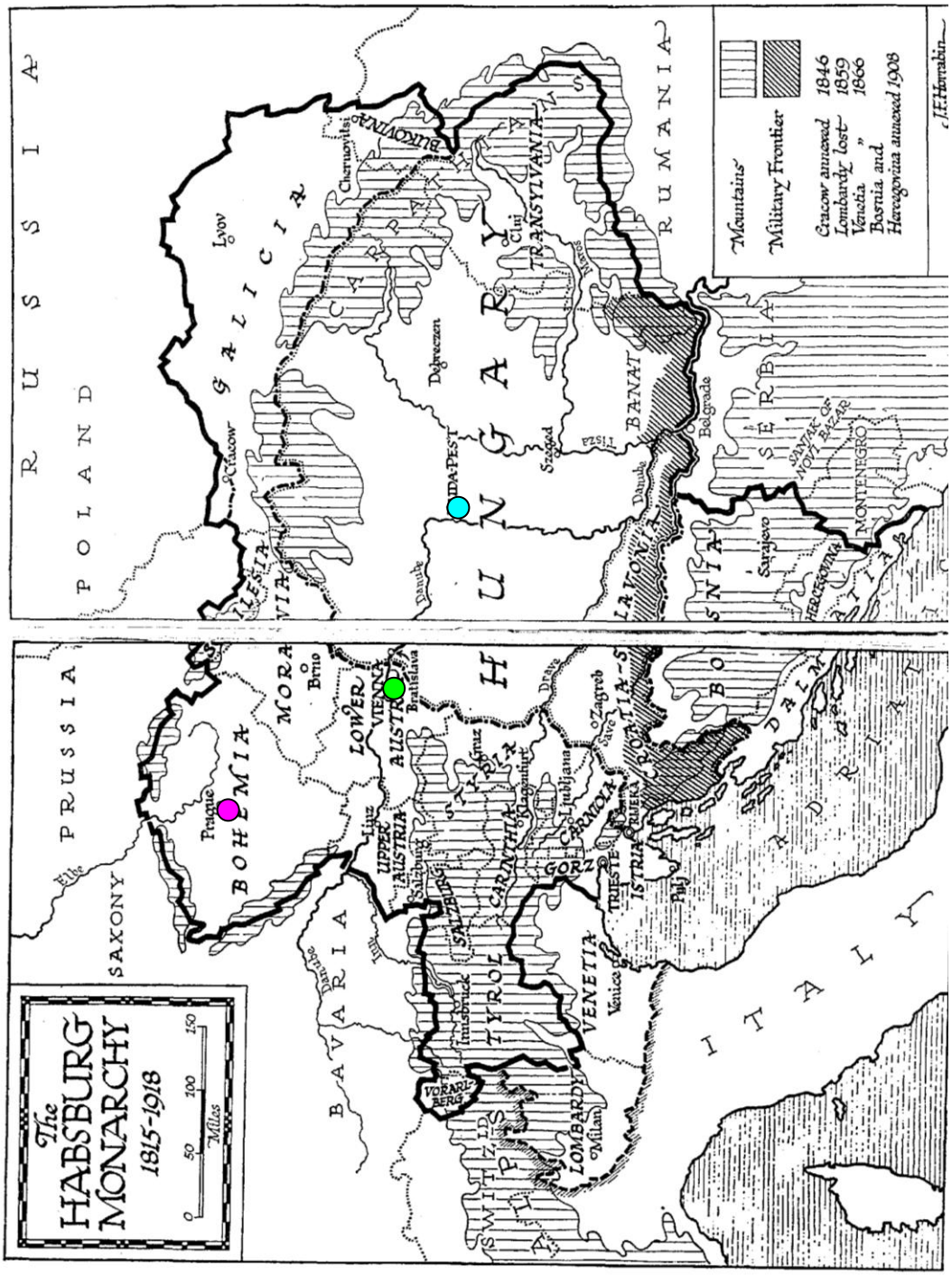
The difference between these two perceptions is central to understanding how ideas and actions grew within Austria-Hungary from 1867-1918 under the Dual Monarchy, and how these opposing ideas were manifest in the independent countries after the Treaty of Trianon from 1920.[7] These distinctions rippled through the peace of the inter-war years, until the severe hardships of the Second World War and then Soviet Communist occupation. Today, the contribution made by the peoples of Central Europe to the modern world is being re-evaluated by learned bodies and individuals.

Prior to the fall of the Berlin Wall and the dissolution of the Soviet Union and Eastern Bloc, Milan Kundera wrote an article entitled *Un Occident Kidnapped* - later published as 'The Tragedy of Central Europe' in the 'New York Review of Books', April, 1984. Kundera argued that the West was in danger of losing a part of Europe which he and many others regarded as western in outlook, even under communist control, to a Soviet-dominated view of Eastern Europe. Kundera believed trying to identify Central Europe within strict geo-political boundaries was senseless: he defined the area of Central Europe by their peoples and shared cultural traditions,

> the great common situations that reassemble peoples, regroup them in ever new ways along imaginary and ever changing boundaries that mark a realm inhabited by the same memories, the same problems and conflicts, the same common tradition.[8]

Although Kundera does not clearly define where his Central Europe lays, he does list a number of countries sandwiched between the borders of Germany and Russia. These include Poland, Hungary, Bohemia, Slovakia and Austria. But what of Croatia and Slovenia and other parts of countries which were once part of Central Europe historically? Romanian Transylvania and Bosnia Hercegovina are not included in his list of countries, but are clearly defined culturally within his terms. The problem Kundera had encountered has caused extreme confusion among commentators for many years; because, as he says, the definition of the region of Central Europe is not solely geographical, it is driven by culture, ethnicity and nationality.

I.2 The Relative Geographical Positions of Prague, Vienna and Budapest



Once the communist regimes throughout Central Europe fell there was far greater opportunity for discussion. One of the most passionate pleas for a reconsideration of what Central Europe was and is came from a group of literary figures: Vaclav Havel, Árpád Göncz and Adam Michnik – as representatives of the Visegrad Group (Poland, Czech Republic, Slovakia and Hungary). All went on to become major political figures. Havel became the president of the Czech Republic, Göncz became the president of Hungary and Michnik was founder and editor-in-chief of *Gazeta Wyborcza,* one of the most influential new daily newspapers in Poland, and latterly a member of the Polish parliament.

They argued that the simplistic view of Central Europe now labelled 'post communist' by external commentators was another generalised concept of a complex of nations that had never been fully understood or explained in the West. What was needed (they reasoned) was an understanding of Central Europe as a region that accepts past history as presented by external observers, but also requires a far more thorough and wide-reaching evaluation of all that happened in Central Europe from the beginning of the 20th century and how those events framed the future.

Definitions

This period has been considered in terms of the historical, philosophical and aesthetical approaches to architecture and planning within two principle eras: architectural modernism from 1895-1925 and the Modern Movement/Modernism (used as a collective term for the International Style through Functionalism, Rational, Anti-Rational, to the mature styles we now recognize as Modern) from 1925-1939.

The word 'modernism,' used with the related terms modern, modernist and modernising, refers to the development of architecture and planning which grew from the Age of the Enlightenment in the eighteenth century to the end of First World War. This period is defined by the belief that 'truth shall set you free' with the central concept of freedom from overt religious, political and secular control making the world a better place in which to live. Architecturally this modernism could accommodate many different proposals in improving both urban and rural fabric.

No such precise definition of Modern Architecture, or the Modern Movement, can be made. As Charles Jencks points out in his introduction to 'Modern Movements in Architecture, the Plurality of Approaches' there are significant problems with any linear chronology or strict classification.

> For instance when one hears an historian say 'The Modern Movement', one knows what to expect next: some all-embracing theory, one or two lines of architectural development, something called 'the true style of our century', a single melodrama with heroes and villains who perform their expected roles according to the historian's loaded script. Dazzled by this display of a consistent plot and inexorable development, the reader forgets to ask about all of the missing actors and their various feats - all that which ends up on the scrap heap of the historian's rejection pile.[9]

In taking Jenck's analogy further, this clarification as to who were the 'leading actors' becomes all the more difficult when the historical record in English carries little witness to the activities of many Central European architects and planners. Their work has been submerged in wars and occupation, followed by a period of isolation during the Cold War 1948-1989. In that period the need to project the superiority of everything emanating from the West as capitalist, democratic and free, is contrasted to that of the East, where a communist-led, world-wide patronage was presented as backward, dangerous and bad (or the opposite, depending on which side of the Iron Curtain the author sat.)

Sitting very unhappily between these two extremes were the people of Central Europe, who throughout continued to live as they always had, recording their histories in their own languages but with very little stimulation from sources beyond the communist world.

In seeking to avoid obvious bias, any form of comparative survey where events and works in Central Europe during this period are incorporated into an established Western chronology is eschewed in favour of a parallel survey, where a Western and Central European chronology are run side by side. Only where there is compelling evidence of contact and exchange between parties do the chronologies interconnect. By this method, it should be possible to identify the key characteristics of Western and Central European ideas, plans and buildings feeding into modernism and the Modern Movement as a whole.

The other area of 'restoration' which this work seeks to achieve is the clarification of ethnicity and nationality. Architects, who have lost their antecedents and history by being called 'Austrian' and or 'Viennese' for example, have their forebears restored to them. Two examples of figures to suffer from this re-labelling are Josef Hoffman and Adolf Loos, both of whom are Czech by birth. More precisely, Hoffman was born in

Brtnice, Moravia and Loos in Brno, Moravia. Although sharing this Moravian heritage, the term 'Austrian' (as applied to both in Vienna) to give them a particular kinship took no account of the differences in their buildings and outlook.

> So it may be profitable to contrast Hoffman's delightful building [Palais Stoclet, Brussels, 1905] with the work of Adolf Loos, so completely opposed in character, though Loos was [also] an Austrian.[10]

What this statement ignores is the individual differences between the two men in their formative years, and their personal exploration of architecture, to arrive at very different, conflicting styles. Once this information on upbringing, exposure to mentors and ideas is restored to the planners, architects and builders, a picture can be shaped which portrays by nationality, date of birth and mentorship the key practitioners within the history of architectural modernism and the development of the Modern Movement. Where this understanding is then extended to groups and movements by the application of prosopographic analysis (see Method below), many of the discovered similarities and differences reveal a more comprehensive picture of the development of architectural modernism and the Modern Movement without the usual separation between East and West.

Method

The first notion of writing about architectural modernism and the Modern Movement began in 1983 when conducting research into Henryk Berlewi, *Mechano-Faktura* and Helena and Szymon Syrkus as part of a paper on Polish Constructivism. In so doing it was quickly revealed that beyond snippets of information in the Penrose Annuals there was little else about Central European avant–garde movements. Over the intervening years fragmented periods of research, attendances at conferences and seminars and informal discussions have located hitherto unknown sources e.g. 'The Hungarian avant-garde – The Eight and the Activists', Hayward Gallery, February, 1980. Views as to the feasibility of a study that looked at what was then a prohibited region, from the birth of the 20th century to the start of the Second World War, were sought.

Clearly this entire process was aided considerably by the fall of communism and the destruction of the Berlin Wall in 1989. The growing interest from historians, architects and designers in the achievements of Central European 'schools' gave rise to an increased number of conferences and exhibitions (as detailed below). From this point forward the levels of contact facilitated by the internet improved communication and

information considerably, allowing important sites to be identified and a network of key informants throughout Central Europe to be established.

The primary research for this thesis was conducted through a programme of visits to Central Europe between August 2000 and August 2004. A number of semi-structured interviews with key informants and site visits of between two and four hours were conducted. Before embarking on the interviews, archival research in English language articles identified limited sources that included a range of multilingual periodicals in the RIBA reference library.[11] These periodicals were used as English language primers in conjunction with catalogues and conference notes from a number of events:

- 'Jože Plečnik 1872-1957, Architecture and the City', Oxford Polytechnic, Urban Design, 1983
- 'Constructivism in Poland 1923-1936', Kettles Yard, Cambridge, 1984
- 'Adolf Loos', Arts Council, Sheffield City Art Gallery, December, 1985,
- 'Devetsil, The Czech Avant-Garde of the 1920s and 1930s, MOMA, Oxford, 1990
- 'Katarzyna Kobro' Henry Moore Institute, March 1999, Leeds[12]
- 'Karel Teige: Modernist Architecture and *Avant-Garde* Typography', RIBA, February 2000, London[13]
- 'Peasants Real and Imagined', Brighton University, March 2000[14]
- 'The Werkbund Housing Estate Prague', Vienna, 2000
- 'Czech Design, Culture and Society: Changing Climates', Brighton, December, 2005

These sources were used to confirm the accuracy of information to date.

In writing this thesis one other question had to be resolved. Was this to be:

History as *the past* or

History as an *account of the past?*

Although the differences between the two are subtle in their linguistic statement the actual difference between the two approaches is considerable. The first is a very simple statement about what happened in the past, as in 'it's all history now' meaning 'it's all in the past'. The latter statement is implied when we enter into a discourse on a particular event e.g. the First World War, where opinion and counter opinion have to be weighed.

This research uses the latter approach despite the dearth of archival material either written in or translated into English. Most research methodology gives primacy to the written word because it can be tested by cross reference across a number of sources. This method has been viewed as the most reliable and verifiable for many years. However a growing body of thought reasons the facts as recorded in these documents are only part of a much greater 'truth'. This has led to a considerable re-examination of historical methods particularly in regard to the stating of historical facts. The records of the past by definition are incomplete and will always remain so:

- The past was not recorded in every detail by the people at the time.
- The historian relies on the memory and accuracy of recall of others.
- The past has gone and therefore it is impossible to check the validity and accuracy of our accounts of it.
- The past is viewed through modern eyes using contemporary understanding and concepts.

As a partial answer to some of these difficulties the use of prosopography or prosopographic analysis as a subset of historical research has been growing in importance in academic circles.[15] Within prosopography the study of biographical details (educational background, family background, religion, ethnicity, childhood events, etc.) that can be identified as being 'in common' or as an aggregate part of an organisation are used to analyse patterns found in societies' elites.

This approach, in combination with the standard practices of historiography, adds considerable evidence particularly where written record is scarce. The method is capable of yielding revealing insights particularly in comparisons between individuals who share the same ethnicity, religion and level of education. Another advantage this method displays over historiography is that it is less inclined to bias and hagiography than those works fed by biographies. Within these works the lives and works of architects as individual monographs are reassembled to give a comprehensive picture of their participation in a movement as a whole. In using prosopographic analysis it is gratifying that architects and architectural historians have placed their trust in someone who is progressing from the position of a design/cultural historian who would make observations about the practices of architecture and urban planning.

Literature Review

The complex nature of the multicultural and multilingual Habsburg Empire and the independent nations that were to emerge in the wake of its collapse makes any account of the literature that relates to the period under review very difficult. However, less problematic is an account of the authorities and texts that first provoked this thesis and subsequently provided material for consideration.

For example, The Modern House by FRS Yorke (1934 revised 1946) proved inspirational in its prophetic and reasoned explanation of The Modern:

> In England there was C.F.A. Voysey, Baillie Scott, Edgar Wood, George Walton and C.R. Mackintosh, in America, Frank Lloyd Wright "whose open planning broke the mould of the traditional." On the continent, Otto Wagner "the real precursor of modern structural architecture"; Josef Hoffman his pupil and partner who was among the most notable of its earliest pioneers; Behrens, Berlage, Josef Olbrich, Adolf Loos, Hans Poelzig, Van der Velde, Perret, Kotěra and his pupil Gocar. Their attitude, in consideration of the immediate architectural background was inevitable. There was no stylistic integration until the War came, accelerating the disclosure of objects, and emphasising the importance of economy and hence the inseparability of architecture from structure.[16]

Two factors are immediately apparent from the above quote: firstly, Yorke was aware of developments in the Vienna School of Otto Wagner, especially through student disciples who were by birth of Central European origin and who would disseminate the precepts of Modernism far and wide. Secondly, Yorke is adamant that Modern architecture would 'break the mould of the traditional'. Modern architecture would be concerned with a new plan for a new way of life and therefore the new functional plan using new building materials, methods of construction and arrangements of home, town and city would become the norm. Yorke was one of the first architecturally-qualified commentators to understand that:

> Experiment, invention, the immense scale and scope of modern industry and the demands imposed by modern life, have completely changed the methods of construction which prevailed for centuries and have produced new synthetic materials which are stronger and lighter and generally more efficient than the old natural materials. It is absurd to impose upon the new materials that are essentially light the classic forms that are essentially heavy.[17]

Within Yorke's introduction we find the quintessential definition of Modernism/International Style, i.e. new ways of building with new, technologically

advanced materials to create towns and cities fit for the new century that existed for the benefit of everyone.

Yorke's knowledge of Czech architectural developments was facilitated by his friendship with Karel Honzík whereby these advances in architectural form and construction were highlighted in Yorke's writing; a number of notable buildings were discussed in these works. [18] For example, the Smíchov House Prague by Honzík and Havlicek (1929) and Evžen Linhart's house in Prague (1930) both exemplify the freedom of working with new ideas, new materials and a:

> … freedom conditioned by the absolute necessity for economy and efficiency, but drawing strength from these rather than regarding them, as in the past, as impediments to fine design. [19]

Yorke then uses a number of other houses, including ones by J.K. Riha (architect's own house, 1931), Adolf Bens' villa in Prague (1932), Karel Hannauer's villa in Prague (1932) and Ladislav Zak's house in Prague (Villa Hain, 1932) to point up another important characteristic of Modernism – the disposition of the property via its orientation, terraces and fenestration allowing the occupiers to take full advantage of the surrounding landscape. [20]

At the same time Hitchcock and Johnson published The International Style: Architecture since 1922 (1932 revised 1966) to much acclaim.[21] This text defined a new style, inherent in which were the intrinsic qualities of materials as distinct from contrived applied decoration; regularity of form as contrasted to symmetrical arrangement; and, of great importance, volume as opposed to mass. The definitions of Modernism/International Style by Yorke and Hitchcock and Johnson consider a totality of architectural structures and town and city planning which match the needs of modern living.

These ideas were taken further by Peichl and Šlapeta in Czech Functionalism 1918-1938 (1987). In their analysis of the Zak house they reveal that the client who was a leading aeronautical engineer, wished the property to face south-east overlooking the site of the new main Ruzyně aerodrome designed by Adolf Bens 1932-34. Bens saw his work thus:

> By working in the spirit of modern architecture, we are creating a new lifestyle and new character for human beings, with space, light and air in place of the gloomy, closed arrangements of the past. [22]

Yorke believed that modern houses and villas should be constructed using the very latest materials within cubic, clearly-defined, architectural spaces: these included Isostone lightweight blocks, Mexiko Ebanos bituminous coating, Heraklith wood-wool board, Rabitz reinforcing mesh, Kraus patent sliding and folding double glazed windows, Orlit cast coat rendering of small stones and cement; the whole to be centrally heated by the Strobel boiler. Interestingly enough, all of these were to be used without the architect being able to predict either the performance of these new materials, either individually or in combination.

As part of the further industrialisation of the First Czechoslovak Republic 1918-1938, Vladimír Šlapeta in The Brno Functionalists (1983) reveals that commercial and industrial architecture was being expanded and developed apace throughout the Republic. Examples include Otto Eisler's Double House (Brno, 1926), Bohuslav Fuchs's Pavilion of the City of Brno for the Brno Exposition (1928), Josef Kranz's Café Era (Brno, 1929), Ludvik Kysela's Bat'a Shoe Store (Prague, 1929) which were all indicators of a commercially prosperous country that had embraced Modernist values:

> Clearness, cleanness, purposefulness, proportion and convincing constructional logic: it is interesting that the first things to exhibit these formal characteristics were modes of transport- ships, automobiles, locomotives and aero-planes, designed by engineers who felt the need for close contact with civilisation.[23]

It was precisely these products of engineering that would generate wealth for the population of Central Europe. These works were paralleled by developments throughout Central Europe which during the period 1905-39 had one of the greatest concentrations of Modern Movement architecture through explicit modern planning to house a greatly expanded workforce in industry and commerce – more than most other parts of the world. Yorke, Hitchcock and Johnson, Šlapeta and Peichl attest to all of this development, but significantly post-1945 this information is conspicuously absent from the histories of architecture published in the West.

An example of this lapse in memory was evident in the case of Nikolaus Pevsner and his landmark text Pioneers of the Modern Movement (1936). Pevsner, who was born in Leipzig and studied in Berlin, wrote the original work which was later republished as Pioneers of Modern Design (1960). Within the text he does not refer to any of the developments in Central Europe except for two earlier works in Breslau; Max Berg's *Jahrhunderthalle* (Centenary Hall) (1910-13) and Hans Poelzig's Office Building (Breslau, 1911).[24] Pevsner, who through his circumstances one might expect to have been aware of developments throughout Central Europe chose not to include them either in the

original or revised version of his work possibly because of the political situation in which he found himself.

Another seminal work, Theory and Design in the First Machine Age by Reyner Banham (1960), recorded the works of the Breslau Group, Wroclaw, Poland, especially in the reinforced concrete construction of *Jahrhunderthalle* 1910-13 by Max Berg, where it went a little further. Unusually, the builders Konwiarz and Trauer were acknowledged, possibly in anticipation of a developing form of design and build which would become more common throughout Central Europe from 1920 but, as before, no mention was made of the Modern Movement in the Czech lands or throughout Central Europe as a whole.[25] This absence is also apparent in The History of Modern Architecture, Volume 2, The Modern Movement by Leonardo Benevolo (1977).[26] Considering the reputation of this work it is clear that the view that architectural development in Central Europe was negligible was still very much to the fore.

By 1980 Kenneth Frampton's Modern Architecture, A Critical History, could acknowledge in Chapter One that:

> The one country which has always been inadequately represented in any account of the International Style (Modernism) is Czechoslovakia and an adequate history of the Czechoslovakian Functionalist movement has yet to be written.[27]

This apparent rediscovery of the importance of Czechoslovakian architecture in 1980 was in marked contrast to earlier views developed by influential figures like Theo van Doesburg, who expressed a very different view:

> The Czechs are lacking in original creative initiative as much as the Germans and this is the reason why neither of the two countries possesses an original, new architecture.[28]

Van Doesburg clearly preferred Dutch architecture, claiming:

> Dutch architects had understood the challenge of the cubist innovation much better then their Czech colleagues.[29]

Van Doesburg continues to cite architectonic design devoid of decoration as proof of this statement. This standpoint, i.e. the denial of the achievements of Central European architecture, is made all the more puzzling when Van Doesburg demonstrates a clear understanding of the architectural intentions of Adolf Loos with the following quote:

> It is always a sign of a kind of narrow-mindedness when a person dresses very individualistically according to his or her own design and own tailoring, - The

> modern intelligent person must present a mask to other people. This mask is the general life form, originating from necessity and culture, a person's life habits, his clothing and physiognomy, all crystallized together in his dwelling. His dwelling is his mask.[30]

Perhaps like many others, he saw Loos as essentially Austrian/Viennese and therefore not of Central Europe origins, despite his Moravian antecedents.

Although Frampton in his work catalogues the omissions of architects Jaromír Krejcar, Karel Tiege, and the Devenstil [sic] group from previous publications, it is very striking that he does little to rehabilitate the importance of Central European developments – except for citing the importance of Adolf Loos in terms of his influence on Le Corbusier. This influence is particularly important in terms of the 'free plan' as demonstrated in Loos' 'Raumplan', where the bridge between the first phase of modernism and the later Modern Movement was established and could be seen to transcend cultural legacies. As an acerbic critic of modern culture, Loos reasoned that architecture needed to develop beyond the nineteenth century form and be plastic and fluid in resolving the architectural space within in contrast to the more formal resolution of the external architectonic structure. First postulated by Loos, this proposition was to be developed in the work of the later generation where the radical 'free plan' was fully resolved.[31]

> The logical deduction was that construction pure and simple was to take the place of the fantastic forms of past centuries, the luxuriant decoration of past epochs. Straight lines right-angled edges. That is the way the craftsman works who has an eye to function and has materials and tools to hand.[32]

This statement (one of many written by Loos) dates from 1917 and could well serve as the clarion call for the Modern Movement, echoed many times over and by none more so than Le Corbusier's in *Vers une Architecture* (Towards a New Architecture, 1931 revised1986), a seminal text on the development of building and town and city planning with regard to aesthetics, economics, morality and functionality.[33] Here Le Corbusier sets outs in a declamatory fashion his views on architecture, drawing on the work of Garnier, Cerdà, Sitte, and Geddes amongst others. In the first section mass, surface and plan are considered in light of their application in the manufacture of liners, aeroplanes and automobiles. Subsequently, this understanding of materials and technology is applied to the discipline of architecture which in a modern world is seen as a combination of plastic invention, intellectual speculation and higher mathematics.

By adjusting the accepted chronology of the Modern Movement, present in so many histories, so that Le Corbusier comes into play at the end of the first so-called 'pioneer'

phase along with contemporaries like Mies Van der Rohe and Phillip Johnson but go on to dominate the second so-called 'international' phase, does a more balanced view of the development of the Modern Movement appear. However advocating this improved symmetry is difficult because of the weight of history and the bias in the literature. Pevsner, Banham, Benevolo and Frampton have all provided definitive architectural histories but it is clear that their focus lies within Western Europe and America. It may be that international politics post-1944 did not allow for anything within the now Communist East to be seen as an important precursor for the development of the Modern Movement.

This asymmetry has only recently been addressed by authors like Adolf Max Voght and his ground-breaking work Le Corbusier the Noble Savage–Toward an Archaeology of Modernism (1998) which offers 'an unexpected and vital piece of Le Corbusier scholarship':

> Adolf Max Voght looks to the early, formative years of the architects life as a key to understanding his mature practice, taking aim at such fundamentals as "Where did his design vocabulary come from?" and "How was his aesthetic sense Formed? [34]

Voght points out the significance of Le Corbusier's perambulation around Turkey, the Balkans and Central Europe during 1911 which exposed him to ideas, writings and buildings the like of which he had dreamed of but never experienced which were captured in copious notebooks and sketch books.[35]

In the following quote from Peichl, Le Corbusier appears to be more accepting and constructive towards Czech architecture than does Theo van Doesburg:

> When I first saw the Trade Fair Building (Palace) I felt totally depressed, although I did not approve of the building whole-heartedly. However I did realise that the large and convergent structures I had been dreaming of really existed somewhere, while at the time I had just built a few small villas.[36]

This observation, first made by Le Corbusier in 1930, resurfaced as a growing interest in Central European architecture and planning began to emerge in the mid-1980s. The first publication in the English language to fully address Central European advances was W. Lésnikowski's East European Modernism, Architecture in Czechoslovakia, Hungary and Poland between the Wars (1996).[37] In this work Lésnikowski, together with Vladimír Šlapeta, John Macsai, Janos Bonta and Olga Czerner argue that:

> Despite the collapse of communism and the dramatic change in the political and socio-cultural nature of former Central European countries, information on the twentieth century modernist architecture of Czechoslovakia, Hungary and Poland available in the west has been imprecise and fragmented. Forty years of communist domination of this part of the world eliminated any rational and objective historical analysis of the modernist heritage.[38]

This was represents the most forthright statement in terms of how Central European experts regarded the widespread omission of the contribution made to the Modern Movement by their countrymen. The volume was also vital in terms of providing many illustrations had not been seen in print previously.

This groundbreaking tome was soon followed by the most comprehensive work to date. Ákos Moravánsky's Competing Visions, Aesthetic Invention and Social Imagination in Central European Architecture, 1867-1918 (1998), described by Eric Dluhosch, (Professor Emeritus, Department of Architecture, Massachusetts Institute of Technology, MIT) in the following terms: [39]

> Ákos Moravánsky's remarkable achievement is his ability not only to show the reader what is distinctive in the architecture of the countries formerly designated by westerners as 'Eastern Europe', but also to convincingly demonstrate what they hold in common as members of an all-European culture; His phenomenal knowledge of both major as well as minor languages of Central Europe allows him to tap into sources hitherto inaccessible to western scholars His narrative proves beyond any doubt that the term 'Central Europe' implies not only Vienna, Budapest, Warsaw and Prague, but draw into its orbit Berlin, Paris and London as well.[40]

It is clear that this work represents a lifetime's knowledge of the subject drawn from a scholarly understanding of the many languages and complex history of Central Europe. Moravánsky poses many interesting aesthetic and cultural questions in a lucid text supported by numerous illustrations.

It is unfortunate that Moravánsky's study ends in 1918 as his insight and knowledge would be of benefit to any study of the inter-war period. However, this gap in the chronology was addressed in part in 1999 with the staging of the exhibition Shaping the Great City, Modern Architecture in Central Europe 1890-1937. This exhibition and its accompanying catalogue takes the lineage of cities like Vienna, Budapest, Prague,

Zagreb, Ljubljana, Brno, Zlin, Krakow and L'viv, exploring the architectural works and forms of city planning generated in such places. [41] As Blau and Platzer note:

> From the start we have seen Shaping the Great City: Modern Architecture in Central Europe, 1890-1937 less as a definitive study than as a way to suggest avenues of research and to open discussion of the central issues it raises.[42]

The exhibition claimed:

> … that it was in the lived cities of the region that the conflicting aspirations of empire and people and the intersecting of urban modernisation and national autonomy gave shape to a modern architectural culture[43]

However, these concerns were not addressed directly. Blau and Platzer offer little exploration of the development of cities or urban modernisation. There is some recognition of Ebenezer Howard, Camillo Sitte, Ildefons Cerdà, Raymond Unwin, Patrick Geddes or Lewis Mumford and their models of smaller, autonomous residential districts but it is Otto Wagner and the advocates of the metropolis who form the principle subjects of the exhibition and sadly, the absence of so many important prime movers from Central Europe presents a less than complete argument.

To redress these omissions it is necessary to go back to source with G.R. and C. C. Collins and their two seminal works, namely Camillo Sitte - City Planning According to Artistic Principles (first published as *Der Städtebau, nach seinen künstlerischen Grundsätzen* and also known as City Building [Vienna, 1889]) and Camillo Sitte and the Birth of Modern Planning (1965).[44] Within these two translations is the essence of city planning as developed by Sitte from 19th century German theory and practice. Historical references to Baumeister, Stübben, Classen, Mayreder, Howard and the planning hygienist Pettenkofer, illustrate a significant work which reveals Citte's specific aesthetic predilections and architectural credentials.

Howard's Garden Cities of Tomorrow (originally published as Tomorrow: A Peaceful Path To Real Reform, 1898) took these arguments further with its broad exploration of the 'Garden City, Cité Jardin, Gartenstadt, Cuidad-jardín, Tuinstatd', becoming one of the founding texts of modern city planning. [45]

It is perhaps unfortunate that F. J. Osborn who wrote the preface to the 1966 edition and regarded the book as one of the most important works of planning literature, should believe it remained unread by many planners. He further suggests that those planners who have read it have forgotten what it said and in his opinion, they [the

planners] need to pay far greater attention to the purpose of this work. As Mumford also observed:

> This is not merely a book for technicians: above all it is a book for citizens, for the people whose actively expressed needs, desires and interests should guide the planner and administrator at every turn.[46]

Town planning was explored extensively by Lewis Mumford in texts like From Technics and Civilisation (1934), The Culture of Cities (1938), The City in History (1961) and The Urban Prospect (1968). He, more than anyone else, has made consideration of how people live and the cities they inhabit a key issue for any study of modernism and the Modernism Movement. As Von Eckardt noted:[47]

> He stands, along with men like Freud, Einstein, as a great mover of our time…Mumford's insights into the nature of the human habitat will surely move us toward a more comfortable and creative place to live.[48]

Would that Von Eckardt's observations were true of suburban communities but they are an oversimplification of much greater complexity, as Spiro Kostof demonstrates so vividly in texts like The City Shaped - Urban Patterns and Meanings Throughout History (1991) and The City Assembled - The Elements of Urban Form Throughout History, (1992).[49] From the organic patterns to the formalised grid and cities executed in the 'Grand Manner', Kostof has provided a vitally important study for architects, planners and social historians, taking into its orbit Vienna, Budapest, Prague, Cracow and other cities within Central Europe. All are considered by understanding the development of cities as if viewed from the air, examining their development historically and geographically from ancient times. The second volume develops the theme of plasticity, looking at the city from ground level and from the centre outward to the edges to explore and explain their expansion and development.

The singular work of Phillipe Panerai, Jean Castex, Jean Charles Depaule and Ivor Samuels in Urban Forms: The Life And Death of the Urban Block (2004 - first published as *Formes urbaines: de l'îlot a la barre* in 1977) concentrates on the development of the urban block from Hausmann's Paris to the superblocks of Radburn.[50] The work is most informative in Chapters1-7 which traces the progress from 'Hausmannien Paris' through 'The Garden Cities' to the 'Cité Radieuse' and finally to the 'Development and Diffusion of architectural Models'. Within the pages of this slim volume one of the most insightful examinations of the growth of our urban landscape from the 1850s is contained. Authored by a practicing group of architects and urban designers, the book examines in some detail how urban modernism and the Modern Movement have upset

the natural morphology of cities. In abolishing historical street plans and isolating buildings which were once focal points for the confluence of the major thoroughfares, the authors argue that the destruction of these relationships leaves us bereft, looking for other urban forms that can accommodate modern ways of life while at the same time maintaining the qualities of the traditional town.

As this thesis will argue, a historical case can be made that Zagreb, Ljubljana, Cracow, Zlin, Prague and Budapest as examples of Central European development have handled these problems through precise planning and regulation better than their Western European counterparts. Perhaps in all but Zlin, which was built on the English 'Garden City Model', the preservation of the ancient road patterns, as in the development of Roman Emona to today's Ljubljana, is the key to this success. It is clear that the conservation of the old in sympathetic synergy with the development of the new leads to the best resolved towns and cities with regard to transport infrastructure, building and the quality of life for the citizens.

Town and city dwelling is also discussed by Joseph Rykwert in The Seduction of Place (2000). Through an analysis of town planning from the late seventeenth century through Howard, Sitte and Cerda to the twentieth century, Rykwert arrives at the view that it has been the denigration of metropolitan values like tolerance, cultural vitality and pluralism (which are seen as the 'nourishing character and soul' of the urban landscape) that has led to a decline in the quality of life for inhabitants of towns and cities. This may well be true in relation to many Western European and American conurbations but (interestingly) it is less so for Central Europe where ethnicity, religion and cultural preferences have determined that this sense of place and belonging is strongly held across all of the diverse communities.

During the writing of this thesis there have been three new works coming from the wider Central Europe. The first two include Djuric and Suvakovic's Impossible Histories, Historical Avant-gardes, Neo-Avant-gardes, and Post Avant-gardes in Yugoslavia, 1918-1991 (2003)[51] and Blagojevic's Modernism in Serbia, The Elusive Margins of Belgrade Architecture, 1914-1941 (2003). [52] Both works break new ground and add to our understanding of Central Europe and the Balkans during this formative period from1914 to 1941.

The third work, Art Design & Architecture in Central Europe 1890-1920 by A. Clegg (2003) is a wide-ranging account of both applied and fine arts within Central Europe where it is recognised that it was:

> … a place marked by a simultaneous fear and celebration of ethnic, linguistic and cultural diversity that has enormous international resonance a century later.[53]

It is unfortunate that this enthusiastic and informed observation is contradicted by much of the text. Perhaps as with a number of other American sponsored works cited in this Literature Review this volume is incapable of balancing 'insider' and 'outsider' positions due to pre-determined histories and chronologies as discussed in this text.

In addition to published works a number of Exhibitions have informed this thesis. On 27th February 1980, The Hungarian Avant-Garde Exhibition was staged by the Hayward Gallery and the Arts Council of Great Britain with the collaboration of the Hungarian Institute for Cultural Relations. John Willett noted how:

> At first sight the works in this exhibition might seem like a Hungarian (hence relatively unknown) version of all of the recognised art movements from the Fauves up to the eve of Surrealism in 1924 … then followed them in veering round to the new Constructivism being developed in Soviet Russia.[54]

This exhibition introduced to a western public an almost unrecognised chapter in the history of Hungary and marked the beginning of a greater awareness of planning and architecture in Central Europe.

This event was followed by an exhibition of the works of Jože Plečnik (MOMA Oxford, 1983)[55] which helped establish Plečnik's importance through the exhibit of plans, sketches and models; all of which was summed up by Ian Bentley and Durda Grzan-Butina in the catalogue in the following way:

> This is the first publication to expose the work of Plečnik's most fertile period-his projects in Ljubljana from 1920 to 1957 – to an audience outside of Yugoslavia.[56]

Clearly this belated recognition of the work of artists and architects from Central Europe by a Western public was gaining considerable momentum and by 1987 the auspices of the Architectural Association (London) provided the venue for a number of Austrian and Czech institutions to collaborate in the exhibition Czech Functionalism 1918-1938:

> Today both throughout Austria and here at the Academy of Fine Arts in Vienna, the achievements of Czech architects of the 1920's and 1930's are seen as especially worthy of interest. At the major schools, moreover, they are eagerly discussed as an alternative to the masquerade of so-called Post-Modern architecture. Because of their content, they are gaining more respect.[57]

The exhibition 'Shaping the Great City' (1999), clearly responded to Peichl's wish (noted above) to make the rediscovery of this 'especially worthy' architecture to be part of a debate beyond Europe.[58] With the sponsorship of The Getty Research Institute, Los Angeles, a major touring exhibition was organised. Seen in Vienna, Montreal, Prague and Los Angeles this exhibition alerted an international audience to the hitherto unappreciated history of architectural planning throughout Central Europe from 1890-1937. The approach succeeded in creating debate and raising 'avenues for research' around the central themes as noted by Eve Blau in the accompanying catalogue:

> Architecture, during the nearly fifty-year period of intensifying political conflict and radical social transformation covered by this volume, was therefore charged not only with producing the spaces of the emerging culture of the modern city, but was also with constructing meaning in relation to its complex multinational history, diverse cultural traditions, conflicting political agendas and identities.[59]

Another exhibition in 1999 brought Polish history to the fore, in the figure of Katarzyna Kobro:

> The effort to place Kobro in her rightful international context was undertaken by a handful of Polish curators and academics from the 1970's as part of their campaign to bring wider recognition to Polish constructivism as a whole and in particular to the collections of the Museum Sztuki [Art Museum] in Lodz.[60]

As with the other exhibitions noted which owe their origins to placing parts or all of Central European modernism and the Modern Movement within the fullest context, the International Symposium on Czech Design, Culture & Society: Changing Climates (2005) took for its direction a display of 100 designs of Czech origin as primers to a number of papers. Raising issues around 20th century 'Czech, Fashion, Dress and issues of National Identity', it closed with presentations from the leading Czech graphic and product design groups, Olgoj Chorchoi and Studio Marvil. This event set the agenda for Central European design developments to be reappraised not only in architecture, but also in graphic design, product design, and fashion design.[61]

At this point a review of publications about individual architects/planners might be anticipated, where one author's opinion might be balanced against those of others. However, such a description is not possible because of the very small number of monographs in English or English translation. A core group of some fifteen academics and their research teams are responsible for bringing the history of Central European architecture and town planning to a wider audience to date.

In selecting works on Otto Wagner for example, it was imperative to the validity of this thesis to find works which were not coloured in their argument by being treatments that knew little or nothing of the Wagner School as both Viennese bastion and training ground for Central Europe's new architects. Consequently, only two works were found useful; the first authored by two Austrians, Geretsegger and Peinter and the second from the pen of Vera Horvat Pintarić of Croatian birth.

Otto Wagner 1841-1918 (1964), by Geretsegger and Peinter, 1964, represents a history written by two architects from the Academy of Applied Arts, Vienna. Heinz Geretsegger and Max Peinter bring considerable insight to the work of Wagner particularly as they echo his experience, in being architects, designers and writers who have completed industrial and administrative buildings in addition to exhibitions and trade fairs.[62] From the introduction by Richard Neutra to the Authors' Note p.271 the text adopts a standpoint where the all too often unthinking reverence applied to Wagner's oeuvre in other writings is replaced by a well observed critique.

> Many contemporary architects feel that the architectural polemics of the turn of the century, established a completely self-contained system which is now greatly admired for having 'anticipated' current modes of thought with such amazing accuracy. Consequently a building by Otto Wagner is regarded by these modern thinkers as an imperfect illustration of just such a 'system', which means that – for them – the tangible reality of the actual physical building constitutes no more than a number of individual acts of anticipation.[63]

This critical position underpins their thorough re-examination of fact and opinion. The section 'Life' within its opening nine pages offers illuminating biographical detail which helps give Wagner (a complex man, a *grand seigneur*) a very human quality. The critique unfolds, supported by new photographs which offer instructive comparisons across Wagner's major works. Equally impressive is the exhaustive bibliography which cites numerous obscure sources particularly in relation to competition decisions and Wagner's lifelong battles with his critics. This singular work also carries a comprehensive chronology and a street plan locating Wagner's buildings in Vienna. If it were possible to reduce the size of the volume it would become the guide to any scholarly appreciation of Wagner and the rich architectural legacy he has left behind.

Horvat Pintarić's Vienna 1900 (1989), in common with the work from Geretsegger and Peinter adopts an unusual standpoint in beginning in 1880 with Artibus and finishing in 1915 with the Emperor Franz Josef Cancer Hospital, Michelbeuren, works which (interestingly enough) do not appear in the exhaustive 'chronological table' assembled

by Geretsegger and Peinter. This of course is not a deliberate omission but it is evidence of how sources may differ from one another. In the former much use is made of Wagner's publication of his designs in *Einige Skizzen Projekte und ausgeführte Bauwerke* as it is in Horvat Pintarić but the latter also had at her disposal the Historisches Museum der Stadt Wien. The inclusion of these later drawings with those taken from *Der Architekt* extends our knowledge of Wagner's buildings and his superb draughtsmanship in handling ink and watercolour on coloured stock to give memorable impressions of what it was that Wagner conceived.

Pintarić also understands the significance of the Wagner School as a training ground for the future architects of Central Europe - 160 persons are said to have been Wagner's pupils. These included Jan Kotěra, Josef Chocol, Pavel Janák, Jože Plečnik, Viktor Kovačić, Vjekoslav Bastl, Wunibald Deininger, Emil Hoppe, Otto Schonthal, Karl Maria Kerndle and Marcel Kammerer. In no other publication is such a list available. As Otto Antonia Graf and Marco Pozzetto point out, these students and their projects had:

> importance for the architecture of the future. This is an impressive collection of bold designs that may rank among the incunabula of twentieth century architecture.[64]

It is therefore rather surprising when other works choose to ignore or deny this progeny.

Another work which has helped address omissions is Jan Kotěra 1871-1923 - The Founder of Modern Czech Architecture by Slapeta et.al. (2001). As the only monograph on Kotěra in the English language this volume and its accompanying exhibition is seen as a response to the dearth of works on Kotěra and a riposte to the unfavourable reception to the earlier display of his work in 1926, 1944 and 1972.[65] This work draws upon hundreds of documents translated into English for the first time and is illustrated by over 400 photographs, illustrations and drawings, many never seen before in the West, to present the most compelling evidence of Kotěra and his work.

Of particular importance is the listing of Kotěra's colleagues, assistants and students (86 names) who were to form the most prolific and influential architects, planners and designers of their day.[66] These listings in conjunction with the references to texts on Jan Kotěra, books, articles in journals and newspapers and exhibition catalogues are a state sponsored project conducted by Peter Krajči (Ministry of Culture of the Czech Republic). As director of the National Technical Museum Architectural Archive, Prague, and as key respondent in the text of this thesis, Peter Krajči with Vladimír Šlapeta and Radmila Kreuzzigerová have compiled the most important singular directory of sources on the history of Czech Modernism. The insights and illuminating text from an august

panel of contributors, unequalled then as now, establishes this work as a model of how such studies should be prepared.

Plečnik by Peter Krečič, 1993, is the first monograph to be written in English to offer the complete works of the Slovenian architect, planner and designer who left an indelible mark on the history of modernism and the Modern Movement.[67] From Vienna to Prague and Ljubljana with works in the newly created Yugoslavia Plečnik's range was immense. All is captured in a lively narrative that gives enormous insight to this very complex man. As the world's leading authority on Plečnik and as custodian of Plečnik's house, Dr. Peter Krečič (Director of the Architectural Museum, Ljubljana) occupies a privileged place. This work explores Plečnik's position as a member of Slovene Moderna, a movement which bridged the period from the late nineteenth century to the end of the First World War.

In the inter war years and post war period, Krečič reveals how Plečnik was integral to our understanding of the development of twentieth century modernism, particularly in his use of materials in reworking historical buildings. Throughout the text Plečnik is revealed as a man capable of resisting all dogmatic approaches to planning and architecture to arrive at forms that combine a playful eclecticism with a rational functionalism. As shown by the over 300 illustrations all of his work was both passionately felt and intensely personal but what Krečič reveals above all in this text is that Plečnik is not easily pigeon-holed; in essence he does not belong to any of the myriad groups labelled by art, design and architectural historians during this period.

Jože Plečnik 1872-1957 by Prelovšek (1997) is a wide ranging exposition of all Plečnik's work from his beginnings with Otto Wagner to the Žale Cemetery opened in 1940.[68] The text (translated from the original German) has neither the quality nor understanding of the earlier work by Krečič. This may be because Prelovšek (guest professor in Salzburg and Prague before becoming director of the Institute of Art History at the Scientific Research Centre of the Slovenian Academy of Science and Art, Ljubljana) was obliged to produce a narrative within a very formal construct – either that or much has been lost in translation. Whatever the truth of this matter other works by authors like Krečič, Andrews, Bentley, Gržan-Butina, Šumi, Podrecca, Gilkey Dyck and Gooding in further short monographs and catalogues, offer insights missing from this work.

Karel Teige, 1900-1951 L'Enfant Terrible of the Czech Modernist Avant-Garde by Dluhosch and Švácha (1999)[69], contains an introduction by Kenneth Frampton which is

even more forthright than his initial condemnation of the ignorance of Czech Modernism in Modern Architecture: A Critical History. The contributors to this work have been translated into English for the first time and include Karel Srp, Lenka Bydžovská, Polana Bregantová, Rostislav Švácha, Vojtěch Lahoda, Miroslav Petřiček Jr., Rumana Dačeva, Klaus Spechtenhauser and Daniel Webb and also Miloš Aulickỳ, the nephew of Karel Teige, who went to considerable length to correct what he perceived to be:

> the many gaps and errors in recent literary biographies about my uncle, Karel Teige.[70]

Chief among these errors was a misunderstanding of his political affiliations. Teige was never a card carrying member of the Communist party and denounced Stalin's Moscow trials of 1936 as a 'counterfeit comedy'. This denunciation of Stalin protected him during the Nazi occupation but would cause him to hide his foreign books and burn all of his foreign correspondence when labelled a Trotskyite counter-revolutionary. Sadly, Teige and his family were pursued to their deaths, his apartment was 'sealed' and over eight linear metres of books and papers were confiscated by the state after the death of his partner. One can only wonder what these writings may have been, perhaps they will emerge in the fullness of time if they are not already destroyed thereby leading us to a greater understanding of Teige and all his works.

One final work used in the preparation of this text was, Le Corbusier and the Continual Revolution in Architecture by Charles Jencks (2000). Unlike many previous publications on Le Corbusier characterised by hagiography and weighed down by inaccuracy and imprecise attribution, this work responds to recent scholarship and new theories of architectural change. In essence by using the definition of 'Exemplary Creator' for Le Corbusier, as defined by the cognitive scientist and historian Howard Gardner, Le Corbusier is included in a group of luminaries who dominated the early twentieth century, together with Freud, Picasso, Stravinsky, T.S. Eliot and Martha Graham, Einstein and Ghandi.

Charles Jencks very clearly indicates a lineage which places Le Corbusier at the epicentre of creative activity and whether we agree or disagree with this argument the premise on which it is modelled is abundantly clear. Jencks goes so far as to present a visualisation of the evolution of twentieth century architecture. All is stated very clearly even though 'the diagram is better understood for the complex relationships if seen in three dimensions'. This very clear visual model of the importance of Le Corbusier offers a view that allows considerable debate and discussion. In truth the reasoning contained within Gardner's definition of an Exemplary Creator relies on a number of immutable conditions.[71] Without labouring the point, many of the architects of Central

European origin described within this thesis qualify according to this rubric, which only serves to underline the fact that their contribution to modernism and the Modern Movement requires far greater examination and exposure.

Any review of the literature relating to the subject of this thesis will conclude that there is a considerable amount yet to be uncovered in placing events within Central Europe within a fully informed context and that the publication of any new works and/or the staging of further national and international exhibitions is to be welcomed. And in this connection, the thesis which follows must be regarded (like much of the literature described above) as another part of the academic effort to write the architecture of Central Europe back into the history of the Modern Movement.

Chapter Synopsis

Introduction Central Europe Defined
The thesis opens with the contested notion of *Mitteleuropa* or Central Europe and establishes a framework, temporal and geographical for considering the principal actors. Key terms of reference are defined as are the methodologies employed by the thesis. A Literature Review of publications, exhibitions and conferences is included with a chapter by chapter synopsis

Chapter 1 National Styles and Urban Planning 1890-1910
Within this chapter the emergence into modernism from the 19th century historicism and Beaux Arts, is discussed in the context of an expressed need within the peoples of Central Europe to assert their individual ethnic and cultural identity through the adoption of National Styles.

Chapter 2 Architectural Development in Towns and Cities 1890-1910
The thesis now confirms a chronology for the development of modernism and the dissemination of these ideas through publication of the emergent forms of planning and construction throughout Central Europe that would become the Modern Movement.

Chapter 3 Architectural Development in Towns and Cities 1910-1923
This chapter consolidates the chronology established in chapter 3 by reference to the growing force of the Modern Movement. This advancement in architectural practice is discussed in relation to the development of Rondo-Cubism in Prague as a National Style.

Chapter 4 The Development of Functionalism in The New Czechoslovak Republic 1924-1939

The thesis moves to investigating issues of socio-economic progress in the Czech lands. This developing prosperity found a welcome partner in the widespread adoption of Functionalism as an arm of the Modern Movement. Zlin is discussed as an example of this planned expansion where it is argued that modernism in the form of an English garden City model was married with a Functionalist system of standardised construction methods.

Chapter 5 Jože Plečnik, The Regulation of Ljubljana – Classical Modernism 1928-1939

The debate about Jože Plečnik's position within architectural practice vis-à-vis modernism and the Modern Movement is considered through the remodelling of Ljubljana as a 'Slovene Athens'. Was this return to a classical modern model part of returning the Mediterranean feel to Ljubljana in establishing 'his city' as an independent capital?

Chapter 6 Hungarian Functionalism and Polish Constructivism – Architecture and Planning as Social Advancement 1924-1943

Consideration is given in this chapter to the acceptance of Functionalism, already admitted, and Constructivism as representatives of the Modern Movement throughout Hungary and Poland. The position of city planning as a component for developing a stronger economic infrastructure is examined in the context of these advances apparently leading to a better way of life for all the citizens

Reflections on the Themes

Reflects on the arguments developed by the thesis and its central propositions identifying the contribution to knowledge with due regard to the role of others, as identified within the text. Finally the chapter concludes with potential strands of post-doctoral research which have been identified in examining the arguments in the thesis.

Notes to Introduction

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[7] see Taylor A. J. P., 1970, *The Habsburg Monarchy,* Chapter 11, The Making of Dualism
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[9] Jencks C., *Modern Movements in Architecture,* Penguin Books, Harmondsworth, 1973, p.11
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[11] During the summer of 1999 an exploration of the Getty Databases 'International Repertory of the Literature of Art' (RILA) and the 'Avery Index to Architectural Periodicals' identified a small number of publications discussing Central European architecture during the period 1895-1940. Using the periodical archive of the RIBA reference library articles of interest were identified, the information from which would be used to extend knowledge prior to interviewing respondents.
[12] In attending the private view I was able to discuss ideas of Polish Constructivism with a highly informed group of experts including Katarzyna Kobro's daughter Nika Strzeminska and was directed by one of the guests to 'The Polish Avant Garde 1918-1939' published in Warsaw in difficult circumstances in 1981.
[13] Although it was intended to speak with Rostislav Svacha after his presentation this was not possible, we did agree a visit to the Charles University in October 2000.
Fortunately the event had an added impetus in being seated next to Dennis Sharp and the late Catherine Cooke with whom ideas were discussed and further contacts established.
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CHAPTER 1

NATIONAL STYLES AND URBAN PLANNING 1890-1910

CHAPTER 1

National Styles

The street plan of much of Central Europe, Ljubljana, Cracow, Prague and Zagreb had been created many centuries before as the Greek model of Acropolis and Agora or the Roman Milesian model. With the development of the grid iron pattern, after Cerdà's Barcelona (1855) the street existed as a thoroughfare and not a dark, devious passage herded between buildings. Although it is possible to attribute the widening of roads and streets to vehicular traffic, this overlooks practices particularly evidenced in Maya, Inca, and Indian cities where religious ceremonies and military and civic processions had a need of greater space. Equally, the ascription of grid iron systems, with their *insulae* (blocks of houses) and connecting thoroughfares to the conquests of Alexander the Great is to deny the regular plan of Mohenjo Daro laid out some centuries before in 2,500 B.C.:

> All parts there were designed to function within a whole. The slightly inaccurate grid iron covers about one square mile of ground and all the streets, about thirty three feet wide and unpaved, run from east to west and north to south [and] were probably directed by ritual laws as well as by the direction of the prevailing winds.[1]

From 1860 the centralisation of economic life and culture in Vienna led to the creation of a vibrant, highly-educated professional population drawn from all of Austria-Hungary. These professionals although being educated in Vienna were not Viennese nor Austrian, their own understanding of ethnicity determined they were Magyars (Ethnic Hungarians), Czechs, Slovaks, Poles and Ruthenes as the Northern Slavs; Croats, Slovenes and Serbs as Southern Slavs and as Transylvanian Romanians and Istrian Italians. The increased participation of the Slavs and others in Viennese life from 1867 was occasioned by the disastrous expansionist ambitions of the Emperor Franz Joseph and his Government with failed military actions against the Italians in 1859 and an equally disastrous engagement against the Prussians in 1866. To protect Habsburg authority the Dual Monarchy of Austria-Hungary was created in 1867 with Budapest and Vienna as their eastern and western capitals respectively allowing cultural, economic, and artistic life to be devolved to the other cities of the empire.

Unlike the Western European model of expansion based upon the development of industrialisation and urbanisation, Central Europe as a predominantly agricultural and rural economy did not possess a unifying element of advanced commerce to drive change. The speed of advancement in all fields until 1900 was hampered by reference

to the past. In architecture this was seen as historicism, an obsessive interest in the past. We find historicism in the work of Ferdinand Fellner (1847-1914) and Hermann Helmer (1849-1914) in Beaux Arts, Neo Baroque and Neo Renaissance mixes. As architectural ambassadors of the Viennese court Fellner and Helmer constructed these buildings of great monument regardless of any national sentiments (1.1).

In opposition to this historicism was the idea of remembrance, or more properly recollection of the past, where that which was regarded as the best in whatever form was re-assembled as a national style. One of the first examples of this national style was seen in the building of the Museum of Applied Arts, Budapest, Ödön Lechner, 1892-1896. The difference between historicism and national style is that with historicism there may be little connection with the place or time in which it is now being used whereas the national style is predicated on a perceived shared linguistic and cultural route. In the case of Lechner's national style this was taken from the studies of József Huszka who from 1881 urged Hungarian architects to,

> base the renewal of architectural style on ethnographic discoveries.[2]

As part of a lecture programme entitled 'The Past and Present of Our National Style'. Huszkas' thesis, which Lechner shared, was that Hungarian folk art in the use of decorative motif had showed striking similarities to Indo–Persian and Moorish art and that therefore pre-Christian Hungarian art and culture should lead in any positioning of their national style.

This position of national styles was repeated throughout the countries of Central Europe leading architects to reconsider their nations' histories using the teachings of Gottfried Semper one of the most influential German architects of his time who was defining the difference between adornment and ornament and how both related to the structure. His hypothesis was that adornment was an autonomous element applied to a building as an indicator of purpose as in Greek sacred architecture.[3]

> The parts that were resting places of construction, such as the pediment, the frieze, and the spaces in between the beams were suitable for adornment by high art for symbolic-allegoric representations of the ideal purpose of the temple.[4]

Ornament was seen as part of the building, in part to frame the adornment making the function of ornament an integral part of the structure. From this understanding of high art Semper proposed architecture as a universal language able to communicate ideas of social progress and freedom as the ultimate goal of history. Semper further argued that by applying strict analytical process in considering origin and function, the confusing

layers of history within a single architectural work would be stripped away revealing the essential language of the building. As the adoption of a fashion or faddish style would completely contradict Maks Fabiani's deeply held view of a national element in architecture, he would not allow the adoption of an essentially decorative applied Viennese form in any of his work. In questioning Semper's view of art being the individual differences between civilisations and their specific requirements, for example the Egyptian as contrasted with the Greek, the Roman as contrasted by the Hun.[5]

Although it is easy to simplify Semper's observations to one of 'nationality and provenance' there is much more to his apparently simple comments. What he postulated is immensely searching and allowed many 'Viennese' architects and designers who were to succeed him to understand who they were and what their work represented. In the comparison of a *situla* (an Egyptian water bucket) and the *hydria* (a Greek water vessel) Semper quite clearly defines both objects very precisely in terms of their geography, topography and hydrography. In closing this statement Semper indirectly questions the beauty of the Greek forms. Adolf Loos mischievously puts it:

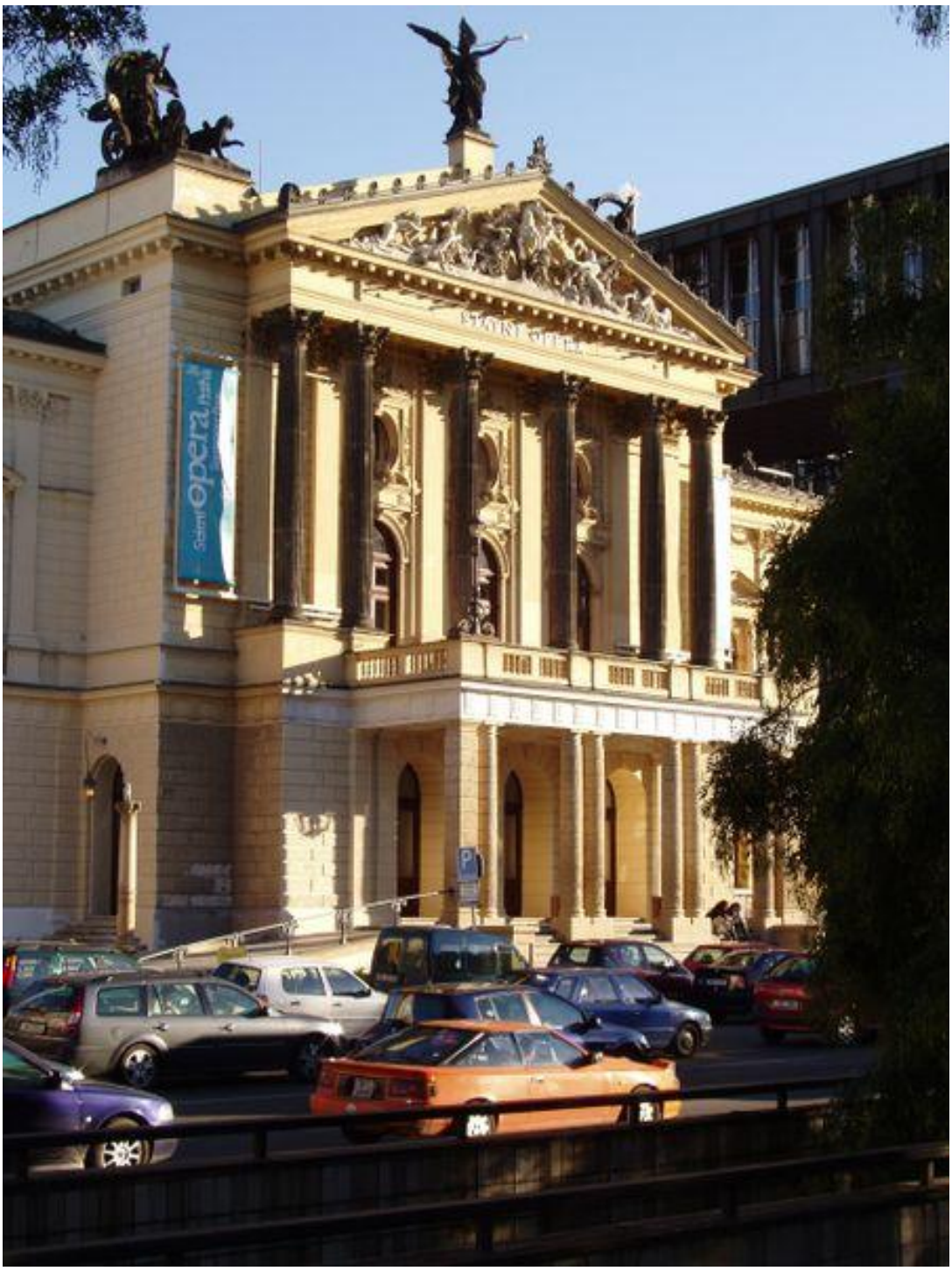
> What! Those magnificent Greek vases with their perfect shapes which seemed created solely to demonstrate the instinct for beauty of the Greek people? Their shapes a product of crude functionality. That means these vases were practical! And we always thought they were beautiful! We have been misled. We had always been taught that beauty and practicality were mutually exclusive.[6]

It is fitting that this quote comes from Adolf Loos' 'Ornament and Crime' as this work is one of the most misconstrued critiques of the time. Perhaps the difficulty encountered in understanding Loos then as now is that an ironic humour is present in all his written works and speeches. One unfortunate who was the subject of Loos' barbed wit was his old adversary, Josef Hoffmann:

> Only in Vienna is one grabbed by the lapels from time to time and forced to hear an admiring, "Ah, Hoffmann!" Not me though. I take the English approach. But in Vienna designers are made into demigods, professors, university lecturers, and for a donation receive honorary doctorates.[7]

The simplest reading of Loos always leads to understanding whether it is a veiled attack on position or privilege, as above, or a very clear statement of principle. The true problem for certain groups of Viennese was they could not tolerate his observations as they questioned and undermined their positions of privilege. This inability among the Viennese to understand how to move from the nineteenth to the twentieth century is without doubt a defining moment in modern architecture relying on the triumvirate of

1.1 Ferdinand Fellner and Hermann Helmer, New German Theatre, Prague 1887



Wagner, Loos and Fabiani to disseminate their wisely considered views of modernism, via a brief flirtation with some industrial aspects of Secession. In eschewing ideas of *Heimatstil* (German cottage architecture) or the pared down results of *Biedermeier* (refined cottage style) a new style was born that would grow into modernism via the dual functions of town planning and architecture throughout Central Europe.

Fabiani had made recommendation to Ferdinand Rainer as regards Loos' suitability for creating something original with the Café Museum Vienna, 1899, and latterly to furnish Rainer's apartment at Schwindgasse 13, Vienna, 1903.[8] It is clear that because of Fabiani's adherence to a new aesthetic he would perforce connect this to his underpinning knowledge of classical forms following his studies of antiquity of the classical world. As with Wagner and Loos, Fabiani would create truly modern works based on classical proportions and truth to materials. These works were in no respect Secessionist and bear no comparison with J.M. Olbrich or his followers.[9] Fabiani, Loos and Wagner were purists where there was no confusion between structure and decoration and where decoration was used it would be a bold cladding of marble or ceramic tile, not hesitant, piped-on tracery.

Anathema to them was Olbrich's habit of using extensive visual 'tricks' to convey an idea. The truth of this was revealed in 1985-1986 when two Viennese architects, Otto Kapfinger and Adolf Krischanitz, researched and reconstructed the Secession House, Vienna, 1896. What they discovered surprised everyone, but would have been little revelation to Wagner, Fabiani, Loos and their circle, as they knew that Olbrich, far from breaking away from the academy and classical forms or even poking fun at the notions of classicism, employed the classical conventions of cyma and entasis in the design of the Secession House. Kapfinger and Krischanitz found that the 'box' of the Secession House is by no means a rectangular geometric volume: every detail is shaped with slanted surfaces and detailing that creates visible tension, pressure and weight, in order to,

> anthropomorphize tectonic form to adjust it to the dynamics of perception. In this way, instead of a tensionless regularity of vertical and horizontal planes, a more appealing composition was achieved that appears monumental despite its relatively modest dimensions.[10]

Could it be that Olbrich, the father of Secession, was making reference to Classical forms? Perhaps it is necessary to look for further contradictions and resultant over simplifications of leading architects, ideas and works at this time.

Fabiani aligned himself with Alois Riegl (1858-1905) and *Alterswert* (Age Value).[11] In part, both men admiring the pioneering work of Semper but contending that Semper's followers, in concentrating on technological advancement through product and technique as determinants of social change, were ignoring the 'marks' made on society by other than great styles and high art.[12] Riegl believed that his investigations for the Czecho-Slav Ethnographic Exhibition of 1895 in Prague had demonstrated the connection between the built environment and the way peasants lived and produced folk artefacts. In the Vienna of 1895 this was a new idea which at first appeared to be out of step with the pursuit of urbanisation and industrialisation through the wider Empire where so many folk traditions might be lost. In Riegl's view all of the ethnographic study which had been carried out in Austria-Hungary from the Vienna Exhibition of 1873 to Prague 1895 which set out to demonstrate the connection between the peasants' way of life, the built environment and the folk artefact was of equal value.[13]

> This view of architecture being a problematic language in Central Europe is presented further by Friedrich Achleitner who has modernised the view of Semper through 'The Language Problem in the Austro-Hungarian Monarchy',

but more particularly with Adolf Loos, a constant commentator on the nature of culture, who was now a confidante.[14]

By contrast to all the differences expressed as national styles throughout Austria-Hungary, Vienna was becoming the educational home of a large number of architects and architecture students from Central Europe who were searching for a modernising influence in their understanding of architecture. The catalyst for this development was Vienna and the Academy of Fine Arts with Otto Wagner as the Professor of Architecture from 1894. The necessity of being educated in Vienna, Berlin, Munich, Paris or Moscow at a higher level was that the Habsburg Empire had to a great extent denied the constituent countries of Austria-Hungary their right to speak and educate in their own languages in favour of a forced Germanisation in the west or by making Magyar the language of choice in the more easterly countries. There was also an enormous amount of prejudice against ideas which did not originate from the Viennese elite.

> It [Vienna] could not help regarding genius and enterprise of genius in private persons, unless privileged by high birth and State appointment, as ostentation, indeed presumption.[15]

For anyone to be successful in Vienna or the wider Empire they had to have the proper connections. It was therefore necessary for students of the professions to leave their homelands. This elitist proposition was in direct opposition to the ideas of building for

the urban city as expressed by Otto Wagner and Maks Fabiani in their work *Moderne Architektur* (Vienna 1896) and by Adolf Loos in 'Ornament and Crime'(Vienna 1908).[16]

Urban Planning

The publication of Camillo Sitte's *Der Städtebau,* (City Building, Vienna, 1889), is seen by many as the beginning of city planning.[17] Sitte's analysis of the artistic and civic character of old European towns, particularly within the Austro-Hungarian Empire, heralded a new approach to the planning of squares and thoroughfares and in the placement of public statues and monuments.

> No writer did more to encourage a reaction against the monotonous uniformity and geometrical severity of nineteenth century urban planning.[18]

The reconsideration of how towns and cities had been organised from medieval times onwards had become an important part of historical research.

> The now meaningless enclosure and the disorder and clutter that often characterized the late medieval city had become intolerable.[19]

The narrow streets and ill-lit alleyways were not only crime ridden but also the breeding ground of disease, poverty and pestilence. The later blight of unrestricted commercial and industrial development from the 1800s was revisiting this medieval form and now was being commented on both privately and publicly by many, but almost by accident Camillo Sitte became the voice of the people. As Sitte later wrote in the preface to his third edition of *Der Städtebau*:

> Only when everyone is already feeling and thinking more or less along the same line, and it therefore depends only on one person finally expressing the matters clearly, are such happy results possible.[20]

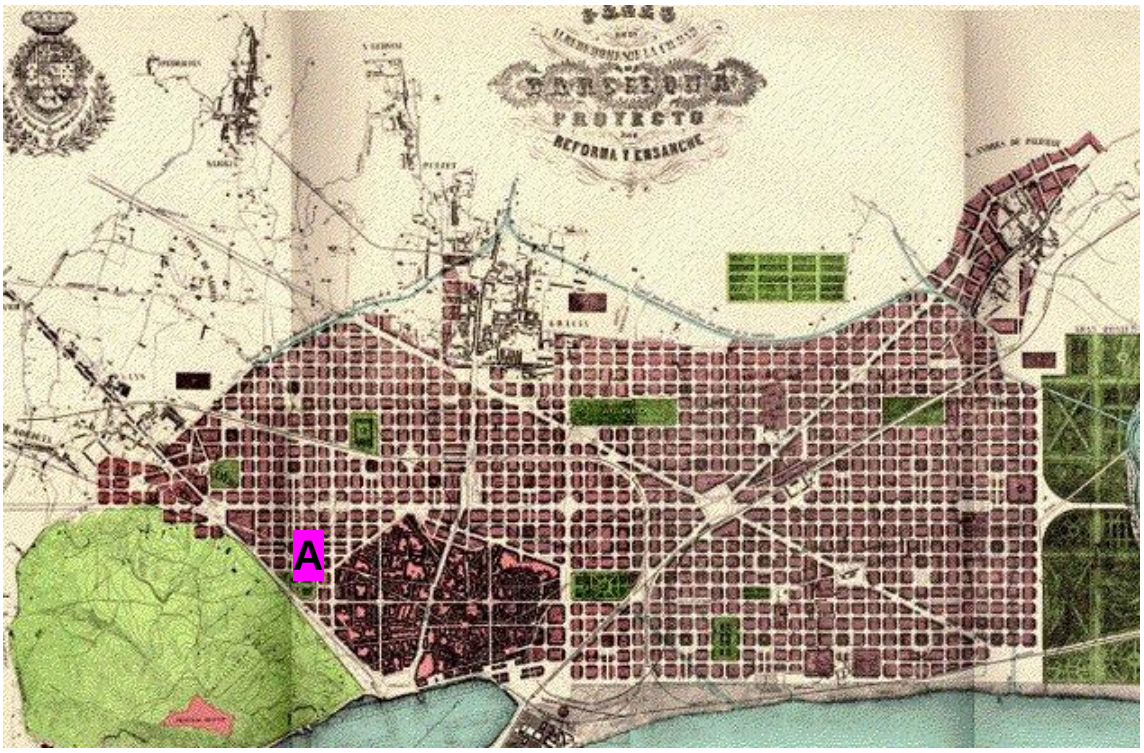
The classical orders as documented by Marcus Vitruvius Pollo in the first century B.C. were being rediscovered, unearthed and measured by archaeological scientists, illustrators and cartographers in Europe and elsewhere from the late 18th century onwards. This rediscovery allowed for the development of an understanding of the forms of classical architecture and their placement within a classical settlement. However, Vitruvius's 'Ten Books of Architecture' have descriptions only of how buildings were built, i.e. a 'game plan' for buildings of a particular time and purpose. This classical tradition was then reinterpreted by successive generations of architects and planners adding a blend of vernacular and historicist, imperial details to the schemes.

This form of architecture and planning continued for centuries until the publication of another book on architecture, similarly divided into ten books. *De Re Aedificatoria* (On the Art of Building) Florence, 1450 by Leon Battista Alberti, a masterpiece showing architects how buildings should be built. This theoretical treatise guided planning and building until the end of the 18th century when for most of Continental Europe, Baroque and the later form of Baroque-Rococo became the dominant architectural style. From the mid-19th century a new monumental tradition that sought to redefine cities gained great power, best evidenced in the works of Georges Eugène Hausmann, Paris 1853-1870, and Ildefons Cerdà, Barcelona 1859, which was contemporaneous of the Vienna Ringstrasse of 1859. The greatest flaw of this architecture and planning is seen in that Hausmann's boulevards, promenades and frontages were placed in front of the Paris slums where little had changed.

It is perhaps unfair to include Cerdà with Hausmann and the Viennese plans, for his ideal plan to remodel Barcelona suffered immeasurably at the hands of the developers. In search of ever greater profit they ignored the essence of his humanitarian scheme. Cerdà surveyed Barcelona and drew plans of unparalleled accuracy in 1855, where he identified the problems of cramped and unhygienic conditions within the older medieval housing particularly. This housing was a breeding ground for high death rates. The cholera epidemic claiming some six thousand lives during the hot summer of 1854 was the result of this unsanitary overcrowding.

Cerdà's plan had great sympathy with Sitte's understanding of the use of verdured squares and park layouts in cities. Within both men there was a realisation that these green spaces, the 'lungs of the city', were vital to public health and hygiene.[21] Cerdà intended his regularised plan for Barcelona (1.2) to alleviate these problems of public health. His solution to the overcrowded city was to use uniform quadrangular blocks intersected by small roads crossing through two of the main thoroughfares linking to the largest roads. Within this regularised grid Cerdà wanted housing to be strictly controlled, being built up on two sides with height restrictions creating a shaded garden square between. This plan would guarantee maximum amounts of light with the planting acting as a 'small lung' for the welfare of the inhabitants. Equally the scale of the larger thoroughfares would allow the passage of traffic away from the densely populated *manzanas* (housing clusters) particularly the omnipresent steam tram and the attendant paraphernalia of telephone and telegraph communication which could be located in these wider boulevards. However the private developers viewed Cerdà's control and restriction on property densities as interference in their profits and as a consequence little of Cerdà's vision was realised. Even that which was achieved has throughout

1.2 Ildefons Cerdà, Barcelona Plan 1895



1 © odin.let.rug.nl 2005

2 © regionalworkbench.org 2005

Area where the “Old City” meets Cerdà’s “New City” **A above** - 1**,** and the same view in a satellite photograph of today - 2

the decades seen the inner courtyards invaded by workshops, car parks and shops.

Two legacies of Cerdà's vision are still apparent today and demonstrate the advantages of an ideal urban plan. Firstly, the *chaflane*, the 45% angled corner of the city block allows for the turning moment of the tram, which still provides adequately for the progress of traffic. Secondly, the creation of the quality apartment block with roof gardens atop the glassed-in galleried drawing rooms of the principal, larger flats. Following Cerdà's lead it was left to a group of modernist visionaries, Sitte, Wagner, Fabiani and Loos, to address this veneering over of all the ills that towns and cities still contained and to improve planning and building within the Austro-Hungarian Empire.

As discussed earlier in the chapter Hausmann's reconstruction of Paris under Napoleon III was an act of duplicity,

> the new facades alongside the giant highways concealed a mass of ancient slums behind them.[22]

Not even the beautifully arranged forms of the Beaux Arts style of Charles Garnier's Paris Opera House, 1874, could disguise this fact. Baron Hausmann's Plan created architecture for an elite group, who had no connection with the poor and starving of the ever present Paris slums. By contrast the most successful of all Imperial Cities at this time was Vienna. The westernmost capital of the Dual Monarchy presiding over the other economic and commercial powerhouses of the empire – Budapest the easternmost capital and Prague one of the largest and oldest cities within the Empire. All of these cities had developed advanced systems of finance, trade and industry and particularly rail transportation, which would over the years, link the cities of Central Europe in a coherent trade and exportation chain.

In returning to Vienna one returns to the ideas of a native Viennese, Camillo Sitte; like Cerdà, his greatest complaint against the planners was that they surveyed only on the surface and in lacking a three-dimensional model they did not give sufficient thought to elevations of buildings and their abilities to be light and airy. This inability to plan in three dimensions tended to result in a:

> stereotypical employment of compact and solid building-blocks as the primary element of design.[23]

This was further added to by the imposition of a:

> square square, a straight street, a triangular open space, and a radial or star-shaped plaza.[24]

All of these forms Sitte loathed, not for their individual forms, but because they would be unable to grow or change with the development of the city.

The problems of city expansion and development were considered in Reinhard Baumeister's book *Stadt Erweiterungen technischer, baupolizeilicher, und wirtschaftlicher Beziehung,* (City Expansion, Technically, Politically and Economically) Berlin 1876. However it was not until the intervention of Camillo Sitte and Otto Wagner that a blueprint for the expansion and modernisation of the towns and cities of Austria-Hungary was put in place. Although some may find this an unusual pairing their understanding of a city's need to grow and re-generate was a shared imperative – both abhorring the inability of successive planners to understand the importance of history and tradition. One of Sitte's basic criticisms of Meyreder's 1890 plan for the old historic inner city of Vienna was that,

> the proposed street layout would lead traffic through old squares like Am Hof and the Graben instead of circumventing them and leaving them in peace.[25]

In evaluating all aspects of this plan Sitte found that the obsession with the straight-line uniformity of wide streets and regular building-block shapes and the ill-conceived garden spaces had 'no trace of artistic beauty'. Sitte unlike his contemporaries, Baumeister and Stubben was not obsessed with planning above ground for the ease of traffic nor did he follow the other obsession of sub-surface planning for super efficient sanitation systems.[26] The ensuing overland, sub-surface schemes generated geometrical plans that were imposed on irregular terrains.[27] By ignoring the ancient routes through a town or city the planner undermined the established infrastructure and destroyed that which was beautiful and appropriate.

> Not only had architectural associations been bemoaning the fact that these ancient quarters were being ruthlessly destroyed instead of serving as models for the new development of cities, but literature of many types dwelt on the superiority of the pre-industrial town.[28]

Sitte was one of many in both theory and literature who championed the fitness and purpose of many pre-industrial towns and cities with a desire to maintain the old while accommodating the modern and the new. This understanding is exemplified in many of his new plans and re-developments, but is best seen in plan form for the layout of Eilenriede, Hannover (1.3). His desire to conserve the old and blend in the new was not an altruistic act to preserve the old history and tradition, for he was very much a modern man. Sitte realised quite clearly that planning was inexorably linked to the perceptions and status of the indigenous population. Symbolic representation seemed to him

indispensable, since modern society was only just emerging 'the people', had to be provided with architectural codes whose reading would help them find their place in this society and develop a sense of place.

Unfortunately in understanding this truth Sitte was never to complete a plan for an ordered metropolis. The modern planning process was moving at speed and although he tried to correct the aesthetic failures of the Ringstrasse by his book of 1889 D*er Stadtebau* (City Building), the proposed alterations to replace the oversized boulevards with a sequence of intervening squares is little more than a cosmetic pastiche which would not arrive at a unified street or site frontage – both essential parts of all his theoretical planning works.

Sitte's contemporary, Otto Wagner, understood the metropolis as a highly complex system that,

> obeyed its own specific laws.[29]

Like many Viennese, Wagner was sympathetic to the writings of John Ruskin, who wrote of the ills of urban deterioration and the need for rethinking how man lived,

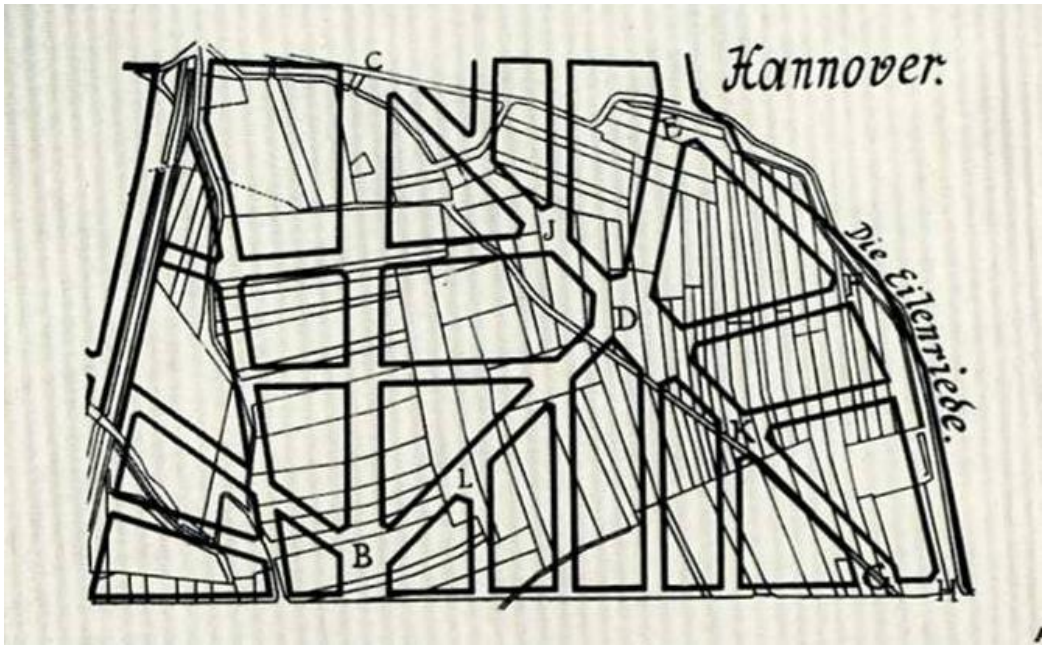
> remedial action in the houses that we have, and then the building of more, strongly beautifully, and in groups of limited extent, kept in proportion to their streams, and walled round, so that there be no festering and wretched suburb anywhere.[30]

Although a critic of the uninspired, ad-hoc development of the Vienna Ringstrasse by a multitude of developers, Wagner, via his mother, was one such speculator. Investing in and developing properties which were just off the Ringstrasse some years prior to his fame and pre-eminence as the 'European Architect' with the publication of his essay on Modern Architecture, Vienna 1896. [See note 16]. The subsequent translation and publication in America, in the 'Brickbuilder' 1901, sealed Wagner's reputation. Sitte's *Der Städtebau* did not enjoy such rapid translation from the original [which would have remained unread by many]. Even when translated into a technically difficult German text in 1904 many preferred the less than exact French translation and this delay coupled with many inaccuracies in the later translations dictated that Wagner rather than Sitte was seen as the father of city planning at this time. [31]

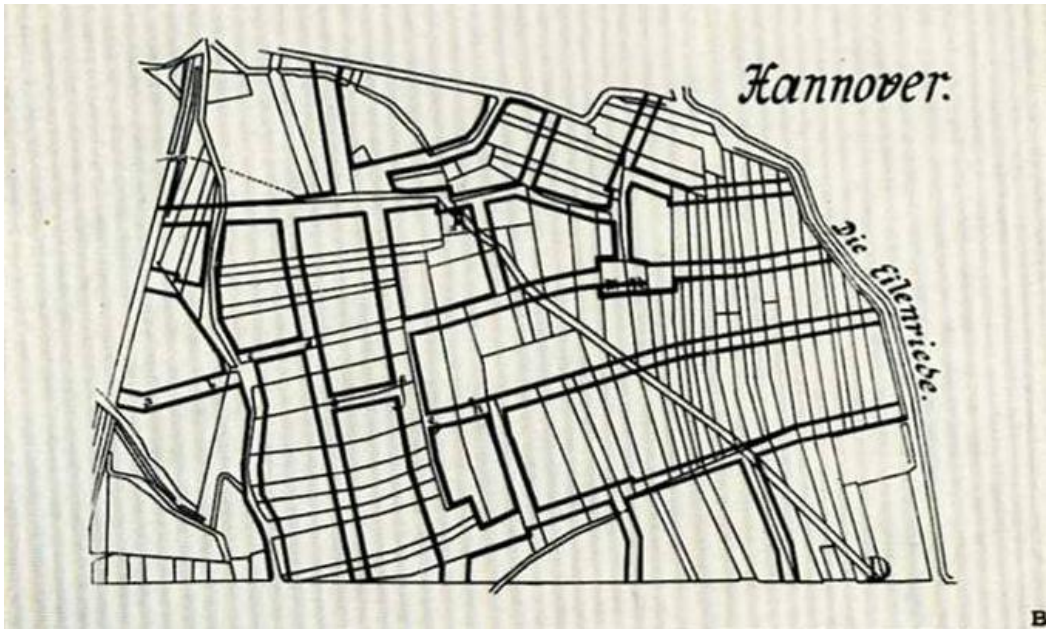
Despite Sitte's historical delay in translation, history and hindsight have proven the great strength of Wagner's perception which was expressed with equal measures of brevity, clarity and radicalism. In recognition of Sitte's contribution to city planning Wagner as

1.3 Camillo Sitte, Eilenriede, Hanover c1900

1. An imposed grid taking no account of property boundaries



2. Sitte's proposal using boundary lines and Die Eilenriede



the chair of the International Congress of Architecture organised a special graveside ceremony in 1908 where Sitte was honoured. Wagner followed on from Sitte's lecture on the 'Vienna of the Future' which gave great attention to its matters of traffic planning. When Wagner was entrusted with what in the 20th century would be known as a 'rapid transit system', designing the stations, tunnels, overpasses and elevated sections of the *Stadtbahn* (Metropolitan Railway) 1894-1901 (1.4) he demonstrated a genius for planning, and emphatically established his credentials as a founding father of the modern city within Central Europe.

Wagner's approach to architecture and his opposition to the idea of a National Style is best summed up in his 1915 Budapest lecture at the invitation of Ödön Lechner,

> the artistic expression of architectural works must be similar in every centre of culture, since the way of life and system of government are similar. If we accept this argument, we should realize that a national style cannot exist.[32]

Clearly this was in complete opposition to the direction being taken by Ödön Lechner and his followers. It is now clear that this rejection of the vernacular and the traditional did not produce an all-encompassing architecture that served peoples of Central Europe equally as was intended. What was needed was a re-evaluation of how people wished to live and this gave rise to further versions of city planning.

It is also necessary to consider the contribution of Adolf Loos and Maks Fabiani. In taking many parts of the city planning argument from Sitte and Wagner, Adolf Loos and Maks Fabiani added their experience of the intimate understanding of nation and tradition so implicit in the disparate states of Austria-Hungary, which the two knew only too well being born respectively as Czech, Brunn/Brno and Slovenian, Kobdilj Stavitel. For these men it is important to understand that this perception of nationality and a sense of belonging to a place were very different.

Following initial training in structural engineering in Reichenberg (now Liberec), Czech Republic, Loos returned to Brno where he worked as a mason until taking up a three-year architectural course in Dresden, but not graduating. He had to depart to undertake military service in the Imperial Rifles in Vienna. Following this he refused to return to Brno and run the family business; he wanted instead to go to Chicago for the 1893 World Exhibition. A deal was struck with his mother to finance this journey but the price was to waive his inheritance and not return to Brno. Despite being poverty-stricken he worked his way around some of America's most exciting cities, well versed in the blossoming progressive architecture created by Louis Henry Sullivan. In his travels he

1.4 Otto Wagner, the Vienna Stadtbahn, 1894-1901, Karlsplatz Station

Front Elevation

Decorative detailing

was a bricklayer, kitchen hand, hairdresser's assistant and a supernumerary at the Metropolitan Opera. It was this cosmopolitan understanding of the development of cities linked to a knowledge of the re-use of classical forms at the Chicago exhibition which would inform all of his writing and architectural oeuvre on his return to Austria-Hungary in 1896. He was determined to make an 'Introduction of Western Culture into Austria' this being a published supplement in the Peter Attenberg edited *"Kunst"* (Art). His other close supporter, Karl Kraus, championed Loos' Café Museum in Vienna's Operngasse 1889, (1.5) which was dismissed by Viennese supporters of the baroque who were hostile to the sparseness of line and lack of ornament. Kraus' sharp wit allowed a brilliant lampooning explanation of the Viennese conservative bourgeois view:

> All Adolf Loos and I have done, he literally and I in words, is show that there is a difference between an urn and a chamber pot, and that it is this difference that provides the scope for culture to develop. The others are divided into those who use the urn as a chamber pot, and those who use the chamber pot as an urn.[33]

Adolf Loos' understanding of how this knowledge might be applied to the architectural development of Vienna is thoroughly demonstrated in his theoretical plan for transforming the old inner city into a well regulated, thriving modern business capital, 1909-12. Loos used the street plan of 1859, which included the recently acquired lands from levelling the old city defences and walls, but was prior to the constraining Ringstrasse. His plan combined the carefully considered squares, views and open prospects of Vienna, after Sitte, while at the same time, where appropriate, using broad avenues as arteries to cultural and financial centres. This aesthetic was visualised in evocative freehand sketches of municipal buildings, banks, apartments and houses. An accompanying model shows how this layout would work within and without the encircling Ringstrasse. The best demonstration of how Loos balanced his modernism with a desire for comfort is demonstrated in the exterior and interior design of the Steiner House Vienna, 1910, (1.6). The problem faced by Loos was how to create the desired three-storey space when the frontage was restricted by local ordnance to one storey. Loos solution was to arch a semi-circular, sheet-metal roof from first floor arcing through a second floor and continuing to form a three-storey, flat-roofed block as the garden façade.

The use of sheet metal roofing provided a functional, simple and elegant solution and, coupled with the plain walls, adhered to all of Loos' statements about taste and culture which at times were used as a critique of the *Secession* and *Werkbund.*

1.5 Adolf Loos, Café Museum, Vienna 1889

Before restoration and after

Views of the interior

> We already have the style of our times. We have it everywhere where artists, and that means the members of that association, have not yet managed to poke their noses in. Ten years ago these artists were looking for new realms to conquer and having already ruined cabinet making, tried to take over the tailoring trade. At that time the future members of the *Werkbund* belonged to the *Secession.* With a few forceful essays on these questions I drove these gentlemen out of the tailors' and shoemakers' work, and also saved other crafts not yet infested with 'artists', from an unwanted invasion.[34]

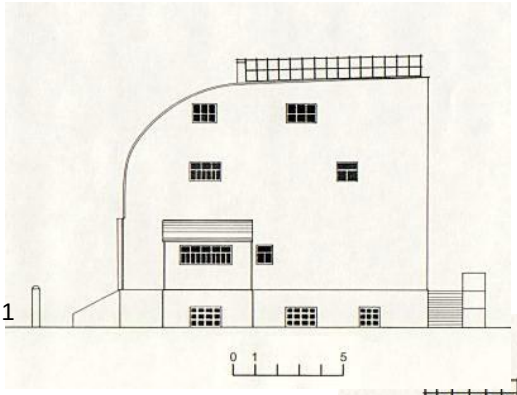
The Steiner House is now a forlorn relic of its former self, stripped of its curving roof and balancing fence and pillars with a smaller scale balcony of the same construction now all removed. Surmounted by an all too heavy half-pitched roof despite pretences to being fully pitched, all of the elegant symmetry of Loos' design in the street façade and the garden façade (1.6 - 8) has gone. Although this 'architectural vandalism' does allow us to refute some critics' concerns of Loos' means and methods. The total absence of decoration on the outside walls and the curved sheet metal roof are seen by Benedetto Gravagnuolo (Adolf Loos: Theory and Works) as being the denial of Loos' aesthetic because, as he points out, these are the walls plastered with lime mortar like the old Viennese houses and in turn the sheet metal roof is material drawn from the local historical building. Gravagnuolo implies that, in using these extant and traditional materials, Loos has become a historicist unable to grapple with the use of or understanding of new forms or materials. An examination of the elevations and the interiors gives the lie to that observation.

> The Steiner House became an icon of architectural history of the modern age and of the Twentieth Century as soon as the first photographs were published. Almost every book on modern architecture cites the Steiner House as an essential contribution to its development.[35]

The design of the interior of the Steiner House would seem at first to contradict this statement of the modern with its apparent conservatism with comfortable furniture in the English style mixed with oriental rugs in a beamed and wainscoted interior. Look more closely however and the proportions of the beamed ceiling look wrong, surely the beams are too far apart to support the weight of other floors? On entering the dining room this sense of foreboding is heightened, the main window is set far too far into the corner, the wainscoting is too high? All of these doubts allow the viewer to proceed through the space with a sense of wonderment as they rise and fall throughout the interior in anticipation of the room beyond. Is that a mirror, why is it below a window, is that a window or a gridded decoration? What Loos has created is far from predictable,

1.6 Adolf Loos, Steiner House, Vienna 1910

The Elevations of the Steiner House, 1 South, 2 North, 3 East, and 4 West,



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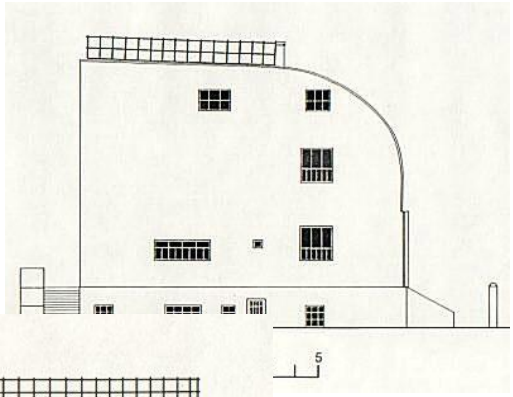

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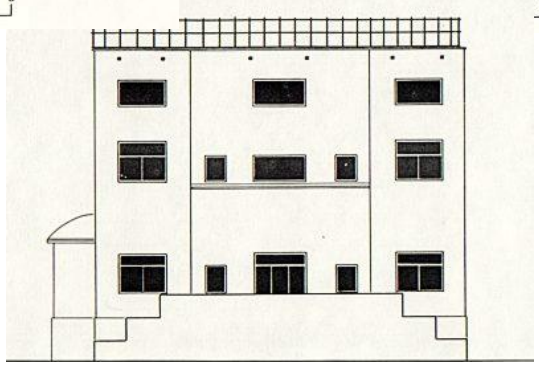

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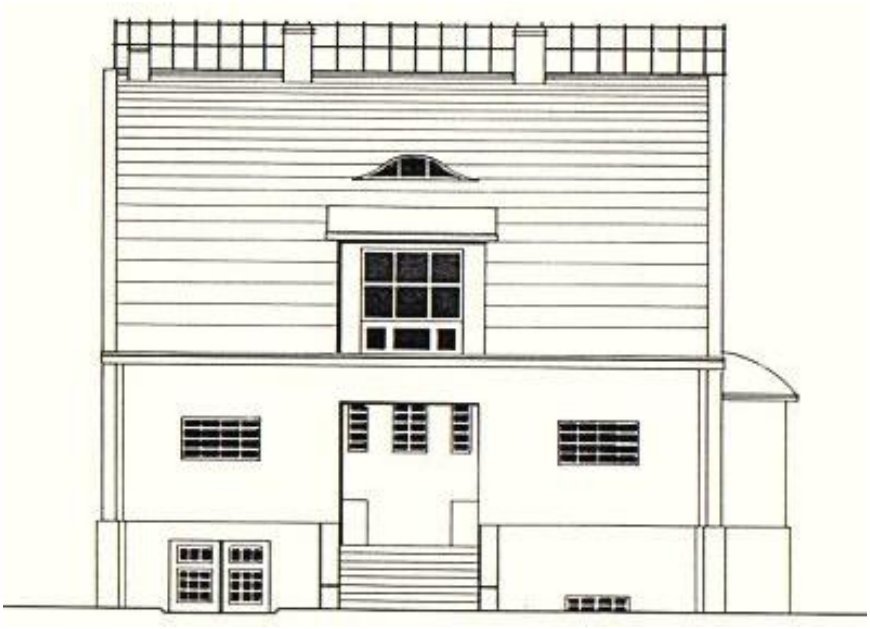

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1.7 Adolf Loos, Steiner House, Vienna 1910

Three quarter view and photograph of the front elevation when first built

1.8 Adolf Loos, Steiner House, Vienna 1910

This view like many others is from the gardens and gives little clue, other than the cubic form, as to the modern approach to a difficult site and planning restrictions Adolf Loos had to overcome..

Adolf Loos, Steiner House, Vienna c.1970

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supporting his view that the interior areas of a home were places of conversation, music eating and drinking in a play of social harmony enlivened by the unsettling questions and further possibilities of the interior.

Loos' original is far superior to the ill-resolved house we see today. Loos' statement was modern, balanced and beautifully resolved by comparison. Any incidental use of materials from the history of building is appropriate, as it is the way Loos uses them, not what they are, that makes the whole concept modern. Gravagnuolo's view would appear to be part of a commentary that misunderstands modernism confusing the use of materials in modernism with the dictates of the Modern Movement. Clearly if this were the case there would be no place for Loos in the cannon of modernism but as will be seen in his later developments of the *raumplan* of which the Steiner House was an early example, Loos' influence on many was considerable.

> The logical deduction was that construction pure and simple was to take the place of the fantastic forms of past centuries, the luxuriant decoration of past epochs. Straight lines right-angled edges. That is the way the craftsman works who has an eye to function and has tools and material at hand.[36]

> The evolution of culture is synonymous with the removal of ornamentation from objects of everyday use. Ornament means wasted labour and therefore wasted health. That was always the case. Today, however it also means wasted material, and both mean wasted capital.[37]

The major difference between Loos and others was that Loos never was able to re-plan on a large scale. However with the destruction of Zagreb in 1880 and Ljubljana in 1895, both from earthquakes, planners including Fabiani were able to take advantage of the situation to introduce new thinking around city planning and employ the very best architectural solutions. The result was a comprehensive re-planning of Zagreb and Ljubljana, which remain two of the most well resolved modern cities to this day – appropriate resolutions of the city ideal, 'The City for the People, the Polis.' The founding of these 'Cities of the People' was to play a major role in influencing further developments across Central Europe in cities like Brno, Zlin and Wroclaw, cities which were essential to the formation of new states in the former Empire.

Notes to Chapter 1

[1] Zucker P., *Town and Square, from the Agora to the Village Green,* Columbia University Press, New York & London, 1959, p.20
[2] Op.cit., Moravanzsky, 1998, p. 217-234
[3] See, Semper G., *The Four Elements of Architecture and Other Writings,* Cambridge, 1989, and Semper G., *Architect of the Nineteenth Century,* New Haven and London, 1996, Ed. Malgrave H.F.
[4] Op.cit., Moravanzsky, 1998, p.287
[5] Ibid. p.287-288
[6] Op.cit., Loos, 1989, p.69
[7] Ibid., p.193
[8] Ibid., p.309-310
[9] see Horvat Pintaric V., *The Architecture of Otto Wagner,* Studio Editions, London, 1989, p.7-31, for an explanation of the Secession in relation to growing ideas embodied within architectural modernism particularly Wagner, Loos and Fabiani.
[10] Op.cit., Moravanzsky, 1998, p.137
[11] Ibid., p.100-103
[12] see Smith B., 1998, *Modernism's History,* Yale University Press, New Haven and London, p.41-46
[13] Op.cit., Moravanzsky,1998, p.242
[14] Op.cit., Blau and Platzer, 1999, p.94-105
[15] Geretsegger H. and Peinter M., *Otto Wagner The Expanding City The Beginning of Modern Architecture,* Pall Mall Press, London, 1970, p.19
[16] It is often stated that Otto Wagner wrote *Moderne Architektur;* however in conversation with Dr Peter Krečič, Director of the Museum of Architecture, Ljubljana, I learned of a letter from Maks Fabiani to Professor Nace Sumi dated Gorica/Gorizia 27th May 1955, which describes Maks Fabiani as living with Wagner at that time, discussing the ideas within the book and writing the text jointly with him. This letter appears in full in *Archives d'histoire de l'art* (Anthology for Art History),*Nova vrista* (New series) XXVII,Ljubljana, 1991, p.121-122
[17] see Collins G.R. and Craseman Collins C., *City Planning According To Artistic Principles,* Random House, New York, 1965 a,. and *Camillo Sitte and the Birth Of Modern City Planning,* Random House, New York, 1965 b. for the fullest explanation of these ideas..
[18] Fleming J., Honour H. and Pevsner N., *Penguin Dictionary of Architecture and Landscape Architecture,* Penguin Books, London, 1999, p.529
[19] Op.cit., Mumford, 1961, p.348
[20] Op.cit., Collins, 1965 b, p.2
[21] Although this remark is attributed to F. L. Olmstead in reference to Central Park, New York, c.1858, William Windham used the phrase 'Lungs of London' to refer to Hyde Park in the House of Commons, 1808. Anecdotal evidence particularly from discussions within what was to become the Royal Horticultural Society, Kew Gardens, suggest that plants-men used phrases similar to this in the previous century. http://www.bbc.co.uk/dna/h2g2/pda/A386138, 2005
[22] Hall P., *Cities of Tomorrow,* Blackwell Publishers, Oxford, 1992, p.202
[23] Op.cit., Collins, 1965 b, p.17
[24] Ibid. p.17
[25] Ibid. p.18
[26] Ibid. p.549
[27] Op.cit., Fleming, 1999, p.594
[28] Op.cit., Collins, 1965 b, p.22 and note 38 p.120
[29] Op.cit., Blau and Platzer, 1999, p.62
[30] Op.cit., Mumford, 1961 p.475
[31] see Collins, 1965 b, Chapter 7
[32]Op.cit., Moravanzsky, 1998, p.239.
[33]Op.cit., Loos, 1998, p.7, Introduction by Alfred Opel
[34] Ibid. p.164
[35] Sarnitz A., *Loos*, Taschen, Koln, 2003,p.43
[36] Op.cit., Loos, 1998, p.181
[37] Ibid. p.171

CHAPTER 2

ARCHITECTURAL DEVELOPMENT IN TOWNS AND CITIES 1890-1910

1. **Zagreb**
2. **Ljubljana**
3. **The Works of Jan Kotěra throughout the Czech Lands**
4. **Brno**
5. **Zlin**
6. **L’viv**
7. **Wroclaw**

CHAPTER 2

1. Zagreb

Unlike most of the Central European Countries and States who had in the greatest part fought for and won their independence from Austria-Hungary after the revolutions of 1848 onwards, there was no such visible national drive or ambition among the diverse groupings that made up Croatia at this time, albeit that Croatia did not exist as a defined country.

For centuries theirs had been an internal struggle balancing the needs of diverse nationalities, religions and political leanings. As part of the struggle in South Eastern Europe since the battle of Kosovo in 1389 bloodshed and banditry had been commonplace in the Balkans. Andre Gerolymatos in his book The Balkan Wars, 2002, gives flesh to the events and characters of this very bloody and brutal struggle.[1] It appears that Croatia, being on the edge of this conflict and particularly in looking north to the newly emergent Czech Lands, was keen to a find a new commercial path leading away from ethnic and religious strife. With the increase of banking, commerce, knowledge and entrepreneurship the people of Croatia, like their other Central European cousins, were able to shed the medieval feudalism of the past and begin to establish a new order to move society forward.

One of these first acts in many towns and cities was to decommission the old ramparts and the *glacis*, the military no-man's-land where previously troops had trained beyond the fortifications perimeter. This act released very large tracts of land for new development. These defences were cumbersome and outdated because their creation was based on a much warranted historical siege mentality where these emplacements were strengthened throughout the sixteenth, seventeenth, eighteenth and nineteenth centuries. However what had been demonstrated in the sieges of Vienna and Prague during the 1848 revolutions was that very little could withstand a well-trained army with modern munitions. Therefore their course was run and they were dismantled throughout the second half of the nineteenth century.

In taking away these defences with their bottleneck city gates architects and planners were now able to reassess the flow of traffic, people, goods and communication through towns and cities. Much of Croatia was once part of the Roman civilisation. Beneath the layers of all those centuries the major axis and grid-plan layout of the old Roman settlements was very clear. The new zoning structures of industry, commerce,

government, judiciary and people's entertainment still followed the Roman model for good reason. Based to a large extent on topography, available raw materials, grazing and sanitation, the model had worked relatively well for centuries. With careful re-planning in more modern times all the benefits of the models could be retained while at the same time allowing the size, complexity and density of all those necessary functions of town and city infrastructure to grow and prosper.

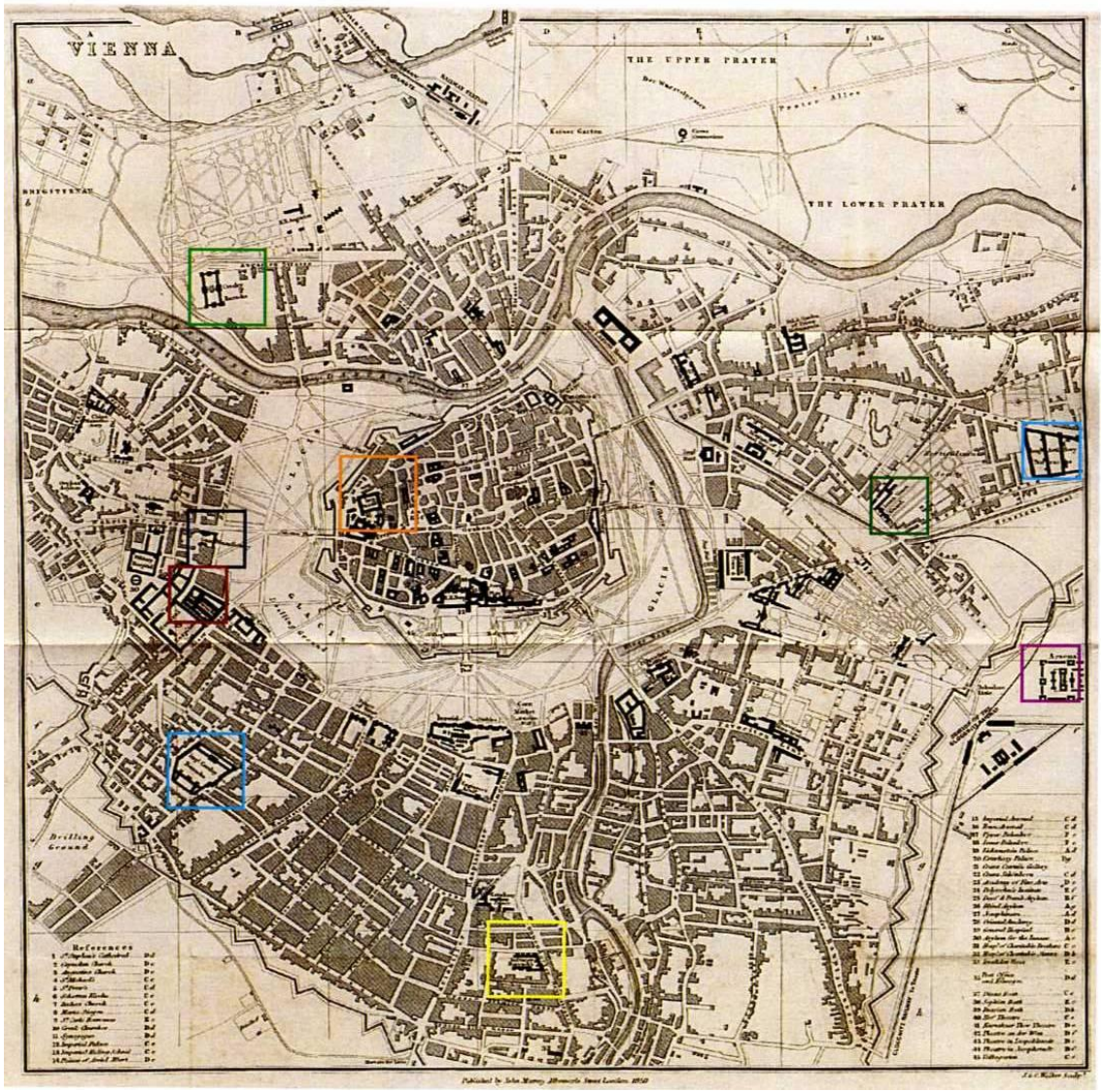
One of the first cities to adopt this approach was Zagreb where in 1865 the first 'Regulatory Plan' was put in force. Zagreb at this time was very much a new centre having been 'constructed' in 1850 by Imperial Decree by uniting the Kaptol and Gradec, the clerical and secular powerhouses respectively since the Middle Ages – the two sides had engaged in a bloody conflict, hacking each other to pieces. This bloodletting gave *Kravi Most* (Bloody Bridge) its unhappy name as it crossed a stream which used to run red with the blood of combatants. Adding the areas of Kaptol and Gradec to the lower city (Donji Grad) and amalgamating all with the royal city of Zagreb established the extent of the new city.

This further expansion of territory meant that modernization would advance with greater speed with attendant urbanization and population growth – pre-requisite factors for achieving much in a relatively short period. From 1860, with the arrival of the railway, the expansion of Zagreb south across the tracks and over the river, or north through the Mednevica Mountains would tax the greatest planners of the day. Between 1865 and 1887 the city underwent much planning and re-planning. Although one of the two masters of the resultant development scheme is celebrated the other is partly lost to history, except for recognition in Croatia via the postage stamp. The two masters of this re-planning were Milan Lenuci and Hermann Bolle who, as the architect of the duo, is better remembered albeit wrongly by Aleksander Laslo in 'Zagreb 1880 – 1918'[2].

It is a misrepresentation to suggest that the Vienna Ringstrasse served as a model for Zagreb's re-development; as the former is little more than a military protection zone constructed to safeguard the Imperial Family comparisons are difficult. The Hofburg Imperial Palace (2.1) is so placed to allow direct reinforcement from two newly constructed barracks and an arsenal located near to the railway stations.

Equally the lessons of the revolutions of 1848 were well learned as the Ringstrasse was built to a 200 feet wide circuit making any form of blockading virtually impossible while also enclosing the old city, home of radical and intellectual alike. This allows for rapid troop deployment, the whole is an overbearing return to the City of Great Monument

2.1 Vienna City Plan 1858, (note the Glacis arsenals and barracks)



- Imperial Cavalry Barracks
- Infantry Barracks
- Lombardy & Venetian Guards
- Gun Manufactory
- Infantry Barracks
- Arsenal
- Cavalry Barracks
- Imperial Artillery Barracks
- Imperial Arsenal & Town Arsenal

albeit under a very fine camouflage of excellent building. One may also look at some of the open flat expanses that surround the complex of palaces and apartments remembering their former use as parade grounds and exercise yards. It can be seen that these wide vistas are areas where cavalry might swiftly quell any uprising. It is important to consider the excellent reputation of Austrian cavalry and be reminded that the finest of all equestrian training was available at the Spanish Riding School within the Hofburg complex.

Despite the magnificence of the bourgeois villas, many of which were designed by the then relatively unknown Otto Wagner, none of the Ringstrasse is public property. It is misguided to compare the Ringstrasse with any part of Zagreb's 'Green Horseshoe', which has for 120 years been admired by many. By referring to (2.2) it is easy to see why. All was conceived on a human scale and deliberately developed within a complete synergy of architecture and parks to delight everyone. This is not to say that the prestigious buildings from around the parks' edges and squares (the Academy of Sciences and Fine Arts, the University, the Central Station, Technical School, National Theatre and urban villas housing the famous and prosperous of Zagreb – the Buratti and Vraniczany families, Zagreb's Milan Auirus and the pre-eminent painter Vlaho Bukovac) were any other than a compendium of historicist mix and match. However to dismiss this achievement is to miss the point embodied within – a point known to Owen, Tourier, Cabet, Geddes, Howard etc, which is contained in the statements of the Russian Peter Kropotkin, expressed in 'Fields, Factories and Workshops' 1899.[3]

Kropotkin as an anarchist thinker and member of the ruling Russian aristocracy was able to combine intellectual rigour and revolutionary fervour within his writing. Kropotkin's argument can be summed up as being: throughout the twelfth century a 'communalist revolution' had occurred in Europe; the expression of this revolution was through the urban fraternities and guilds whose operation within the parish was intended to benefit all equally i.e. everyone looking after everyone else. Unfortunately much of this local organisation and management had been swept away in the sixteenth century with the re-emergence of centralised monarchy and an unthinking authoritarian tradition. However following the revolution of 1848 the flame of freedom had been relit.

At least one building within the Green Horseshoe was modern and that was the Arts Pavilion of 1895. In essence the construction of the Arts Pavilion is very much the story of this type of interdependence and co-operation in a far more expansive form across the nations of Central Europe. It is the oldest purpose-built exhibition centre in the

2.2. Milan Lenuci, Green Horseshoe 1897

King Tomislav Statue

The Front of the Railway Station

Zrinjevac or Nikola Subić Zrinski Square

Croatian Supreme Court

Looking Back Toward the Station

The Arts Pavilion

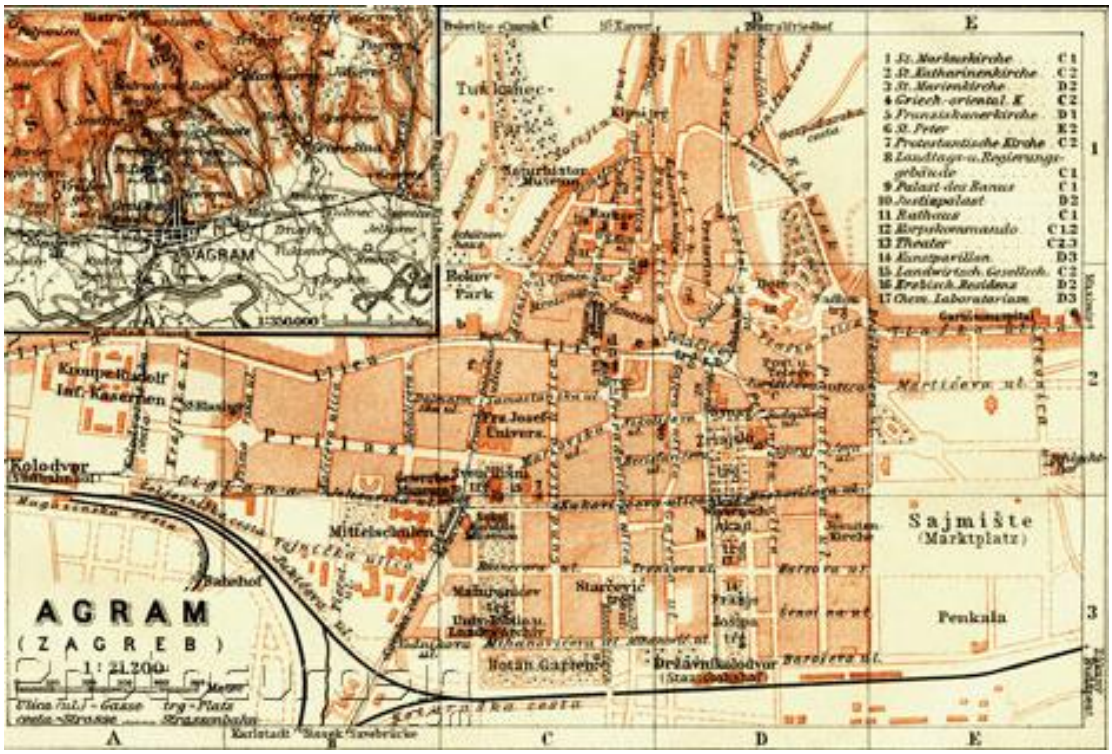
Although the buildings are a mix of styles from Classical to Baroque to Beaux Arts to Art Nouveau, their park setting takes great account of the developing leisure, transport and communication needs of an emergent modern city, being able to adjust to changes of infrastructure and population growth.

Slavic south, initially given in 1895 by the Croatian painter Vlaho Bukovac as a focus for rousing national pride. With the Hungarian collaboration of 'The Festivity of Millennium' both Croatia and Slavonia, who were politically linked to the Magyars, had to contribute arts and artefacts. Bukovac persuaded Croatian artists to ask for their own independent pavilion to be erected in Croatia. This masterstroke allowed for the iron framework of the pavilion to be transported from Budapest to Zagreb at the end of the exhibition. Once rebuilt in Zagreb the pavilion would become the centrepiece of the Green Horseshoe.

Although Helmer and Fellner, the chosen architects of the Habsburg Monarchy, were contracted to complete the design, the original construction in Budapest had been carried out by Danubius through architects Korb and Giergl who all worked with Honisberg and Deutsch under the control of Milan Lenuci, the city surveyor from 1897-1898 in the Zagreb reconstruction. At this time in Zagreb the railway lines which terminated directly to the south of the city (2.3) centre were bordered by the river causing difficulties for any expansion. A new designation of space was required and a plan was arrived at by 1889. As with all planning decisions in Zagreb many views and opinions were sought and taken into account. So it was that the 1889 master plan defined the area north of the railway lines that is Donji Grad, Kaptol and Gorni Grad as the city centre divided into block strips with integral green belt. In addition to the three squares forming the Green Horseshoe there were a further five squares Starcevic, Maruli, Mazuranic (2.4) Theatre Square and finally the English Botanical Gardens, contributing massively to the 'lungs of the city'. From 1860 development plans defined land usage for this area as residential and business building, while the strip of land sandwiched between railway and river was designated as industrial usage with the main port being located on the Sava River.

The expansion of business and commerce and attendant population growth required that the plan of 1889 needed to be reconsidered. Milan Lenuci, who by this time was acknowledged as a planning master, continued to work on the re-definition of the Zagreb city space. An illustration of this is a comparison between the supplies of foodstuffs. Le Boqueria in Barcelona is a much visited and loved food market which on a daily basis serves approximately 1,000 - 1,500 people and as such has been known throughout the years for its colour, hustle and bustle. Within Zagreb there was an informal market (now housed as the Dolac Market) where on a daily basis 60,000 – 70,000 people visited. That is 8% - 10% of the total population and has been so for centuries.

2.3 Zagreb, map of the city above the railway line 1911



2.4 Three views of the Parks - the ‘Lungs of the City’

Theatre Square,

Mazuranic Square

King Tomislav Square

Even this extreme movement of people and produce within Zagreb is accommodated because of accomplished town planning. Lenuci's genius was in transferring the city centre to the south below the railway line and extending the city southward across the river. By 1907 this plan had redrawn Zagreb's spaces. To the south of the river was *Novi Zagreb* (New Zagreb) created in conjunction with the *Zagrebački Velesjam* (Zagreb Trade Fair grounds). In addition to these major changes many other smaller but important changes and revisions had happened between the 1860s and 1907. The major of these were the relocation of Cattle Square, known as New Square once the cattle were gone, and finally becoming Zrinski Square in 1866. The cattle were relocated to what is now University Square (Marshall Tito Square). New roads were created - Marija Valerija Street (today Praska) entering form the north, and from the northwest Berislavićeva Street. This was accompanied by other modernisation – in 1877 gas lighting, replaced by electric lighting in 1907. Benches were first installed in 1880 after the massive earthquake, accompanied by the gift of a meteorological post in 1884 and, with the Jubilee Economic Exhibition at the University; one of the largest buildings of all The Music Pavilion was gifted by Eduard Pristerac in 1891.

It is important at this point to qualify the 'historicist mix and match' alluded to earlier in the buildings of the Green Horseshoe, as the builders and architects Franjo Klein, Janko Grahor, Ivan Plochberger and Janko Janibrisak at least deserve naming although they are almost unaccredited in published works to date outside of their homeland. It was Hermann Bolle who throughout the period became the renovator of many of Zagreb's greatest ecclesiastical buildings following the damage of the earthquake, but his rather German conservative approach to restoration ignored many of the cultural accretions of the previous centuries. He came into far greater favour (possibly becoming a naturalised 'Croatian') with a beautiful modern fountain for Zrinjevac but his major works were the City's Craft School 1888-1892 (the present Museum of Arts and Crafts) and the Mirogoj Cemetery 1876 with the addition of long domed arcades in 1917 (2.5). However Bolle's major contribution to Croatian society, like that of Milan Lenuci's, was to be a key figure in the promotion of the arts, principally from 1882 to 1914 as Director of the Arts School, Zagreb, and in Paris in 1900, as organiser in chief of the Croatian exhibit at the *Exposition Universalle* (Universal Exhibition) and as chief conservator for art throughout Croatia and Slavonia for historical monuments.

It is clear that Lenuci and Bolle were major figures in the advancement of town planning and urban development and it is useful to place all of the planning and reconstruction of Bolle and Lenuci and the Civil Authorities in a wider context. In addition to creating new main roads, numerous other roads were widened or re-routed to meet the needs

2.5 Hermann Bolle, Mirogoj Cemetery, Zagreb 1876. (Long Domed Arcades added in 1917.)

of the growing numbers of people and their everyday requirements. It is the sum total of addressing all these conflicting requirements which place Bolle and Lenuci in the vanguard of establishing the city and it's planning as a modern imperative within Central Europe.

2. Ljubljana

Ljubljana, like Zagreb, was limited in expansion by natural geography being funnelled into the Ljubljana Gate, bordered in the north by the Alps and in the south by the Adriatic and Mediterranean. This geographical position placed Ljubljana on a trade route linking Europe to the East. Although legend has it that Jason and the Argonauts wintered here while stealing the Golden Fleece for the Greeks, what is certain is that the ancient town of Emona, situated in the southern part of modern-day Ljubljana was settled by the Romans. From 50 B.C the town grew to a population between 5,000 and 6,000 people who were mainly merchants, artisans, civil servants and war veterans.

The importance of Emona came from its geographical position as one of the gateways on The Amber Road. Because of the relative value of amber and other trade goods the town was fortified with a surrounding wall four metres thick, in places rising to a height of eight metres. With the collapse of the Roman Empire Emona was destroyed but the remains of the town with their quarters, roads and civic centres still clearly defined became a blueprint for further settlement with the current layout growing from resettlement. From the sixth century to the nineteenth century the town grew to be a modern hub of industry and commerce. This development was greatly enhanced by the arrival of the railway from Vienna in 1849, to be connected to Trieste by 1857. The citizens of Ljubljana were now offered the opportunity to travel thereby linking them more closely with the rest of Europe.

Despite an enormous exodus of the Slovene population between 1850 and 1910, with some 125,000 going to Cleveland, Ohio [i.e. 22% of the total population], Ljubljana modernised very rapidly. In 1820 the first Savings Bank was established; the first Slovene language newspaper published in 1843; public gas lighting introduced in 1861; the establishment of Slovenska Matica publishing house in 1864; the founding of a tobacco factory employing over 1,000 workers in 1873; the first Slovene mayor elected in 1882; electric street lamps installed in 1883 and a municipal water supply in 1895. Finally, following part of the reconstruction after the 1895 earthquake, electric trams were introduced in 1901.

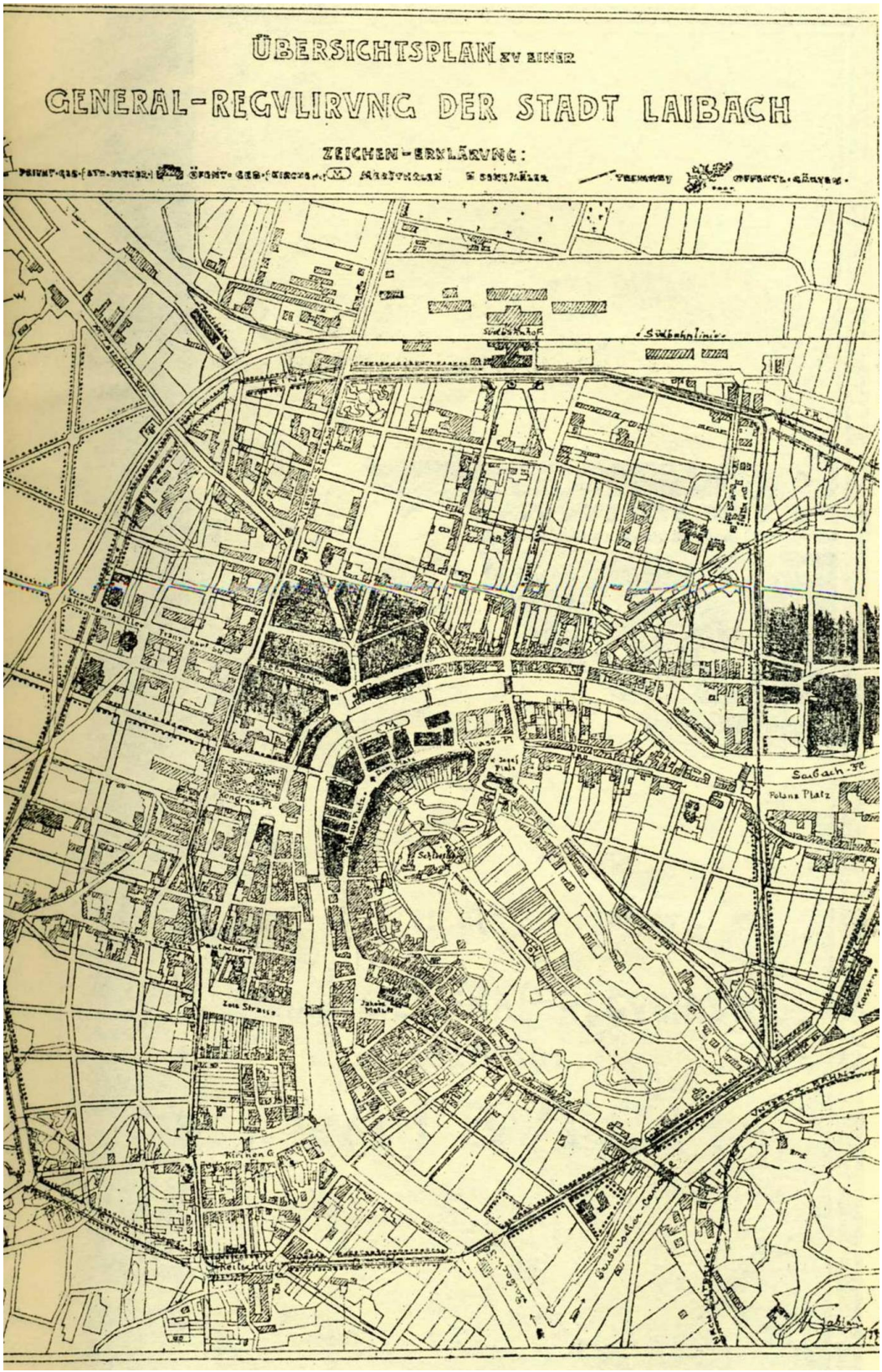
Unfortunately having suffered a crippling earthquake in 1551 this catastrophe was revisited upon Ljubljana in 1895. When the dust settled ten percent of the buildings were rubble and almost all of the other ninety percent of structures suffered some damage on a varying scale. The city fathers saw this as an opportunity to ask the most pre-eminent city planner of the day, Camillo Sitte, to design a restructuring plan. However a native Slovene, Maks Fabiani, submitted a rebuilding plan that was preferred and it was he in concert with the redoubtable mayor, Ivan Hribar, who was to drive this vision forwards.

Although Maks Fabiani is credited with putting Ljubljana's regulatory plan in place he had a further partner in this venture. The senior architect, J. Duffe, adjusted the plan and secured acceptance from the authorities. This plan consisted of a ring of avenues in development of the city centre which were particularly well realised in most of the design. One of the great strengths of Fabiani's plan was based on the fact that he knew the city very well. He carried out a very precise scientific analysis of the urban fabric, which determined that the city, being situated under the castle hill, was the starting point for re-planning. Unlike Sitte, whose plan for Ljubljana had focused on a relatively small area where he changed or re-planned very little, Fabiani addressed all of the functional problems of a city moving into the twentieth century. His analysis recognised that the layout of Ljubljana had been very well resolved over the centuries. Much of what would be done was to echo previous systems while at the same time considering Ljubljana's expansion.

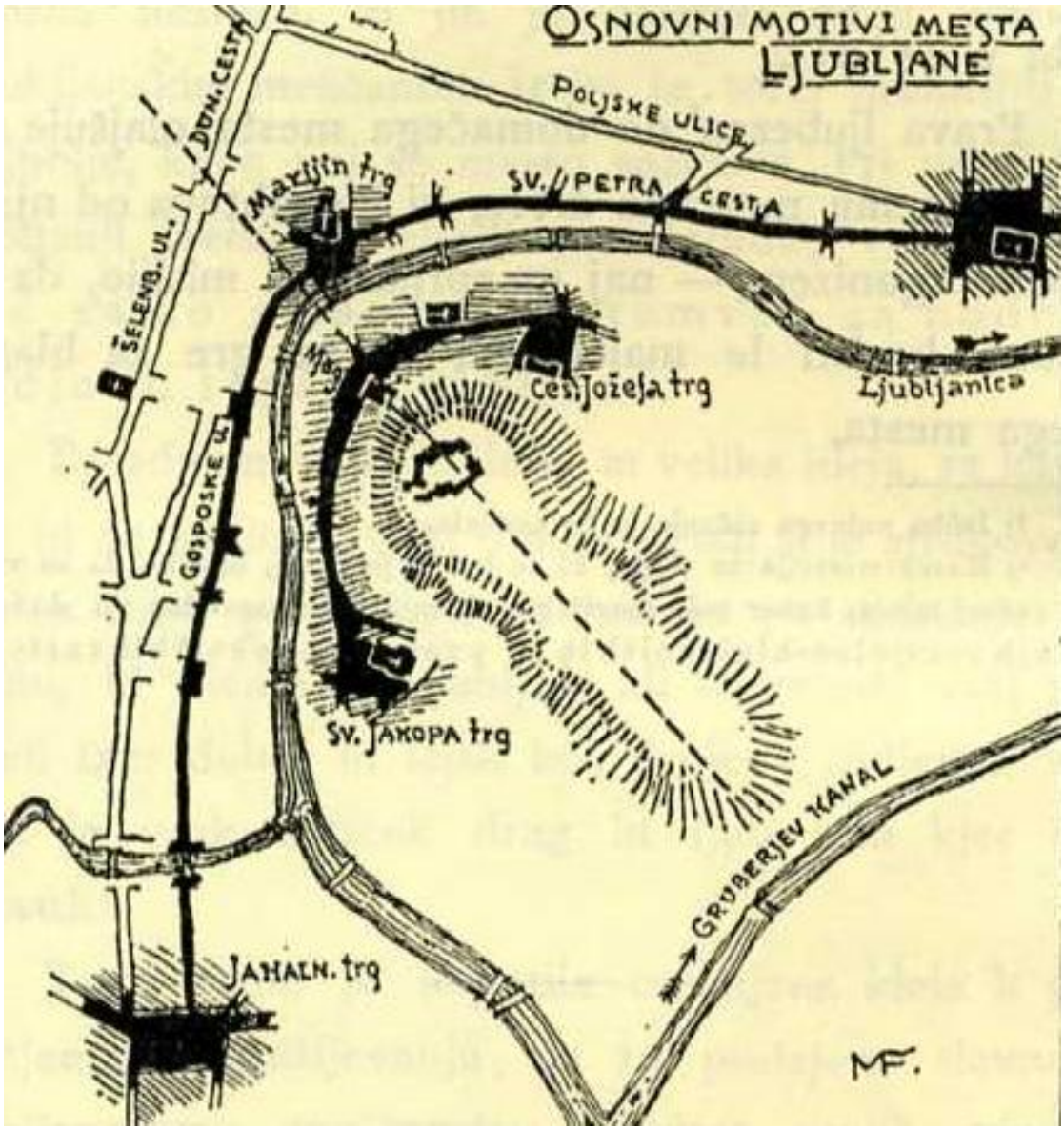
The first act was to repeat the two encircling roads which wound around the castle hill descending to the two banks of the Ljubljanica River; in effect encircling the densely populated city centre in a protective ring (2.6) and allowing for planned, zoned development outside of this area. Having collaborated with Otto Wagner on the text of *Moderne Architektur*, Vienna 1896, Fabiani was well versed in expressing radical planning solutions. His ability in analysing the ebb and flow of Ljubljana's population was in identifying both Roman and Medieval entry and exit points.

Fabiani began by forming new roads and squares on these lines thereby both preserving and enhancing the architectural whole. His analysis allowed him to pinpoint the oldest city line within the medieval town that was re-plotted to connect two important squares (2.7). He was able to add this knowledge to the great understanding he had of Roman Emona. Essentially it was a rectangular town surrounded by high walls bisected by the *Cardo Maximus*, the main street running north to south further divided transversely by the *Cardo Decumanus* with a classical forum situated at the crossing of

2.6 Max Fabiani, General Regulatory Plan, Ljubljana 1895. (Detail of encircling double-moat ring.)



2.7 Max Fabiani, General Regulatory Plan, Ljubljana 1895. (Lines of connection and bisection.)



Squares joined by darker lines above and below the Ljubljanica with a 45^{o} linear axis through the Castle Hill as a system of orientation.

the main axis with a temple and basilica. In addition to the walls, there was a double moat for even greater protection for the wealth invested in the amber trade and other commodities. He also identified a later Roman settlement to the northwest of the present city with a baptisterium and basilica and a fourth and fifth century graveyard. Because of his great respect for architectural classical forms and their supreme orchestration of space, Fabiani followed the lines of these previous plans wherever possible.

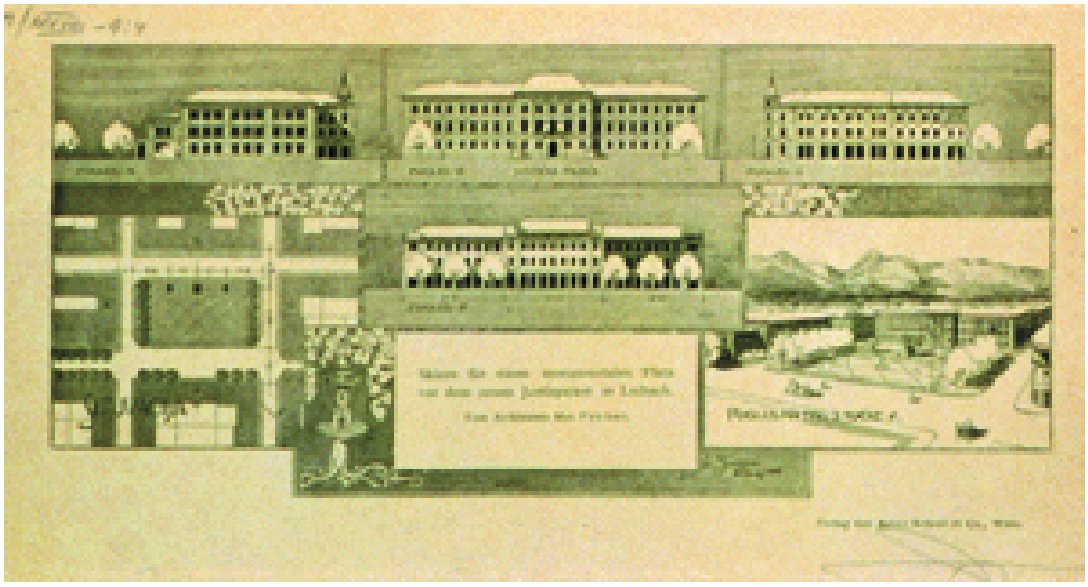
In addition he was immediately careful to protect and preserve many gothic and Baroque buildings as part of Ljubljana's living history. Fabiani also anticipated the problem of the proximity of the railway to the city centre. This would cause difficulties for future expansion so he planned to move it away, replacing it with an enormous square between the existing city and a newly developed northern quarter Bezigrad, 1899, which he had planned as space for additional industry, housing and recreation. Fabiani was also very careful to limit buildings to no more than four storeys, thereby preserving the dominant motif of Castle Hill to create a great sense of security.

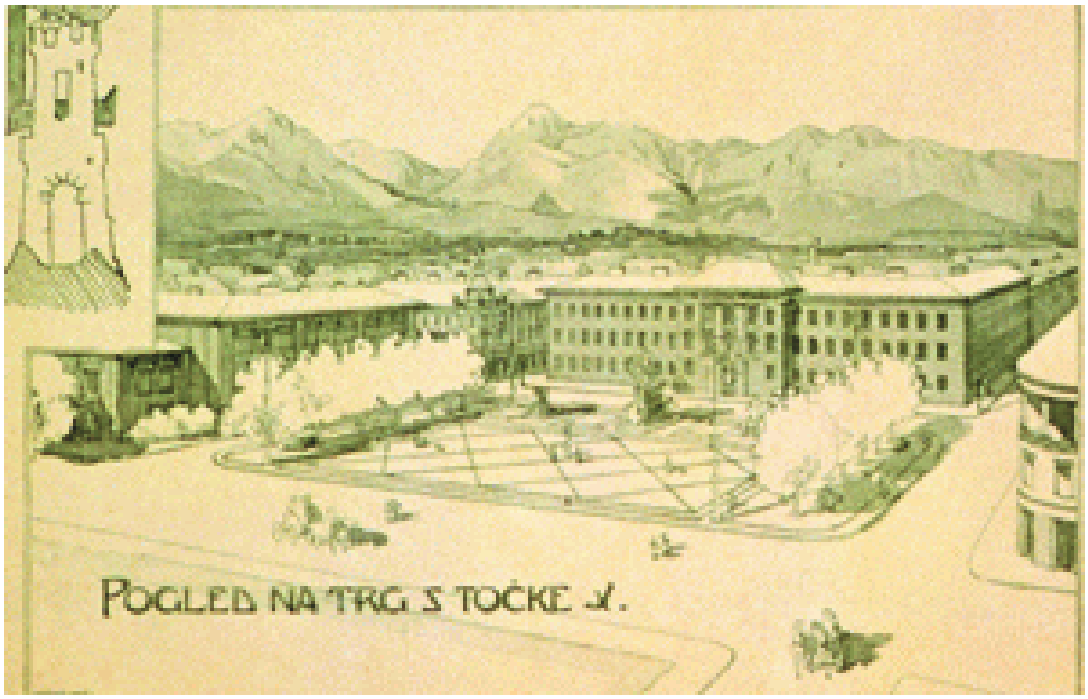
Within this scheme Fabiani created new streets: Miklošičeva which linked with the new *Slovenski trg* (Slovenian Square) (2.8), a beautifully resolved dominant classical space, now known as Miklošičev Park 1900-1901. Around its perimeter were the Law Courts and the Krisper House (2.9) and other superb buildings erroneously labelled as Secessionist by Breda Mihelic in Shaping the Great City.[4]. In fact Fabiani moved away from any suggestion of decorative Secessionist motifs to a modernist frame of reference very rapidly as in the Hribar and Bamberg Houses (2.10). Other important architects from this period and location were: Josip Vancas: City Savings Bank, Zagreb, 1903-1904, Hotel Union, Ljubljana, 1904-1905 and People's Loan Bank 1906-07; Freidrich Sigmundt: Urbanc Business Premises, Ljubljana, 1902-1903 and Ciril Metod Koch: Hauptmann House, The Small Skyscraper, 1904.

But there is one fine Secessionist work in Ljubljana, the *Zmajski Most* (Dragon Bridge) by Jurij Zaninovič 1901, Ljubljana, (2.11). Yet even this encompasses a contradiction as it is a monumental construction of reinforced concrete made to look like stone. In construction methods alone this must transport the whole to a more modern period than that of the Secessionists.

2.8 Max Fabiani, *Slovenski trg* (Slovene Square) now Miklošičev Park 1901

Buildings around the square depicted in a set of illustrations and postcards.





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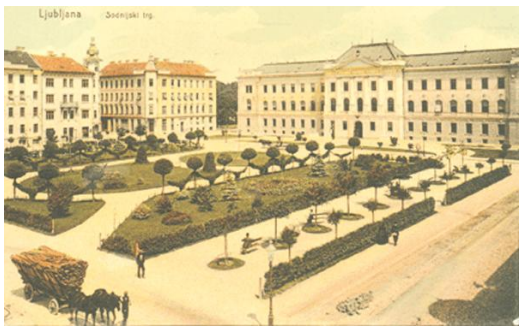
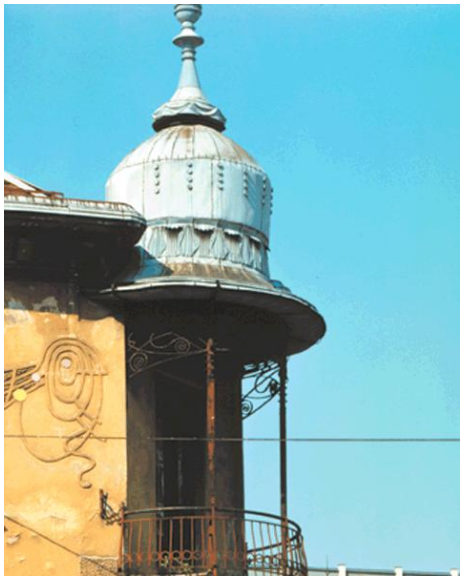


3. © Blau and Platzer, Getty Inst. 1999

4. © City of Ljubljana Archives, 2006

2.9 Max Fabiani, Krisper House 1900-1901, Miklošičeva 20, Ljubljana. (Builder Filip Supaneie)

1 Detail of the corner turret showing a paired down undecorated aesthetic, 2 full view which continues with the plain façade.



Ciril Metod Koch, 12 Uden House, Ljubljana 1902. (Builder Jakob Accetto)

Fabiani's aesthetic was shared by others although the capital and globe of the tower were more of the period as seen in the decorative detailing on the People's Loan Bank, Josip Vancas 1907.

2.10 Max Fabiani, Ivan Hribar House, Tavčarjeva 2, Ljubljana 1902-1903 (Builder Gustav Tonnies)

Max Fabiani, Bamberg House, Miklošičeva 16, 1906-1907. (Builder Gustav Tonnies)

2.11 Jurij Zaninovič, *Zmajski Most,* (Dragon Bridge), Ljubljana 1901

One of the world's first reinforced concrete bridges guarded by four bronze dragons the symbol of Ljubljana.

Ljubljana was a place of great building expansion: theatres, hospitals, museums, schools, hotels, department stores, houses and public buildings accompanied by wide, paved, tree-lined streets. The rate of building from 1896-1910 had increased threefold. One of the most notable of all the architects was Jože Plečnik (1872-1957) who had worked alongside Otto Wagner in Vienna and had been fascinated by Wagner's ability to employ Renaissance, Baroque and Neo Classical influences in his architecture. This versatility was required by the Austro-Hungarian authorities but Plečnik, as somewhat of a provincial, was unused to this level of masterful adaptability although his Grand Tour had included Rome, which had prepared him to understand the monumental city.

He quickly realised that Vienna as a utilitarian metropolis was outside of his experience. This 'innocence' afforded Plečnik an enormous advantage. As a 'petit bourgeois' Catholic Slovenian, someone from the provinces of the Austro-Hungarian Empire, he had a narrow view but intrinsic in this was his great love and respect of national forms and identity allowing him to drive his personal vision forward. These factors were of enormous value to his spiritual and intellectual language although this placed him in a difficult position:

> To the conservatives he appeared an innovator, and to the modernist a conservative.[5]

In fact he was both, who through this duality of understanding would produce original buildings, remodels, reconstructions and regulatory plans of exceptional variety throughout his life. Contrary to the opinion of Friedrich Achleitner that Plečnik was frightened by modern metropolitan culture and disgusted by the modernist *tabula rasa* (a scraped tablet, a fresh start) which would imply Plečnik was unable to understand all that was happening around him, nothing could be further from the truth. Plečnik not only used all of the complexities before him but was by his understanding able to proceed beyond a national frame of reference with all the inherent complications of ethnicity, religion and material metropolitan culture kept in balance by his innate understanding of time and place as evidenced in his work.

To try to understand Plečnik or to know him to any degree is immensely difficult as from his early years he was a very private man. The two things which were clearly very important to him were a strong sense of family bounded by religious life within an emphatically liberal environment. Plečnik's absolute faith in the intellectual and artistic underpinning from his 'motherland', made him Slovene first, last and always.[6]

Unlike his brothers his educational progress was fractured but his latent talent was recognized in 1892 when he won a regional scholarship to the School of Applied Arts in Graz. Although Plečnik was encouraged by Leopold Theyer and Theodore Muller he appeared unaware of his exceptional talent for drawing. It was left to his brothers to eventually persuade him to present a portfolio to Otto Wagner, the newly appointed head of the Vienna Academy of Fine Arts, 1894, at the age of twenty two. In the fine detailing and use of line and tone, Wagner recognised a fine degree of technical ability but was very clear that Plečnik was not as yet equipped for studentship at the Academy. The ideal situation was for Plečnik to experience the demands of the city while gaining far greater experience.

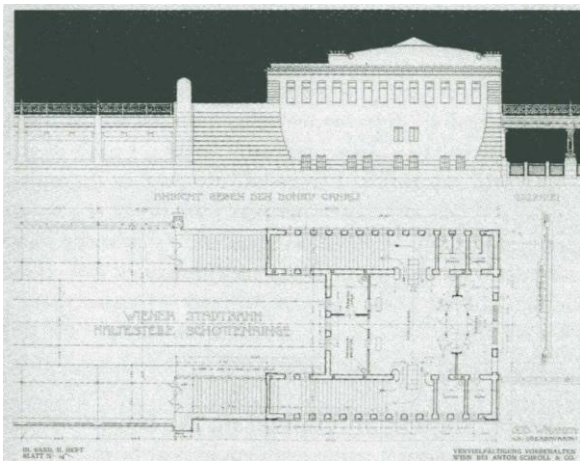
A compromise was reached; Plečnik would work as a draughtsman within Wagner's studio. Here he would work on the drafting of designs for the Stadtbahn (2.12) and Danube Canal as well as other prestigious projects that Wagner, now created Professor, would almost certainly be given. So began the building of Plečnik's career, the relaxed atmosphere in the Wagner studio contrasting with his experiences elsewhere allowed him to produce a personal sketch or drawing for his portfolio every day after work, until he had sufficient to be presented to and accepted by the Academy in 1895.

As the photograph (2.13) shows Plečnik was very much a young man with a sense of style. He was four or five years older than his fellow students with a greater maturity. His single-minded pursuit of his own perfection led his colleagues and professors to find him unsociable. This attitude allowed a meteoric progress from simple façades to complete villa plans embracing all the new forms and materials of iron and concrete in just three years. This immense capacity was to produce designs for posters, monuments, furniture and exhibition design. In 1898 when designing the Great Exhibition at the *Prater* (a rotunda built for the 1873 World Exhibition in Vienna) Adolf Loos commented on the fact of this work extending to every detail of man's environment. Following work for his thesis, a design for a health resort at Scheviningen near The Hague aroused Wagner's interest especially in Plečnik's use and placing of a pair of columns with a flight of steps wound around and between them. This would be the beginning of Plečnik's manipulation and exploration of classical forms as beautifully resolved in the Zale Cemetery Complex from 1938-1940.

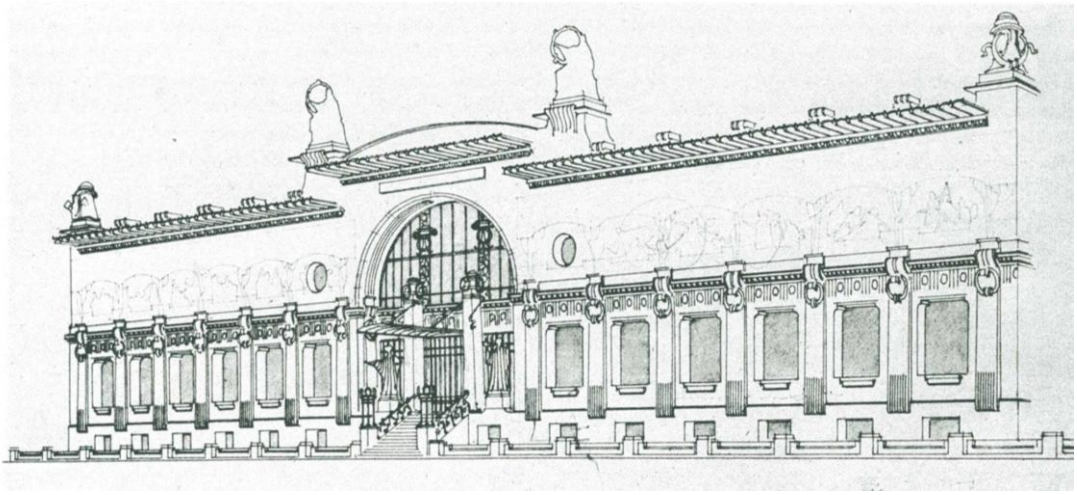
In 1898 Plečnik's student thesis won the much-coveted Rome Scholarship with a purse of 3,000 Austrian Crowns. He began his travels in Venice where he was given to remark:

2.12 Jože Plečnik, Otto Wagner's Atelier, 1900

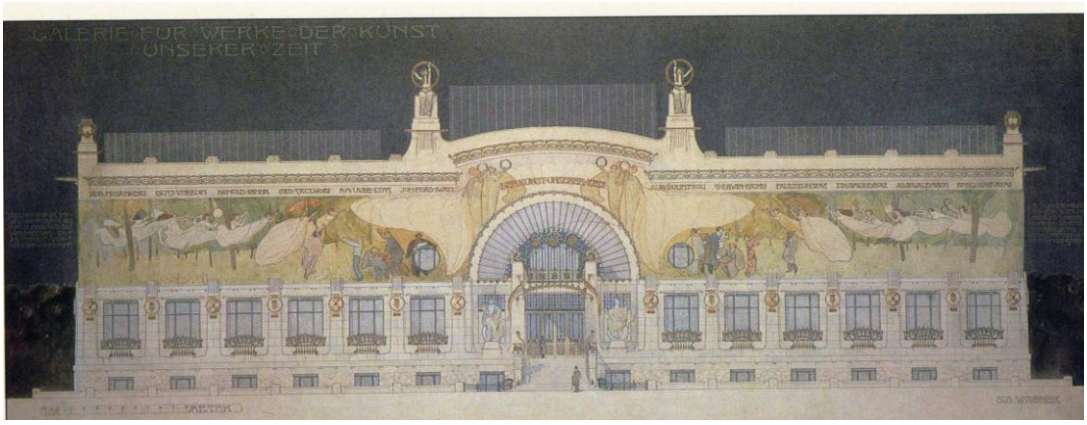
A relaxed Plečnik in the studio, 1900



Plečnik's drawing of the Vienna city railway Schottenring station, 1900



Otto Wagner's Modern Gallery as drawn by Plečnik, 1900



Otto Wagner's representation in pencil and watercolour of the Modern Gallery, 1899

2.13 Jože Plečnik, A young Man in Vienna 1893

Plečnik as a stylish 20 year old

Plečnik seated second from the right with Josef Hoffman standing behind. Otto Wagner seated far left with JM Olbrich standing extreme left, as viewed.

> Everything that is old here is incredibly beautiful and everything that is new there [Vienna] seems mediocre.[7]

Then on to Rome, for so long his imagined spiritual home. Plečnik was able to contrast the German love of the fantastic and mythical to the might of Zuccari, Michelangelo and Palladio demonstrated in those most reliable materials, brick and stone. Within this visit two realities were born in Plečnik's mind; to always use the very finest materials available, preferably hewn from the quarries or dug from the earth and the realisation that he was to see

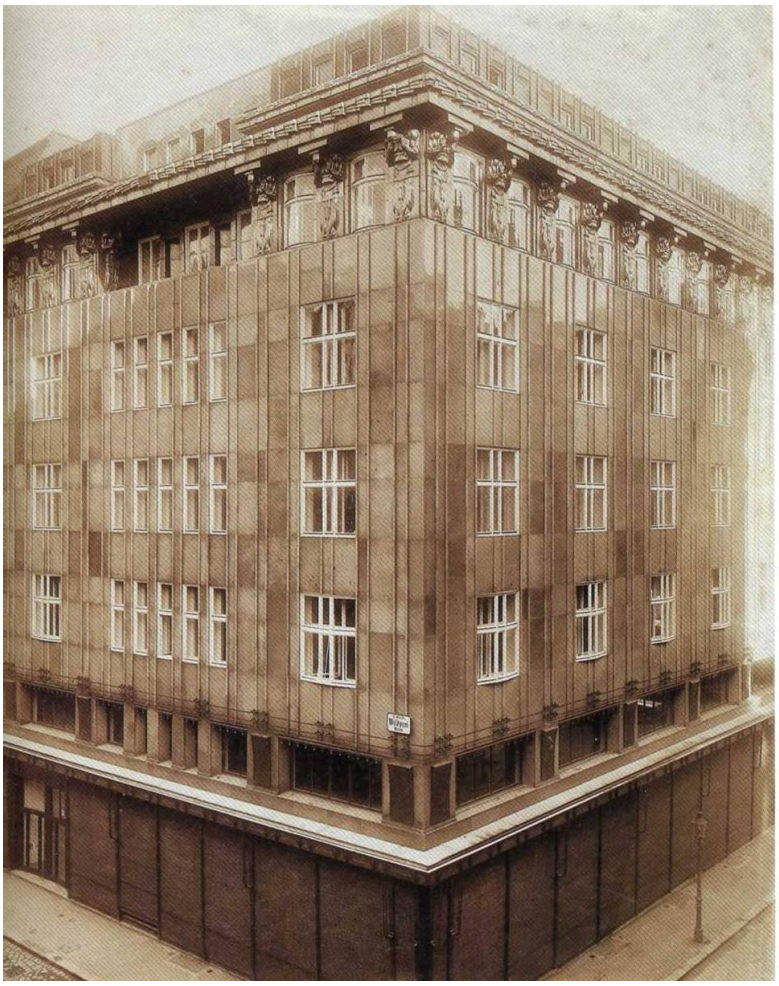
> Ljubljana as a place where both worlds came together; a mediaeval German tapestry with elements of the Renaissance and Baroque woven into it.[8]

This was the realisation that would become a beautifully executed 'dream' when Plečnik celebrated and embellished his capital, his Ljubljana. Following his trip to Italy he progressed to France but while in Paris was forced to return home because of his mother's death. Plečnik returned to Otto Wagner's studio briefly but was unable to work with Wagner's profit obsessed son. For the next decades Plečnik would enjoy a stellar career, firstly in practice in Vienna – the Langer House, Hietzing, 1900-1901; Loos Villa, Melk, 1901; Weidman Apartment, Vienna, 1902 and the Zacherl House, Vienna, 1903-1905 (2.14). In addition to these were numerous other buildings, monuments, fountains and furniture, one of his first loves.

He was then invited to Prague by his friend and fellow student of Wagner, Jan Kotěra, to take up a teaching post at the School of Applied Arts in Prague. This appointment began in the spring of 1911, continuing to 1921 when following an invitation from Jan Vurnik he was to return to Ljubljana to take up a professorship at the newly inaugurated University of Ljubljana. At the same time he also accepted, on the recommendation of Jan Kotěra, the position of chief architect of Prague Castle at the personal invitation of Tomáš G Masaryk, the President of the new Czechoslovak Republic. It is clear from his works that Plečnik belongs in this company as a modern, not being tied to a slavish copying of any tradition or forms; his remodelling of parts of *Prazsky Hrad* (Prague Castle) among others demonstrate his abilities as both innovator and manipulator of exterior and interior architectural schemes (2.15-16).

In fact these appointments were part of an amazing number of offers including chairmanship of the Prague Academy of Fine Arts and a post of Professor at the Royal Academy of Arts and Crafts in Zagreb. Having decided to return to Ljubljana, Plečnik

2.14 Jože Plečnik, Zacherl House, Vienna 1903-05



Contemporary view of the Exterior

Two Modern photographs:

1. The top storey Atlantes (carved male figures, telemones) support the broken cornice of the roof

2. The marble entrance corridor

2.15 Jože Plečnik, Hradcany (Prague Castle) (remodelling first phase 1922-26)

Details of the President of the Republic apartment

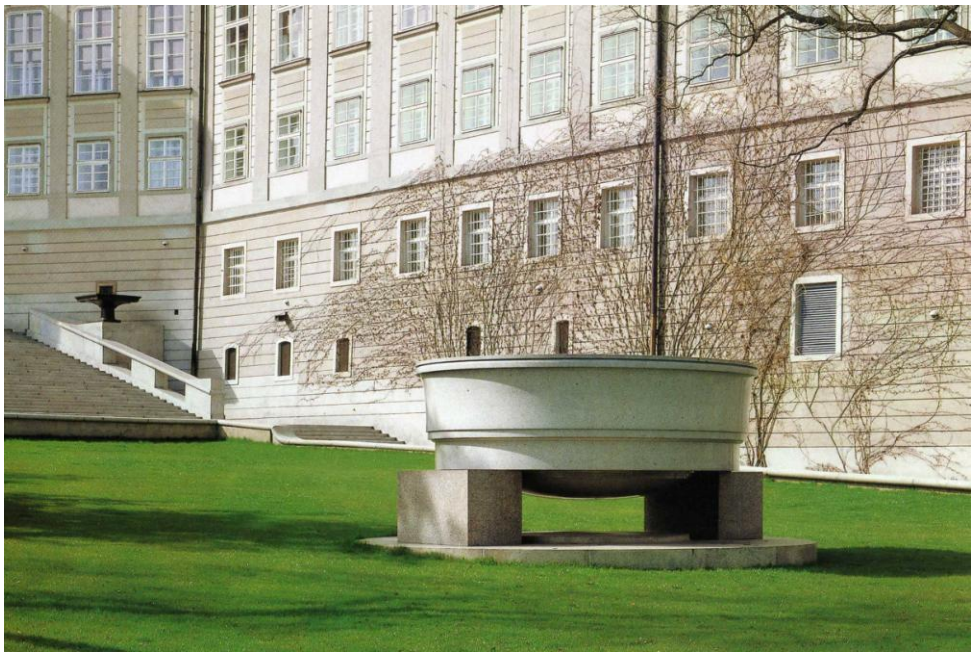
1. Window detailing

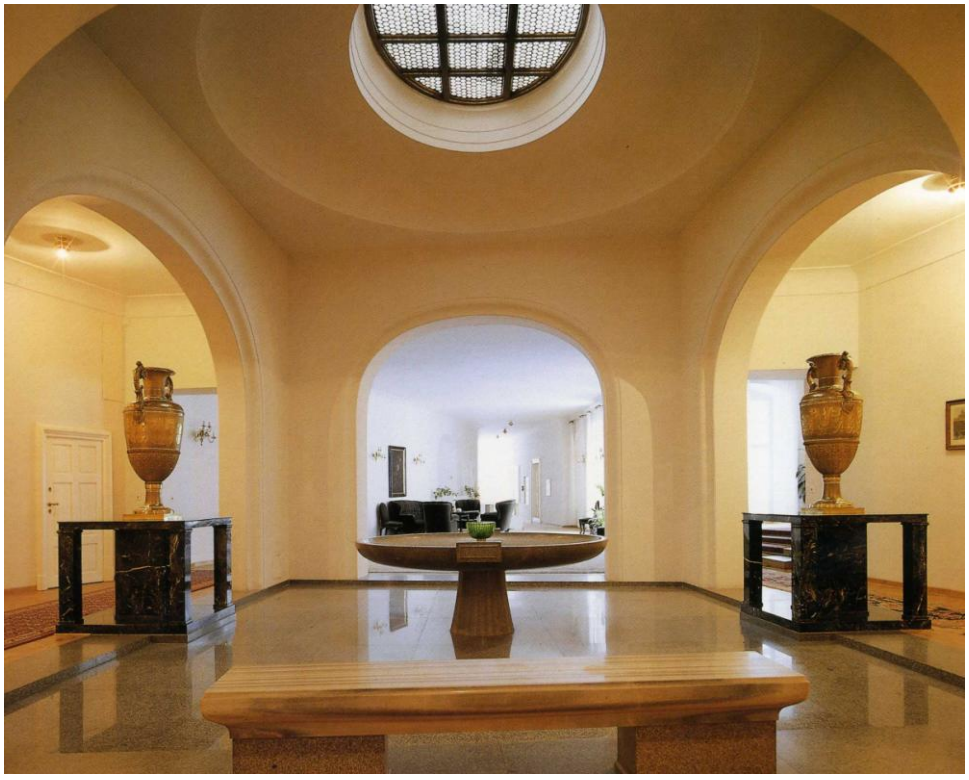
2.The President's lift

3. Vestibule before the President's stairs, note the columns tapering top to bottom

2.16 Jože Plečnik, Hradcany (Prague Castle) (remodelling first phase 1922-26)

1. Garden of Eden/Paradise Garden, the giant Mŕakotin granite basin and entrance steps. In the background is the diorite bowl above the steps



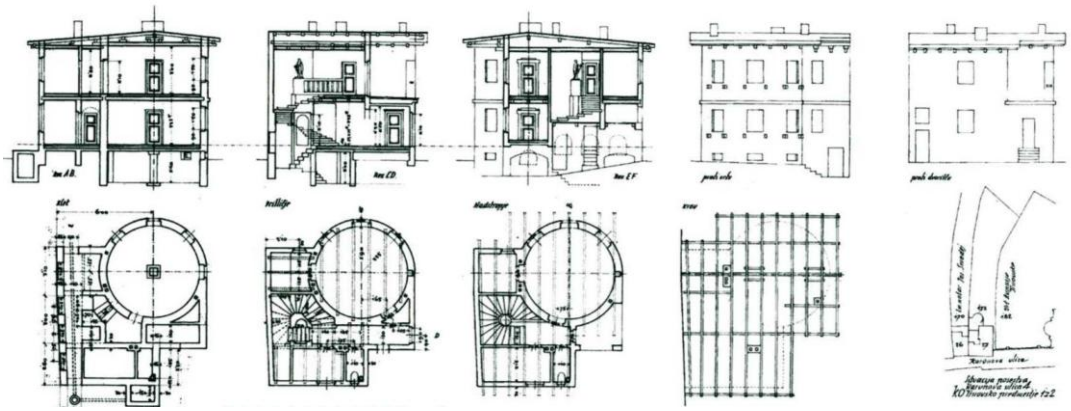


2. The President of the Republic Impluvium, that is an opening in the atrium which in Roman times was used to gather water, hence the arrangement of a perforated window below which is a shallow cistern

2.17 Jože Plečnik, his own house, Trnovo, Ljubljana 1923

1. Viewed from the rear garden looking towards the front of the house with two storey extension.

2. Plans and elevations of the extension



3. The garden end of the conservatory

4. The conservatory, extension and garden

began by extending his own house in Trnovo, 1923-1925 (2.17). This was followed by a rapid succession of works from 1923-1940.

3. The Works of Jan Kotěra throughout the Czech Lands

The theoretical positions of Gottfried Semper, Alois Riegl and Adolf Loos were in some ways made concrete by the work of Jože Plečnik and Jan Kotěra (1871-1923). As the next champion of Central European architecture and 'The Founder of Modern Czech Architecture', Kotěra needs to be understood in historical context.[9] There is a tendency to believe that the latest form, the most modern, is the only acceptable form of architectural expression and that any reference to past historical styles demonstrates a lack of understanding or ability – as proffered in judgements about the work of Jože Plečnik. What is overlooked in this argument is that what we now accept as the established 'greats' from the history of architecture and art were seen by the conservative establishment of their day as renegade *avant gardes* who would destroy all that was civilised and rational.

This position is well documented with the works of Bohumil Kubišta, 1884-1918, Emil Filla 1882-1953 and Vicenc Beneš, 1883-1979, and a particular form of Bohemian Cubism learned to an extent from living in Paris and knowing the works of Picasso and Braque:

> The substance of any all new and good art, as represented by Picasso and Braque, consists in greater richness, abundance, and perfection of its formal means.[10]

This Cubism counter-pointed by Rondo-Cubism and Functionalism became a mixed style for a short period in the Czech Lands, and in Prague and Brno in particular. Czech sympathies, more than was usual for the time, would value whatever was good and use it in a whole new modern idiom. This was always the case with Jan Kotěra whose approach accorded with an earlier but very similar definition of the power of architecture to liberate men.

> Architecture unshackled which would afford to the greatest genius the greatest opportunities of producing the most powerful efforts of the human mind.[11]

It was this freedom of self expression which Wagner and his students/collaborators Fabiani, Loos, Plečnik and Kotěra valued and exemplified, shown by their abilities to mix their personal demonstration of classical proportion and the latest advances in materials and technology. Kotěra's architectural works stretch across the Czech Lands from the northern town of Hronov to Treborn in the south and from Holoubkov in the west to Frýdek-Mistek in the east. Among these buildings were houses, villas, pavilions,

studios, town halls, museums, banks, offices, hotels, opera houses, castles, schools, university departments and a waterworks. (2.18)

Kotěra travelled widely and absorbed ideas and influences in addition to the many cultural flows and cross-pollination that were an enormous part of his exposure to Wagner's circle. This contact enabled Kotěra's career to progress with great speed. In 1896 as Wagner's student at the Viennese Academy of Fine Art he won the golden Fugger medal. 1897 saw him win the Prix de Rome for his final college project. By 1898 he had a first teaching post at the Prague School of Applied Arts.[12]

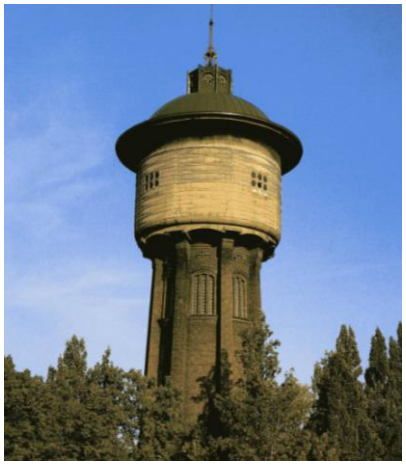
Parallel to all this knowledge gathered by personal contact, the developments in lithographic printing and publication meant that art and design magazines were being launched worldwide so that the dissemination of ideas was greatly increased. One building more than any other, often regarded as his finest work, demonstrates all of these contacts and influences. The City Museum in Hradec Králové, 1909–1913 (2.19) is an astonishing mix of a classical monumental structure interspersed with clear elements of English Arts and Crafts: Baillie Scott, Crane and Webb and Charles Harrison Townsend.

It is wise to remember at this point that although England never had a fully developed Art Nouveau style (relying more on a re-interpretation of native British decoration as in the '*Tudric'* and '*Cymric'* ranges of Liberty's), Arthur Heygate Mackmurdo through his cover of the book 'Wrens City Churches' (1883) created the very first image that would become the *leit motif* of Art Nouveau. Amalgams of sensuous vegetational forms undulate and flow across surfaces in tandem with a superb understanding of asymmetrical balance. Much of this work, including that of Charles Rennie Mackintosh, was published and promoted via 'The Studio' magazine which was disseminated widely across Europe and additionally Kotěra had intimate experience of Secessionist forms.

Kotěra now added to this mix the brick architecture of Holland and Belgium as in Hendrik Petrus Berlage, being greatly impressed by Berlage's masterpiece The Amsterdam Exchange or 'Beurs' 1903. Other influences are taken from Henry Van De Velde, Bloemenwerf, 1895; Peter Behrens, Haus Behrens, 1901; J.M. Olbrich, Grosses Glückert Haus, 1901; Frank Lloyd Wright, Dana House, 1902; Josef Hoffman, Palais Stocklet, 1905; Otto Wagner, Steinhof Church, 1905-1907 and finally to Fyodor Shekhtel's Derozhinskaia's Mansion, 1901 in European Russia (2.20).

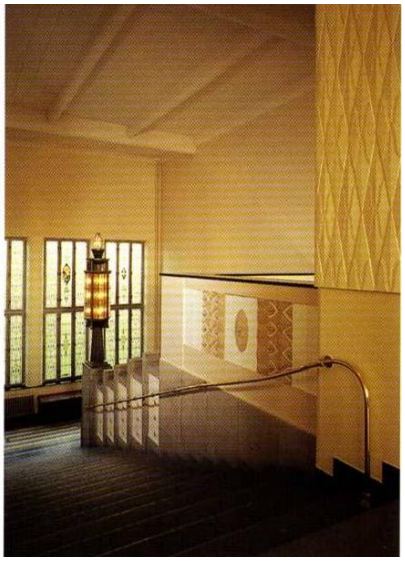
2.18 Jan Kotěra, architectural works

1 A kiosk on the bridge in Hradec Králové 1910

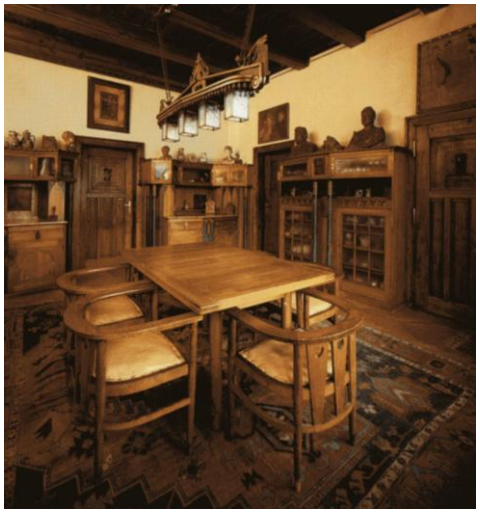


2 Vrsovice waterworks, water-tower 1906

3 Králův Dvůr workers' housing



4 Hradec Králové City Museum stairs 1913

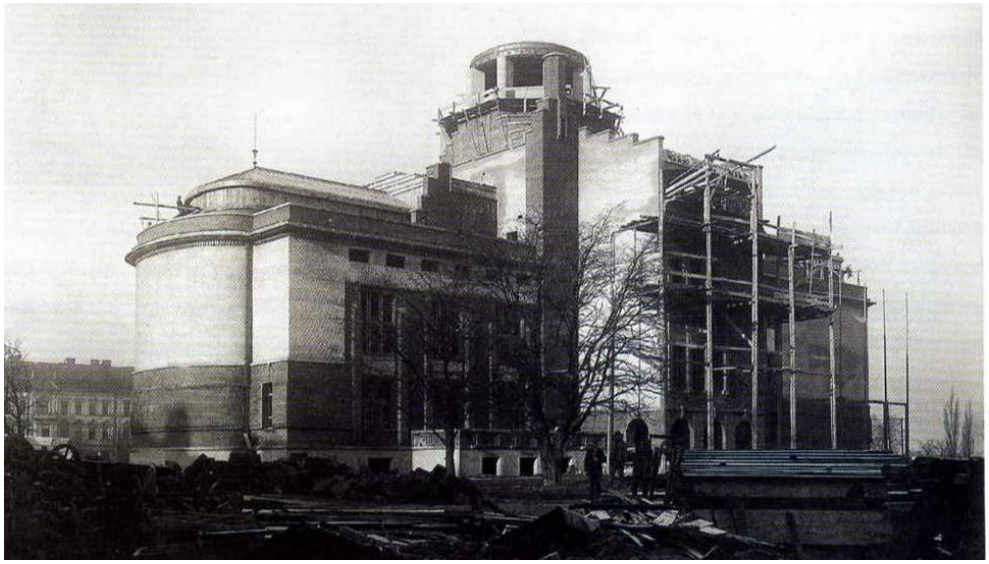


5 Stanislav Sucharda's villa dining room 1906-07

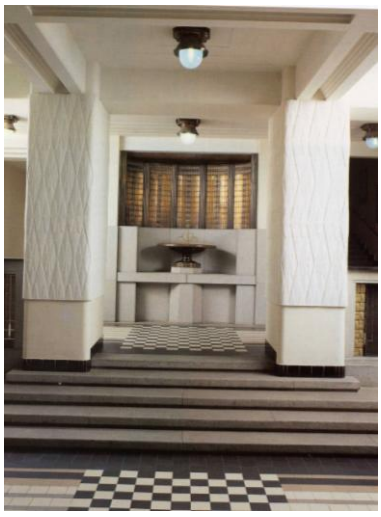
6 The National House Prostějov main façade 1905-07

2.19 Jan Kotěra, Hradec Králové Museum, Hradec Králové 1909-1913

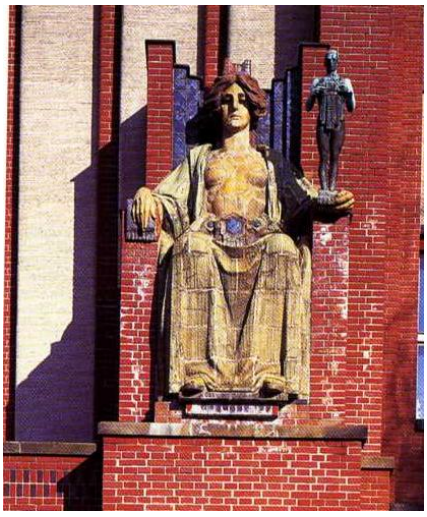
1. Main Facade



2. Construction during 1910



3. Fountain at the foot of the entrance stairs



4. History Figural Sculpture by Stanislav Sucharda

2.20 Fyodor Shektel, Derozhinskaias Mansion, Moscow 1901

1. View of the front façade.

2. A stone fireplace within a wooden surround.

3. A newel-post lamp-standard.

As with Western and Central Europe, Eastern Europe enjoyed great publication and discussion of art and design through Diaghilev and his entrepreneurship, publishing *Mir Iskusstva* in 1898, closely modelled on "The Studio". There was also a greater degree of published work made available to Kotěra on Steel Framed Buildings especially 'Sullivans Guaranty Building', Sullivan and Wright, 1894-95. Although little is known of Kotěra's American visit, except that he was accompanied by Josef Urban, it is reasonable to surmise that in designing the Czech Section of the World Exhibition in St. Louis in 1904 he had extensive contact and discourse with influential figures including Hermann Muthesius, the most eminent of theoretician/architects who judged Kotěra's exhibition to be,

> an exquisite work.[13]

Kotěra (and his mentor Otto Wagner) passed this experience and understanding on to the next generation of Czech modernist architects and many others in a seamless flow. For the development of modern architecture the new form of planned and zoned cities was an absolute necessity. Much that was happening in the Czech Lands was driven by industry and commerce particularly in Brno and Zlin.

4. Brno

Brno had grown steadily in size and importance from the eighteenth century situated as it is at the foot of the Czech–Moravian Highlands at the confluence the Srvatka and Svitava Rivers, which played an important part in the development of Brno's textile industry. Like so many other cities Brno was ringed by defensive bastions, a moat and a city wall. Early expansion began to move the suburbs outside of these walls where the first textile and engineering factories were established from 1763. From this date Brno's total population, which had never exceeded 8,000, tripled to over 25,000. As a consequence the dismantling of the city fortifications became an imperative. So it was that one of the first known planned and zoned housing policies for the newly arrived workforce could be put in place. Because of unforeseen problems the plan devised in 1845 had to be held over until later.

Following the 1848 Revolution, 28 administrative units were attached to Brno through the abolition of feudal remnants*;* this expansion increased the city area from 349.3 to 4,485.5 acres (7.01 square miles).

> In 1849 there were 42 factories in Brno; 24 cloth-manufacturers, 5 spinning mills, 1 linen mill, 1 hat manufacturer, 3 metal works, 3 tanneries, and 3 manufacturers of food products serviced by an expanded population of 50,000.[14]

The delayed plan of 1845 developed by the provincial building director Josef Esch constituted two new avenues crossing one another, with construction activities restricted between these new avenues and the city walls. In 1852 Josef Seifert, the city planner, was able to develop Esch's plan where the destruction of the city walls and fortifications allowed replacement by a circular avenue, Brno's Ringstrasse, designed by Ludwig Forster in 1860. Very quickly Johann Lorenz, the city engineer, modified this design in 1861 and by 1862 further developments by public competition was being considered. However, competitions were limited to German-speaking architects as nationalism through the Germanization of official functions was still very much in place. The winning design was by E. Fassbender, a Viennese architect, but fortunately this plan which would have ruined the appearance of central Brno was not implemented.

A combined plan was arrived at from the design of Moritz Kellner, Franz Neubauer and Josef Arnold, but because of the reduction in public green spaces that resulted, this plan was also rejected. Finally a definitive plan of 1863 was adopted and from this point forward Brno grew in a controlled and planned manner (2.21-22), reminiscent of Zagreb where a ringing group of parks similar to Lenuci's Green Horseshoe were established. Progress meant that the city centre remained as a focus for social and public life but some Baroque palaces and associated churches were demolished to create space for new planning projects.

> The prosperity of Brno from the 1860s moved from a dependence on textiles production to devising more inventions and improvements, reaching a peak from 1867-1868 with 27 patents being granted.[15]

This degree of invention allied to mechanical engineering enabled the growth of other industries in Brno particularly metalworking and the production of boilers. One invention that would continue to guarantee Brno's prosperity was the production of the first ever diffusers to extract sugar from sugar beets – sugar having become an essential condiment for the modern table. In addition to Bedrich Wanieck founded in 1864, the factories of C.F Luz and T. Bracegirdle merged their businesses in 1902 to form the First Brno Engineering Works employing 1,010 workers in 1910, rising to 3,000 by 1915.

This development was made possible by the introduction of electrical power. Brno's second mechanized industrial revolution began with the city electric power station becoming online from 1898 enabling the modernity of Brno to be better illuminated. In 1901 modern Liberty Square was illuminated by six electric lamps; in 1905 the station

2.21 Náměstí Svobody (Freedom Square, originally Lower Market) Brno 1869

1. Was created following the demolition of the 13th century ,St. Nicholas's Church opening out the area as part of the reconstruction incorporatring the the Brno Ringroad

Theofil Hansen, Besední Dům (Beseda House), Brno, 1871-73

2. One of the many early buildings created on the Ringroad folowing the demolition of the city walls and opening out of squares and thoroughfares

2.22 Denisovy sady, a typical Baroque park, Brno 19th century

1 Remodelled and used as part of the green spaces “lungs of the city” from 1860-1890

Fellner & Helmer, divadlo Na hradbách (Theatre on the Wall) 1882
The wider sweep of the new roads is seen in this period postcard

1 © jižní morava.cz 2006
2 © andreas praefcke/carthalia 2006

concourse was lit by three arc lamps and the pedestrian tunnel passing under the station had six lamps installed. By 1913 the city was hooked up to a higher capacity generating station that allowed the illumination of Vineradska, Radnicka and the Radnici trail. This increase in electrical output allowed the Brand and Lhullier foundry to develop. But of all Brno's industrial factories it was 'Lederer and Porges' founded in 1889 that was to become the famous 'Královopolská' works with 1,850 employees in 1907, producing a vast range of steam boilers, railway storage tank cars, wood working machines, deep freezers, steam engines, steam rollers and railway and road bridges.

The most reliable figures show, that by 1902 Brno had a total number of 3,926 factories. As many as 12,609 workers produced textiles in 159 factories and 293 tanning and industrial factories employed 6,562 people. Garment mills, numbering 2,355, employed 6,151 persons. So that this number of people could be housed and fed, 241 construction firms employed 4,488 workers to build necessary factories, shops, accommodation and other infrastructure. To supply the dietary needs of workers and their families, 2,686 people worked in 362 factories involved in food production. To recap, that is 32,496 people engaged in planned industry in a zoned, controlled environment. Nowhere was there comparable organised and controlled expansion. In the growth of Brno from 1910 onwards, the previous attention to planning from 1850-1890 was to have great benefit.

The other essential to this development was a much-needed growth in the network of rail links so that the new markets for the ever-expanding industrial products of Brno could be served. As before, this development was well planned and staged. In 1851 Brno was linked with Ceska Treborra and was further linked with Střelice with goods warehouses in 1856. To expedite commercial traffic a customs house was built on an undeveloped tract of land creating the Lower Station Rosice, primarily for freight, while the Upper Station Rosice remained for passengers. A second railway link to Vienna was completed in 1870 via Střelice, Moravský Krumlov and Hrusovany–Sanor. In 1888 a double track system and junction was constructed to link the Upper and Lower Stations.

Public transportation needs in an expanding city were also served by the development of the tramways, which from 1869 had been horse drawn. These trams were converted to steam power in 1884 operating along 6.5 km of track. By 1896 steam was replaced by electric with the first system being operated by *Österreichische Union Elektrizität Gesselshaft* (Austrian Union Electricity Company) on a tramway that expanded to 22.5 km. although this was not an entirely integrated system. Nationalistic differences

between Germans and Czechs meant that further extension to Tivoli and Tabor, in the Czech suburbs, was delayed until 1914.

One further requirement of an expanding modern city is an empowering, integrated, educational system that supports advancement free of any nationalistic controls or prejudices. In 1849 the first institution of higher education, the Technical College of Brno, was founded. By 1873 the dual teaching languages of Czech and German had been reduced to German speaking only. In response, after some failure and delay, a Czech-speaking Technical College was established in Brno in 1899. This disparity between German and Czech-speaking was echoed in the school system where German-speaking schools were founded in 1778, whereas the first Czech speaking schools were not founded until nearly one hundred years later in 1869. Despite these distinctions and animosities Brno was by 1910 a truly modern, planned urban and rural conurbation that was able to service all needs by an expanding, controlled infrastructure. One key figure in the development of this expansion is Otto Eisler who with his brothers Artur, Moric and Hugo established their construction firm to work alongside architects and planners as one of the earliest examples of Design and Build paralleling those in Lviv and Wroclaw.

5. Zlin

The story of Zlin is very much the story of Bat'a Shoes. Zlin and its environs had grown from a small town in the 16th century to a larger, mainly agricultural, town in the 19th century. With the founding of the T. & A. Bat'a Shoe Company in 1894 (Tomáš, Anna and Antonin Bat'a), shoe production would depart by stages from the centuries-old cobbler's workshop to a modern factory system. The first shoe, the 'Batorka', of fabric and canvas construction was produced in 1897. Progress of plant mechanization according to Fordist principles advanced very rapidly and by 1905 2,200 pairs were being produced daily by 250 employees. In 1909 the first shoes were exported to Germany, the Balkans and the Middle East in a greater range of styles than ever before. The excellent quality and value for money saw sales top two million pairs by 1917, produced by 5,000 employees. Investment in more modern production equipment allowed the company to grow and prosper, as did the surrounding community. Bat'a built houses, schools and hospitals, developing the infrastructure of Zlin as a whole particularly from 1920-1939 (which will be discussed later).

6. Lviv

At this time the Polish lands consisted of a number of ‘states’ including Galicia within which were parts of the Ukraine. (As a consequence this work uses Ukrainian as opposed to Polish, Russian or German or Latin names which collectively over the centuries have been; Lwow, Lvov, Lemberg and Leopolis). At first sight the architecture of Lviv would appear to have no connection with any ideas of modernism but the quality that makes many of the buildings modern is not discerned by looking. As in Zlin the most important factor in the building of Lviv is a partnership between builder and architect and here within this economically important ‘second capital’ design and build had an early flowering.

With the reform of the Austrian Empire in 1860 the status of Lviv as the capital of the autonomous Kingdom of Galicia and Lodomeria was greatly enhanced. As a consequence the late nineteenth century and early twentieth century saw a great expansion of architectural works and their associated schemes. From 1885 building zone regulations allowed for the development of a modern, urban infrastructure which, like other cities, would see the movement away from horse-drawn trams to electric power in 1894 for the opening of the Galician National Exhibition. With this advancement, Lviv became the,

> fourth city in Europe possessing such a means of transport.[16]

The exhibition was in part situated in one of Lviv’s showpiece creations – a diadem of green spaces and parklands of which the Strijsky Park founded in 1887 was the centrepiece. For the visit of Franz Josef in 1905 a ring boulevard was constructed around the historic city centre, arranged according to the direction of the Inspector of Municipal Green Spaces, Arnold Rohring.

Although when looking at the architecture of Lviv, it might appear to be a common Central European mix of historical styles, from medieval craft, neo-Renaissance styles melded with the later Secessionist and Art Nouveau forms, this would be to deny the progeny of the Lviv School of Architecture and the construction firms employed. The earlier of these were Alfred Kamienobrodzki, Wincenty Rawski and Jan Schultz who based much of their architecture on Italian models. These leaders were followed by Teodor Talowski and Kazimierz Moklowski who worked in a more Romantic and Picturesque idiom. Of the greatest interest to modernism are the third group Julian and Alfred Zachariewicz, Ivan Levyns’kyj, Tadeusz Obiniski and Roman Feliński.

As in Brno, architects, designers and constructors formed very close networks to provide Lviv with some prototype architectural schemes. The Mikolasch Arcade, 1899-1901, was erected using reinforced concrete to the designs of Alfred Zachariewicz and Ivan Levyns'kyj who by this time was owner of an associated construction company and building suppliers. Design and build was very much part of Lviv's urban fabric as buildings were put up by Levyns'kyj' office in collaboration with others – Zygmunt Gorgolewski, Municipal Theatre, 1897-1900 and the Central Station, Władysław Sadlowski, 1901-1904, (2.23). Although many of the buildings outwardly exhibit a mix of neo-Baroque and Secessionist touches, they belie their originality in the use of reinforced concrete construction orchestrated by a design and build co-operative headed by Levyns'kyj and Zachariewicz.

By 1903 a new partner had joined, Jožef Sosnowski, who formed the Sosnowski–Zachariewicz Company for concrete construction using the leads from Auguste Perret and the developments from there in the Hennebique system of construction. Despite others before him using reinforcing iron bars, e.g. Smirke, Anatote de Bandot and Victor Contanim, it was Francois Hennebique who understood better than anyone that iron, or preferably steel rods, take up the tension stresses while the dense concrete absorbs the compression stresses. This understanding of structure and stress would over the next ten years herald new developments in architectural forms that could not have been foreseen.

7. Wroclaw

Wroclaw is another city which has been occupied and subjected to name changes over the centuries. Known as *Vradislav* (Czech), *Wratislavia* (Latin) and *Breslau* (German) and in earlier history through the Polish Diocese and as the Lower Silesian Capital as Wrezlave. In 1175 simplified versions of the diocesian form *Sigillum civvitalis Wracislavie* refers to *Wrezlave*. From medieval times both Czech and Polish forms as *Vratislav* and *Wrocislaw* respectively were used. Once the Polish form gained precedence there was further simplification in three stages, *Wrocislaw* > *Wrotslaw* > *Wroclaw*. This changing of names and influences is accompanied in the architectural detailing of the city from the medieval vernacular to High Gothic and through the beloved neo-Baroque of Viennese taste. All were imported as a signifier of learning and culture once German dominance was established as the newly named city of Breslau.

Throughout history the city enjoyed wealth as a trading capital of the Holy Roman Empire and as a member of the Hanseatic League. The original rulers of the city and

2.23 Władysław Sadlowski, Central Railway Station, Lviv 1901-04

1 Echoes of Olbrich's Secession building and Wagner's Metropolitan Railway structures are seen in the exterior façade and entrance porch 2

the province were the Piasts who were deposed by the Habsburgs in 1675 and from that time for many years Wroclaw became a much coveted and argued-over prize between Hohenzollerns and the Kings of Prussia, until 1860 when German/Prussian dominance saw the manufacture of linen and cotton turn a slightly backward agricultural and mercantile duchy into a commercial hub with a modern city.

During the earlier Habsburg reign much of the beautiful, monumental original Baroque was created by the hands of a true master, Fischer Von Erlach, who was much admired by his antecedents, particularly in the 1910s and 1920s by Hans Poelzig and Max Berg. It is through Max Berg whose major work the Hala Ludowa/Stulecia, 'The People's Hall', *Jahrhundert Halle* (Centennial Hall) (2.24) a dome of reinforced concrete able to house 5,000 - 7,000 people, that Wroclaw can claim to have one of the first purpose-built functional modern buildings on record. Designed in 1910 and built between the years 1911-1913 when it opened to mark centennial celebrations. Even though this building predates both Perret's and Le Corbusier's use of concrete in a functional form (as in Corbusier's Maison Dom-ino 1914 and Perret's Casablanca Docks, 1915), Hala Ludowa remains absent from many histories of modernism / twentieth century architecture.

Dennis Sharp highlights Hala Ludowa as being:

> the largest building of its kind anywhere in the world a clear indication that architect and engineer co-operation had made its mark. Dramatically constructed in reinforced heavy concrete, Centennial Hall's (Jahrhundert Halle's) Hala Ludowa's 213 feet diameter was far more impressive inside than out. Unable at the time to develop a system of glazing that would follow the curve of the dome, the designers constructed rings of windows at various intervals up the curve [to fit] and a traditional lantern at the top.[17]

Hala Ludowa was a fitting tribute to the people who rose up in 1813 against Napoleon Bonaparte. To this date Max Berg is rarely celebrated as an influential modernist Architect who in concert with István Medgyaszay – Godollo Studios, Budapest 1904; Vezsprém and Sopron Theatres and Hans Poelzig's, Milch Chemical Factory, Poznan 1912, (earlier German Posen) gave Central European cities their modern appearance. The technical accomplishment of span and circumference of the dome could be said to elevate the work to the pinnacle of construction methods and materials of the first decade of the twentieth century – as with Medgyaszay's studios. The contributions of Francois Hennibique and Auguste Perret in the development of reinforced concrete architecture must be acknowledged, although their early structures up to 1915 were concerned with horizontal and vertical beam and post construction and at no time did

they work with domes as did Berg and Medgyaszay. These advanced forms of architecture and their innovative uses were seen throughout central Europe as part of modernization at the turn of the century and a very necessary component of regeneration and rebuilding after the Great War. This greatly increased activity in building drew upon a wide range of historical precedents, as witnessed in the use of Ottoman and Finno-Ugric/Magyar forms. However, in contrast to these broad historical influences, this period was also to mark the emergence of distinct national styles together with newly developed Rondo-Cubism of German influence, effectively deployed to anchor the ethnic antecedents of the nations.

2.24 Max Berg, Hala Ludowa, *Jahrhundert Halle,* Centennial Hall, Wroclaw 1913

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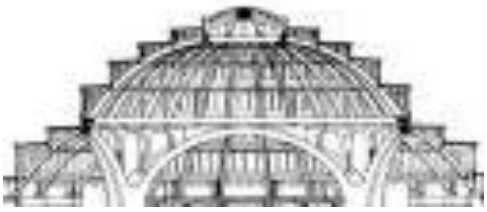

4

5

Aerial view, Exterior and Interior views showing size of auditorium constructed from reinforced concrete with glazed tiers

Notes to Chapter 2

[1] Gerolymatos A., *The Balkan Wars,* Basic Books, New York, 2002
[2] Op.cit., Blau and Platzer, 1999, Laslo, p.136-137
[3] see, Kropotkin P. (Prince), *Fields, Factories and Workshops,* Transaction Publishers, New Brunswick & London, 1993
One of the first commentators, as both aristocrat and anarchist thinker, to understand how meticulous research of dominant tendencies within society could allow for a redirecting of both agricultural and industrial production in a world of increasing demand.
[4] Op.cit., , Blau and Platzer, 1999, Mihelic, p.197-198
[5] Op.cit, , Blau and Platzer, 1999, Achleitner, p.102,
[6] This understanding of Plecnik is taken from extensive conversations and site visits in the company of Dr Peter Krecic, one of the world's foremost authorities on Plecnik as custodian of Plecnik's house and archive.
[7] Krecic P., *Plecnik The Complete Works,* Academy Editions , London, 1993, p.18
[8] Ibid.p.18
[9] Slapeta V., (ed.)., *Jan Kotera The Founder Of Modern Czech Architecture*, Municipal House/ Kant, Prague, 2001
The most complete monograph on Kotera to date, with contributions from many of the world's authorities.
[10], Blau E and. Troy N.J., (eds.), *Architecture and Cubism,* MIT Press, Cambridge Ma., 2002, Murray, p.45
[11] Dance G. R.A., Professor of Architecture, *Inaugural Address,* 1798, quoted from Beard G., Robert Adam
[12] Much of the information regarding Kotera and the development of the Czech Modern Movement is taken from interviews with Professor Rostislav Svacha (Department of Art History, Charles University, Prague) and Dr Petr Krajci (Director of the National Technical Museum, Architectural Archive, Prague) - two of the leading experts in this field. See bibliography for their contribution to a number of publications.
[13] Op.cit., Slapeta, 2001, p.24
[14] http://www.ipm.cz/EN/BRNO/years.6html, p.1, 2005
[15] http:/ww2.fce.vutbr.cz/bvv/i104e.htm, 2, 1998, Brno Trade Fair (BVV), Faculty of Civil Engineering, University of Brno
[16] Op.cit, Blau and Platzer, 1999, Zuk, p.145
[17] Sharp D., *A Visual History of Twentieth-Century Architecture,* Heinemann/Secker & Warburg, London, 1973, p.49

CHAPTER 3

ARCHITECTURAL DEVELOPMENT IN TOWNS AND CITIES 1910-1923

1. **The Prelude to the Great War**
2. **Prague Influences: Rondo-Cubism/The National Style; Jan Kotěra, Pavel Janák**
3. **Russian Influences: F. O. Shekhtel, G. Warchavchik**
4. **Hungarian Influences: István Medgyaszay, Károly Kós**
5. **Turkish Influences: Vedat Bey, C. E. Jeanneret**

CHAPTER 3

1. The Prelude to the Great War

From 1910-1923, effectively the timescale for the total upheaval of the First World War, Central Europe would know no peace. The reality of the 'Great War', as these events would become known, had been uppermost in Bismarck's mind years earlier, when he identified the Balkans as the flashpoint for the greatest conflict man had ever experienced. A united Germany desired greater influence and power; victory against Austria in 1866 (Austro-Prussian War) and France in 1871 (Franco-Prussian War) caused German territorial ambitions to grow. That expansion, following the assassination of Archduke Franz Ferdinand in Sarajevo, the Serbian capital, in June 1914 was one of the major causes of the First World War. The second cause was the disastrous Russo-Japanese War of 1904-05 where Russia as a 'power' was defeated by lowly Japan. Aggression against 'Slavic Brothers' in Central Europe by Austria/Germany would be resisted as Russia tried to regain face using these events as a pretext for trying to occupy parts of the old Ottoman Empire, to be countered by Bulgaria, Romania, Greece and Turkey, leading to the Balkan Wars of 1912-13.

This intrigue of alliances and treaties, made by all the nations named above to avoid conflict soon compelled France, Belgium, Poland, Italy and Great Britain and latterly the U.S.A. to take up arms. These mobilisations sowed enormous distrust and were the catalyst for nationalistic movements and sentiments, echoing the feelings of 1848 across all of Central Europe again as territories were annexed or invaded during the war.

> The map of Central Europe was redrawn. Because the First World War had reduced Europe and the international trade of the world to ruins: because Russia was in turmoil with its own civil war: and because the new superpower, America, was only flexing its political muscles the Peace Settlement was dominated by Britain and France. The Central Europeans were at the mercy of the negotiators…..The driving force behind the Versailles Treaty was twofold: to make the Germans 'pay' for the suffering that the allies over-self righteously claimed they had caused and to make sure that subject nationalities within the former Austro-Hungarian empire would have a chance of self-determination in their future.[1]

This nationalism found voice in the arts and architecture of Central Europe. Previously architects had been educated abroad in Paris, Milan, Vienna, Berlin, London, Moscow, St Petersburg Chicago and New York. In the prelude to war many Central Europeans

returned to their native lands. Immediately post 1918 the desire to take architectural education and development into Central European control to build new countries and administrations would lead to a revolution of building techniques and architectural individuality. This scale and intensity of development was not rivalled anywhere else.

> In summary, during their approximately twenty years of national independence following the First World War, Czechoslovakia and, in particular Hungary and Poland emerged from positions of considerable political and socio-economic disadvantage to rebuild their shattered economies, infrastructures, schools and national institutions. Despite tempestuous, often violent and painful beginnings, there is little doubt that these countries generated the most sophisticated modern architectural culture in Europe after the collapse of modern architecture in Germany, [post Werkbund].[2]

The nature of this conglomeration of ruined German 'States' with diverse administrative and governmental centres was such that the all-encompassing definitions of Germany as a prime mover in the development of the modernism after the First World War are an over simplification. As an example, Lichtwark who published '*Realistiche Architektur'* (Realistic Architecture) in 1897 had within two years re-titled this work '*Sachliche Baukunst'.*[3] Even though there is little actual difference in these two titles one is old school, the other modern. Equally attitudes in major German cities were polarised. The Bavarian Burgher in Munich has never shared the views of the cosmopolitan Berliner and this was particularly true after the defeats of the First World War and on into the 1920s. Examining the minutiae of the many terms used within works of this date: *sachlichkeit*, *neu Gegandstandlichkeit*, *Kulturarbeiten* and *Stilwille*, it is noticeable that as many times as these words are printed, authors' definitions rarely agree.

The key factor is that many of the buildings cited as in the vanguard of Modern Movement were not as yet built in 1920; they were only plans, ideas and ideals. In her introduction to Adolf Behne 'The Modern Functional Building', Rosemarie Haag Bletter states that *Der Modern Zweckbau* (The Modern Functional Building) written in 1923, published in 1926:

> presciently unmasked many of the ideologies of functionalism, rationalism and European [Western] Modernism of the 1920's.[4].

This statement is questionable. Most of the works today considered to be of the Modern Movement in retrospect within the established Anglo-American annals were deliberately promoted, particularly by *Congrès Internationaux d'Architecture Moderne* (CIAM*)*

especially during the 'Cold War' and owe their pre-eminence to that organisation and American/Western European interests.

As has been seen previously, the Germans talked and bickered while the Czechs, Slovaks, Poles, Hungarians, Slovenians, Slovakians and Croatians built.

> Germany lacks a common culture and would be easy prey for a dictator, if it did not have a chronic shortage of strong authoritarians (*Willensmensch*). No country has a harder time making unequivocal decisions. It swings between mistrust and belief, between democracy and dictatorship; between union with and isolation from Europe, between East and West, between yesterday and tomorrow.[5].

These words, written by Adolf Behne in 1925, are truly prophetic. Behne's great strength was in debating with Gropius their opposing views of how modernism was formed. This degree of development in other countries vis-à-vis Gropius' standpoint in 'International Architektur' and Behne's less xenophobic view was expressed thus:

> countries with strong indigenous cultures and people are more apt to be evolutionary and rarely respond to dictatorial regimes.[6]

Having recently emerged from under the control of Austria-Hungary and escaping the Germanisation of their language and culture, Central European commentators clearly defined three related but separate terms:

Firstly, Functionalist building – since 1895 when Otto Wagner said that something impractical cannot be beautiful, the whole art of architecture needed to be tackled on type and function through fulfilment of purpose to achieve the desired building. One such work, the Trade Fair Building, Prague 1924–1929, Oldrich Tyl and Josef Fuchs, was arguably the first completely Functionalist Building in Central Europe. But István Medgyaszay pre-empted many of these Functionalist elements in his studios in Gödöllo, 1904, and theatres in Vezsprém, 1908, and Sopron, 1909, as did Max Berg in his Hala Ludowa, Wroclaw/Breslau, 1913. However, unlike the Trade Fair Building the three latter works had small elements of decorative work: crenellations and carved woodwork in the Gödöllo studios and columned porches with heroic statuary in the Hala Ludowa that clearly locate the whole stylistically, whereas Tyl and Fuchs allowed no such fashionable diversions. The essence of any Functionalist as opposed to functional building is that nothing, even superfluous decoration, interferes with its 'fitness for purpose'.

Secondly, Rationalist building – Rationalism as a representative and patron of standardisation and typification. Seen throughout the later works of Le Corbusier and stated as a clear principle in his 'Machine for Living' that followed on from 'form follows function' first uttered by Louis Sullivan in 1888. Rationalism can be seen as a progression of Functionalism and initially evidenced in the work of Loos, Type of Small House 1922, Rufer House 1922, Apartment Block 1924, and fully realised in the Müller Villa, Prague 1930 (3.1) – the most complete example of '*Rational Raumplan'* within the lexicon of architectural achievement. Unfortunately because it was contemporaneous with the Tugendhat Villa, Brno, 1930, Mies van der Rohe and Villa Savoie, near Paris, 1930, Le Corbusier, it never shared the same international spotlight.

> While both the other houses stood in the spotlight of international architectural discourse, the Müller Villa was only praised for its cube shaped façade. The layout of the interior was misunderstood and dismissed as old- fashioned.[7]

Perhaps as Arnold Schoenberg wrote in his homage to Adolf Loos the viewers and critics were incapable of understanding how Loos' building flowed from a screen like façade marking the boundaries of public and private space to an internal development of interior space which abandoned any two dimensional separations between levels, but maintained a separation between family and servants.[8] Implicit in this space plan is the complex interpenetration of one space within another. From entering the front door a narrow entrance passage leads to a short staircase which reveals the first view of the living room while some short steps above is the dining room. Ones senses are immediately assaulted by the richness of materials and the contrasting white walls.

Loos was lucky in having František Müller as his client, as a qualified civil engineer and a partner in 'Müller and Kapsa' – a very large building company – Müller understood the spatial complexity of the design. This new house would serve a dual purpose as both showpiece office and home. The design uses the separation of space to allow the servants including a chauffeur, nanny and a cook to progress without disturbing the family as a different staircase was used for access to the family living areas.

Thirdly, Utilitarian Building – as expounded by Count Peter Kropotkin, an economic result of saving power, work and time, seen in industrial/commercial buildings following the organisational ideas of Henry Ford,

> We will not put up elaborate buildings as monuments to our success. The interest on the investment and the cost of their upkeep would only serve to add uselessly to the cost of our products – so these monuments are apt to end as tombs.[9]

3.1 Adolf Loos, Villa Müller, Prague Střešovice 1928-1930

1

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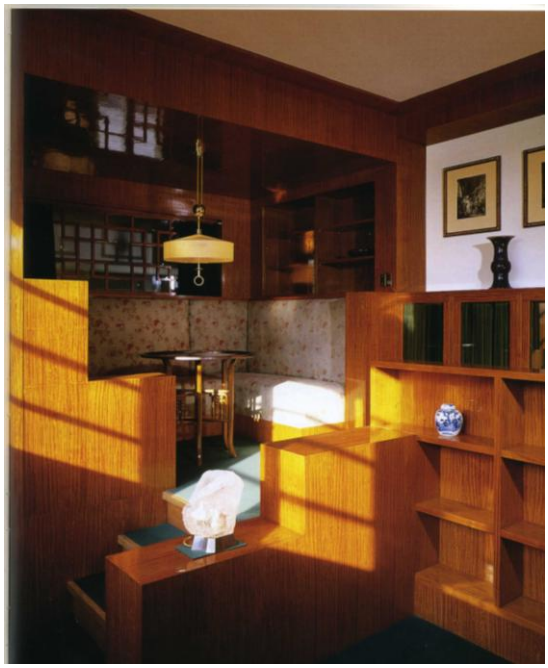

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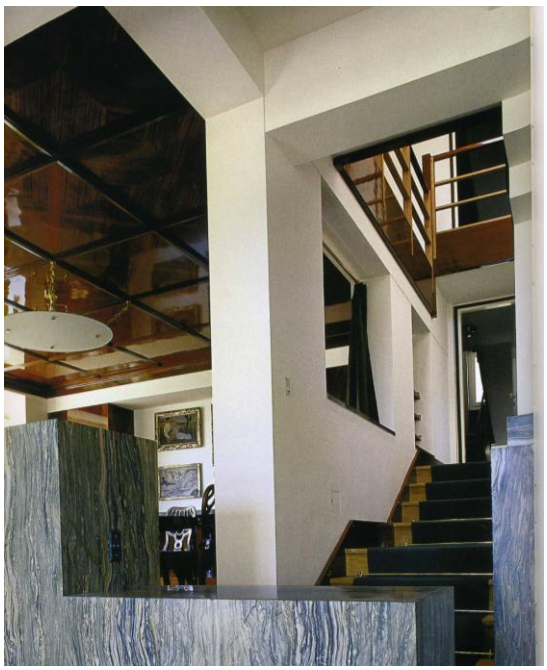


1 Dramatic stepped cubic exterior. 2 3 4 Interior views demonstrating mastery of *Raum Plan* with the use of opulent materials *Cipolino de Saion* marble, lighting from pendant lights and natural lighting through stairwell atria.

This prudent, cost-effective approach to architecture is witnessed in the creation of Zlin where Fordist principles were applied throughout the production and distribution process. All three of these definitions are used both singularly and co-operatively to frame architectural developments in Central Europe. With the advent of Rondo-Cubism, Cubism, Functionalism, Rationalism, Purism, Polish Constructivism and The Eight in Hungary along with continued works in Croatia, Slovenia, Slovakia, and the advent of Turkish Modernism all have to become part of a complete definition of modernism / Modern Movement from this point forward.

2. Prague Influences: Rondo-Cubism/The National Style; Jan Kotěra, Pavel Janák

Unlike Zagreb, Ljubljana, Vienna and Budapest, Prague could not develop commercial and residential buildings to any great extent within the tightly packed medieval streets. As a consequence the further development of modern architecture following the mentoring of Jan Kotěra evolved as particularly strong Rondo-Cubist structures. Identified by the term *Kubisticka Praha* (Cubist Prague) 1909-25 the forms and understanding were informed from the Paris cubist works of Gris, Braque and Picasso from 1907 onwards. Visitors to Prague from 1900 had been recording their amazement at the variety and richness of Prague's historical, cultural, and architectural styles. One of the greatest commentators of Cubism, Guillaume Apollinaire, in writing 'Zone' in 1912, after a ten-year delay from his visit to Prague in 1902, expressed all the opposed emotions, anxieties and sensations of a new genus loci.

> Sitting in the garden of a Prague suburban pub you feel entirely happy somebody left a rose on your table and you, instead of writing your story, regretfully while away your time, looking at a ladybird sleeping inside the rose. Aghast you see your own features in the agates of St. Vitus cathedral you were saddened to death on the day you saw your face in them resembling Lazarus whom light is crushing down. Ascending to Hradčany Castle and listening as night falls to Czech songs being sung in small pubs.[10]

From the mid nineteenth century Prague had confounded many visitors by the cosmopolitan meld of advances in the arts, education, research and philosophy. Prague resembled a laboratory where all disciplines were interconnected and all the diverse professionals were on first name terms. From 1910-1912 some of the greatest minds of the twentieth century were in Prague: Albert Einstein was lecturing on theoretical physics and exploring his theory of relativity while Sigmund Freud and Franz Kafka were 'giving flesh' to the inherent problems of this newly emergent world as they saw it. This

crucible of philosophical, scientific and cultural debate grew in the many bustling cafes, fine art clubs and numerous arts groups and their publications.

The need for better vehicle and train crossings in Prague north and south of the River Vlatava led to huge debate between architectural factions, especially in the influence of Wagner through Jan Kotěra. This debate lead to a break away from the rationalism of Wagner, Berlage and Behrens to the new ideas and forms of Dutch architects in *Wendingen* (Upheaval) and in the very individual works of Jože Plečnik, The Langer House, Vienna 1900 which combined modern form, two juxtaposed cubic blocks (which would become a staple of the Modern Movement and Functionalism), with Secessionist decorative elements.

Of the new breed of Czech architects Pavel Janák was the first in both architectural and theoretical form to question the Wagnerian view of architectural function, i.e. construction and social engineering as the singular impetus for new architecture. The first built work that expressed a departure from the teachings of Wagner and the forms of Kotěra was the Hlávka Bridge in Prague 1909-1912 by Janák and his civil engineer František Mencl. Janák intended that the bridge, within its visible steel and reinforced concrete structure acting as both load bearing platform and supporting elements at the northern end, would be added to by a third unseen diagonal force. This force would come from inside the bridge through the active intervention of the architect's creative intent leading to a dynamic interplay of space, form and matter. The southern end would by way of contrast employ the more traditional bridge building systems. In late 1911 Pavel Janák, Josef Gocár, Vlatislav Hofman and Josef Chochol joined the painters Emil Filla, Josef Čapek, Vicenc Beneš along with the sculptor Otto Gutfreund in the newly formed *Skupina umělců výtvarných* (Group of "Plastic/Visual" Artists). Any remaining affinities with the Wagnerian school are seen in the sculptural medallions decorating the Hlávka Bridge.

The truest expression of the new direction at this time was seen in Gocár's *Dům u Černé Matki Boží* (House at the Black Madonna) department store, Prague 1912 (4.2). When Wagner and Fabiani were drafting the text to *Die Baukunst unsever Zeit* (later translated as Modern Architecture) from 1895 their statement:

> here it is appropriate to shout a loud an encouraging forward to the modern creative architect and to warn him against an excessive and heartfelt devotion to the old so that he might regain self-confidence, without which no great act whatsoever can arise,

could well have served as the clarion call for the Modern Movement.

The House at the Black Madonna of the Lord, to give the building its full name, exhibits what John Hejduk describes as:

> the uniqueness of Prague is that throughout its time the architect who built simply fell in love with it and placed their hearts within its space as safekeeping: for future generations of lovers.[11]

This is represented in the Cubist resolution of the building; in artistic terms the parallel to works by Gleizes, Metzinger and Feinninger. A sympathetic articulation of form and space, it produced a harmonious balance resulting in the floor plan with a Modern conservatism in the façade.

This approach repeated itself many times from 1912-23, most noticeably in the construction of commercial buildings in *Nové Město* (City Centre): Diamant House, 1912-13, Emil Králíček and Matěj Blecha; Urbanek's House/Mozarteum, 1912-13, Jan Kotěra; Commercial and Apartment House, 1913-16, Emil Králíček and Matěj Blecha; Commercial and Apartment House, 1920-22, Rudolf Stockar; and the Adria Palace (which Le Corbusier mistakenly referred to as being an 'Assyrian structure'), 1922-25 (3.3) Pavel Janák and Josef Zasche. In fact the combination of classical Italian designs to celebrate the presence of *Riunione Adriatica di Sicurtà*, the Trieste-based insurance company in its northern most outpost, allowed the contrasting cubistic volume with detailing and massing to become known at the time as both the National Style and Rondo-Cubism. The greatest asset of the style was a flexibility which allowed the inclusion of elements as reminders or indicators of place, history and culture. In the Adria Palace there are clear references to Italian medieval castles and fortifications, which convey ideas of solidity, reliability and security in both the optic and haptic sense without direct mimetic reference.

The House at the Black Madonna presaged the first new building on a vacant city centre site, The Olympic House; Jaromír Krejcar led in the birth of a new modern Prague. *Skupina* had sponsored much that was happening through their magazine *Umělecký měsičník* (The Arts Monthly) which had polarized the disagreement of proponents of the 'new art' identified through the work of Gris, Braque and Picasso as they developed their oeuvre into other forms and understandings, in opposition to the supporters of Cubism now exemplified by the work of Gleizes, Metzinger and Feinninger.

This debate, which had rumbled since 1911, found voice in the works of Vratislav Hofmann, Emil Králíček, Josef Gocár and Josef Chochol and the builder's firm of Matěj

3.2 Josef Gocár, *Dům U Černé Matki Boží* (The House of the Black Madonna of the Lord), Prague 1912

Exterior view within the pedestrianised setting note how the Modern Cubist forms distinguish it from surrounding buildings. Appropriately now the museum of Czech Cubism

2 The Black Madonna of the name encased within a protective cage

3 The imposing doorway with Cubist columns and metal, glass panelled door

3.3 Pavel Janák and Josef Zasche *Riunione Adriatica di Sicurtà* (Adria Palace) Prague 1922-25 (Decoration by Jan Stursa and Otto Gutfreund)

Two views of the magnificent interior spaces with marble cladding, ceramic tiling, Heightened by a multi drop chandelier

Blecha. Kovarovics Villa, 1912-13, by Josef Chochol (3.4) was the first fully resolved celebration of Czech Cubism as a complete statement. In Kovarovic, Chochol had the ideal client, not only was Kovarovic the owner of a building firm he was a city councillor and inspector of all Prague's building firms. With the Villa Kovarovic began the architect's intention to avoid divisions or fragmentation to the surface, taking this aspect of the façade to new levels. Two further buildings, the Tenement House, Neklanova Street, No.56, 1913, Josef Chochol and Antonín Belada and, the fullest expression of cubist ideas to that date, Hodek's Tenement House, Neklanova Street No. 30, (3.5) 1913-14, both demonstrate a mastery of volume and scale.

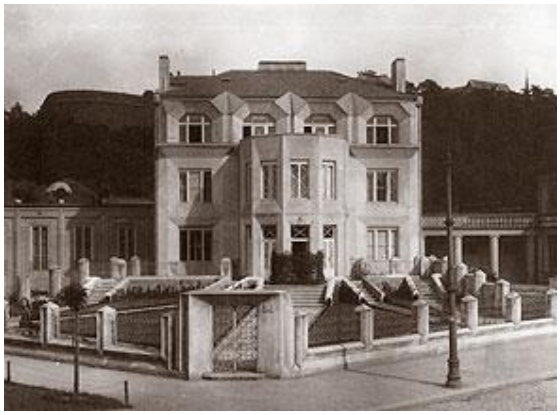
Tatiana Petrasova has suggested that the vertical columns of the Hodek Tenement house front transforming into diamond crystalline vaults at the over hanging cornice are references borrowed from late gothic church architecture in support of the much overused mimetic approach.[12] It is always possible to see many references in the structure and detailing of any building to an historical past, indeed the columns and cornice could be equally classical. However when the understanding, implicit in the use of past styles creates something quintessentially new then the past should be forgotten. This was an idea well known to Chochol who in making sure Neklanova Street was not overdone, removed superfluous details such as the originally planned cubist chimneys very much in the form of Králíček's lamp standard in Jungmannovo Square.

Rather than referring to the past, Chochols's Hodek Tenement can be viewed as a complete Czech Cubist work without deformation that pre-empted Le Corbusier's Purism, in the sense of the geometric proportional simplicity and exactitude being emphasised – as was Ozenfant's and Le Corbusier's intention for Purism to be an antidote to the convolutions of French Cubism. The most important thing about Neklanova Street is that the building takes ownership of all available space, as does Kovarovic's Villa as it cascades down the terraces to street level. The contrast between the rear and front of the building also demonstrates how advanced these architects and builders were to use such topographically challenging sites as part of the development, set as it was below the former Vysehrad Fortress with its steeply sloping earthworks. Neklanova Street, No.s 30/98 and 56 represent a modern statement of solidity and permanence.

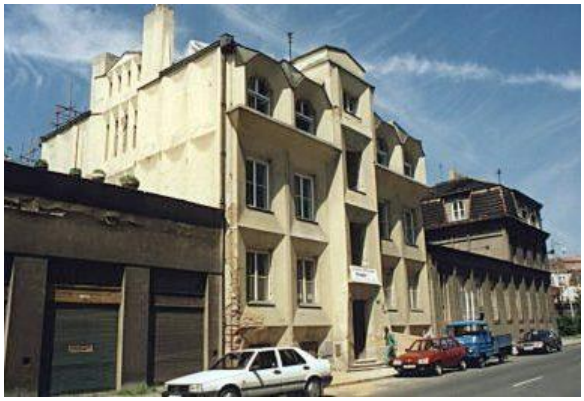
Chochol's evolution of this fully resolved style is demonstrated by the lineage from the Rasin Embankment, Duplex and Triplex Houses to Kovarovic's Villa, 35 Libušina Street through to Neklanova Street No.s 30/98 and 56 Vysehrad. One of the earliest Czech Cubist designs for the Prague Opera House in 1908 came from the pen of Pavel Janák.

3.4 Josef Chochol, Villa Kovarovic, Prague Vysehrad 1912-13

1 Front elevation, recent photograph with mature gardens



2. A rather stark crystalline structure as completed by building firm Matěj Blecha



3 The significantly reduced height of the rear elevation testifies to the drop front to back

3.5 Josef Chochol, Hodek Tenement House, Neklanova 30/98, Prague

Equally the design for a monumental interior of Cubist columns and massive, diamond crystalline vaulting along with heavy cornices, balconies and cubic upper storey in the Vila Fara, Pehlrimov 1913, was an influence on the work of Jaroslav Fragner, who was one of the disciples of Purism. Not for the first time does a mimetic model fail, as using the same influences from Cubism many differing complementary and antagonistic styles are attained.

Pavel Janák in his essay 'Renewal of the Façade' 1913 took Riegl's expressed idea of the polarity of haptic and optic principles, in part inherited from Semper, but extended to be part of an analytical basis for evaluating architecture, fine art and design.[13] Riegl's use of the haptic/optic principle, as explored by Matthew Rampley, puts stress on the relationship between and interaction of the hand and the eye. It is clear from this that to develop our understanding of the three-dimensional world there has to be a supplemental element of active bodily engagement. Simply put 'the child learns to see by touching'.

This process as Riegl would have seen does not in our modern understanding reinforce the difference between haptic/optic sensations as the criterion of sensation lies in the concept of similarity.[14]

Therefore it is mimetic because that is something which is known and fixed as sensation or physical experience which informs our knowledge and reaction to something which is unknown. In allowing all of these factors the haptic/optic polarity moves to a triumvirate of mimetic, haptic and optic sensation as a totality, interdependent one with another. Janák, in championing the central plan and longitudinal façade, was using optical consideration to arrive at a building typology. In direct opposition to the optic principle was Vlatislav Hofman who uses the central plan to generate the haptic principle. He envisioned architecture based on the sense of touching and feeling as constructed by what one sees and the range of emotions and responses thus elicited; an idea that people today are very familiar with and one that clearly placed Hofman in an informed, progressive position.

Josef Čapek's essay *Moderne Architektur* (Modern Architecture) 1914 sought to explain this unity of haptic, optic and mimetic senses as an architectonic expression given flesh through 'mysterious autonomy' and 'incalculable instructive logic'. This quest is reached through the translation of inner plasticity and one's reaction to it as an ideal form of *Raumplan* to be represented in the outward physiognomy of the building. This idea is somewhat similar to ideas in Futurism where the internal structures directly result in the

outward appearance of machines, buildings and cities as evidenced by Antonio Sant' Elia with adjustments for function; for example, a power station had to be architecturally powerful. No doubt these theoretical underpinnings would have been developed further had not the main spokespersons and many protagonists been injured or killed in the First World War. However the greatest theorist and demonstrator of this idea through writings and drawings prior to the First World War was Adolf Loos.

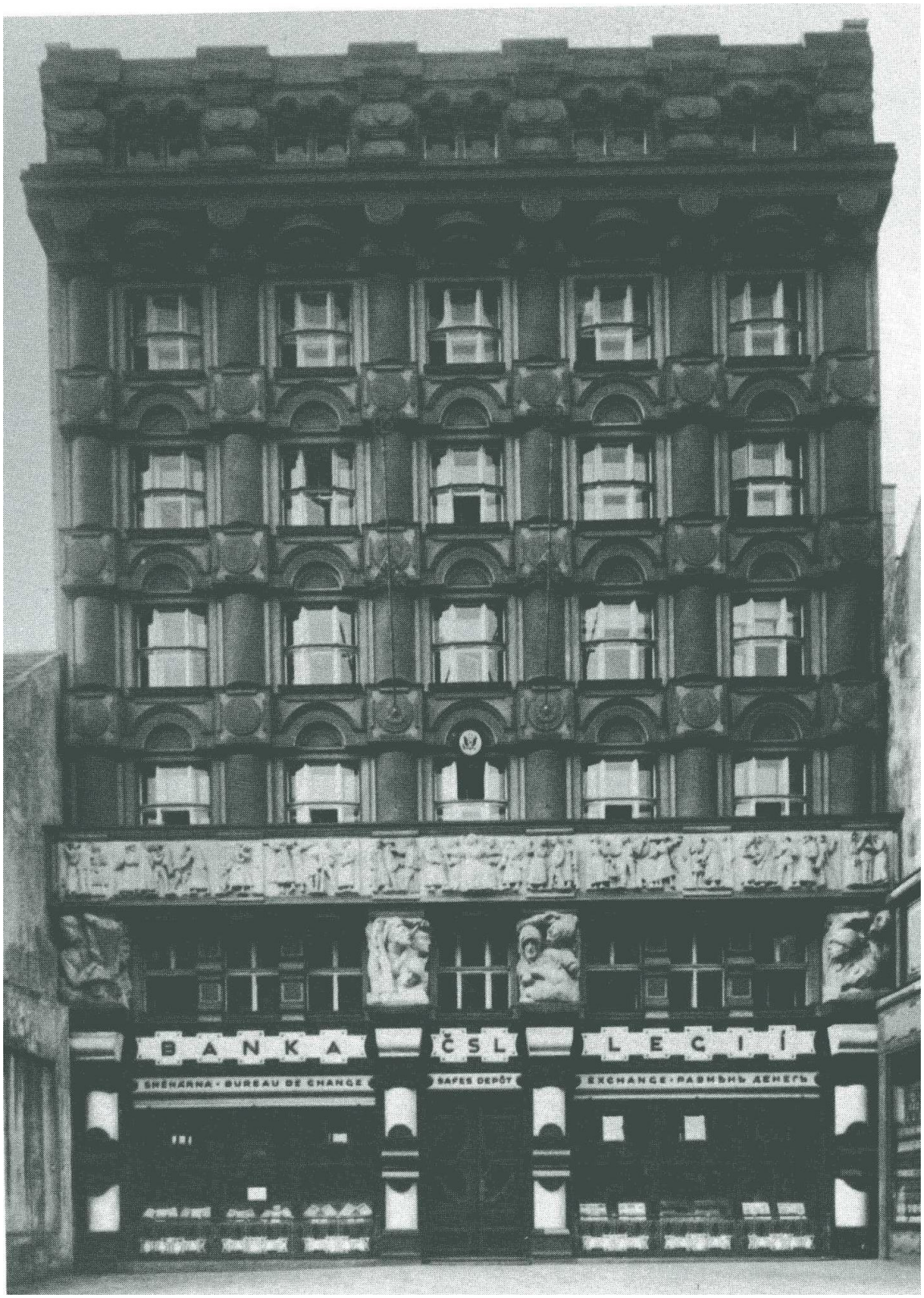
In returning to the Czech model it can be seen that Josef Chochol and Pavel Janák have many more completed buildings by contrast with Vlatislav Hofman. But comparisons based on output are worthless as both the optic and haptic arguments make clear that what is being investigated is that intangible quality of the occupants' feeling of well-being generated by the total scheme. Although they did not know it as a complete argument at the time, the haptic, optic and mimetic were all given equal consideration. Much of this debate was published in *Volné Směry* (Free Trends) and many other similar statements were published and discussed in both professional and popular press.

Rostislav Švácha has identified that between 1900-25 the 'Rondo-Cubist' and 'National Style' led to many articles from Janák, Hofman and Chochol whilst the 'indolent' Gocár, as they regarded him, made one single contribution, preferring to let his work talk for him. The vast number of Czech publications and individual issues following from *Volné Směry* (Free Trends) between 1897-1925: *Architekt SIA* 1901-50, Styl 1909-38, *Umělecký Měsičník* (Arts Monthly) 1911-14, *Červen* 1917, *Stavitel* 1919-38, *Vytvarne Snaly*, *Dobne Umeni* 1920-30, *Veraikon* 1920-25, *Host* 1921-9, *Vytanna Prace* 1921-25, *Živet* 1921-48, *Stavba* (Building) 1922-38, *Disk* 1923 and 1925, *Pásmo* 1924-29 and *Bytora Kultura* 1925, added substantially to theoretical debate.

Two further buildings of this period that defy any clear identity with either the haptic, optic or mimetic proposition in isolation, are the Hlava Pathological Institute 1913-21 Alois Špalek and the Czechoslovak Legions Bank 1921-23 Josef Gocár (3.6).

When visiting Prague for the second time in 1925 Le Corbusier admired the elegant steel construction of the Pathological Institute's anatomical halls. He would no doubt have railed at the Czechoslovak Legions Bank, as on first appearance it appears to be a backward step in Czech modern architecture for 1921. Rather like the façade of the Adria Palace that Jaromír Krejcar decried as 'historicism, futile nationalism and eclecticism', this type of observation does not fully understand the purpose of these buildings. The Czechoslovak Legions Bank is logical if viewed from the standpoint of growing nationalism. In celebration of the Voluntary Legions' military successes, what

3.6 Josef Gocár, Czechoslovak Legion Bank, Prague 1921-23



better than a form which in its dimensions and volume echo a Roman Triumphal Arch? From the massive cornice, down through a tripartite triumphal gate to sculpted relief within a banded frieze by Otto Gutfreund. Below which are four large cubist columns which frame both the doorway and windows of the ground floor. The whole in white, brown and yellow gold of the interior and exterior echo the colours of armour and accoutrements while making reference to Czech folk art in both form and decoration.

This national celebratory treatment is also seen in Pavel Janak's Julius Sweetshop, 1920, with the red and white and blue of the decoration being the new national colours (from 1919 blue was added to distinguish the red and white flag further from the flags of neighbouring Austria and Poland). As Czech architecture within the city centre progressed beyond the forms of Cubism two buildings more than any exemplify a newly developing Modernism/Purism. This later embodiment of the 'national style' is thought to have been exemplified by Gocár in the Legion Bank apartment house (now demolished) within the same plot, completed in 1925, although records and photographs of this building are very scarce. The last Cubist building to be constructed in *Nové Město* was most fittingly the Skoda Works Building 1923-26, Pavel Janák, which adjoined the Adria Palace and continued the façade of the former in a reduced manner. All of these early Rondo-Cubist and Cubist buildings presaged the development of Prague as a very modern cosmopolitan capital city from 1923-1939.

3. Russian Influences: F. O. Shekhtel, G. Warchavchik

Following the Russian revolution of 1917 much knowledge of what happened in Russia prior to the bloody conflict was lost with the imprisonment or death of important architects and planners. The bars on travel and suppression of all but communist ideas denied the rest of the world evidence of the use of modern materials and plans in the execution of architecture.

However as artists, designers and architects began to leave the motherland, news of one architect who had worked in Moscow filtered through. He was Fyodor Ostipovich Shekhtel (1859–1926), formerly known as Franz-Albert Schechtel, whose mother came from Bavaria and settled with his father, who was of Scandinavian birth, in the Saratov region on the border of European Russia but where the population was mainly of German extraction. In 1875 moving to join his mother who had already gone to Moscow, Schechtel converted to Russian Orthodoxy and became Fyodor Ostipovich Shekhtel. His mother had become the housekeeper of Pavel Tretyakov, the founder of the Tretyakov Gallery, and it was through this patronage and influence, especially via

Tretyakov's son-in-law, that Fyodor was able to create a wide oeuvre of works, totalling: 5 theatres, 5 churches, 4 chapels, 2 printing shops, a railroad station, a bank, a cinema, 3 estates, 6 summer houses and 30 mansions. This led to some calling him the Russian Gaudi as, like Gaudi, his stamp was on the city.

The similarities in working with some of the oldest and richest families combined with a mix of entrepreneur and industrialist – Shekhtel with Morozov, Gaudi with Guell – and their shared spiritual underpinnings make their reasons for being architects broadly similar, as does the lack of finery they both enjoyed as quiet modest men. Shekhtel, like all architects, had to work to his clients' wishes and so it was with his first building in Moscow, the Morozov Mansion, 1889. The client S. T. Mozorov had spent some years in Manchester where the neo-gothic mansions of textile magnates by Alfred Waterhouse had impressed him and this medieval castle, in concert with Ryabushinsky Mansion, 1901 (3.7), paralleled progress in Central Europe from Gothic to Renaissance to Neo Classicism, Neo Gothic to Art Nouveau. As with many architects, Shekhtel stepped back from this progress and in 1901 created a mansion for A. I. Derozhinskaya.

Shektel's former works, like those of early Olbrich and Wagner, are a little over-done and florid as in the Ryabushinsky Mansion using an abundance of colour and ornamentation; whereas the Derozhinskaya Mansion 1901-1902, is a cool, almost half-tone representation of a growing modern style. Although the three villas all appear very different outwardly the one constant is their free planning, a pre-requisite of modern architecture; an anti-autocratic statement opposed to traditions in Russian architecture which would tie the architect to imposed standard building systems inherited from the eighteenth and early nineteenth centuries. To these Shekhtel added by stages volumetric mass in asymmetrical arrangements. The importance of Shekhtel and his architecture was lost for decades and even now his works are rarely seen except from a distance, as the buildings are foreign embassies or offices for Russian governmental departments.

Shekhtel's position as an architect, theoretician and educator are represented in a number of ways; firstly as a designer of The Russian Trade Pavilions at the International Exhibition, Glasgow 1901. It was while working on this that Shekhtel named Viktor Vasnetsov and A. Kamminsky (Tretyakov's son-in-law) as his mentors in reworking the simple volumes of traditional Russian timber architecture of both agrarian and ecclesiastical origin. His ideas were embodied in a lecture to Moscow students in 1919 under a somewhat Chekhovian epithet (they were great friends), *'A Tale of Three Sisters, Painting Sculpture and Architecture',*

3.7 Fyodor Shekhtel, Ryabushinsky Mansion, Moscow 1901

> These three arts must operate as a totality, making full use of the applied arts in a supporting role and aiming to put the viewer into that mood which suits the buildings purpose.[15]

In this he is echoing the views of both haptic and optic principles being combined with the mimetic to generate architecture which gives due accord to tradition and function while sitting well within the environment as a whole.

In 1902–1903 Shekhtel, as a representative of the Strogonov School of Applied Arts, Moscow where he was a lecturer from 1896-1917, was charged with arranging the Exhibition of Architecture and Design of the New Style. In bringing the work of Charles Rennie Mackintosh, Margaret Mackintosh, Joseph Maria Olbrich, Henry Van de Velde and Kolo Moser to Russia, Shekhtel demonstrated a knowledgeable and well-read understanding of architectural developments in Europe and no doubt through this honoured company, a knowledge of Frank Lloyd Wright and Louis Sullivan. By 1910 Russian style was being replaced with a hybrid form of modern which allowed him to use all he had learned, with walls composed of rectangular mass, punctuated with many grid windows in an even tension that evoke comparisons with Glasgow School of Art, 1896-1909 and Hill House, Helensburgh 1902-03.

Another signature of a Shekhtel building from which C. R. Mackintosh may have borrowed for the Willow Tea Rooms, was the installation of south-facing pink tinted glass and north-facing blue tinted glass to dramatize the sun's orientation and create mood where the shimmering silvers, lilacs and touches of jade blue-green contrasted with the alabaster white of the interior walls. Equally Shekhtel, like Mackintosh, designed all the fixtures, fittings and fabrics while also commissioning integral works from the Symbolist painter Mikhail Vrubel. Although these architects can be compared, and it may be inferred who was first to use a particular element of visual language, such comparison and debates are irrelevant as Shekhtel clearly demonstrates he had contact with and knowledge of a group of Western European colleagues. How much he took from them and how much they took from him is as yet unknown as architectural historians have very limited access to these buildings at present. What is clear is that this freedom of cross-pollination enriched the world history of architecture where no one should be seen as isolated or unconnected.

Shekhtel continued to develop his architectural style. His pre-revolutionary era generated work with massive stone towers and rectangular form with great authority based on the architecture of Nizhny Novgorod, bearing comparison with C. R.

Mackintosh and his references to fourteenth century baronial castles. Perhaps great men can not only think alike they can build alike from their knowledge of their own histories by using appropriate forms and decoration.

It is also worthwhile to consider those who left after the revolution in the 1920s due to state intolerance of intellectual and artistic freedom, to fully understand the entirety of architectural cross-pollination West to East and East to West. Although not part of any major table of architects, except in Brazil, Gregori Warchavchik, 1862-1972, is a very good representative of the émigré. Being educated at the University of Odessa, graduating and moving to study at the *Scuola Superiore di Architetura* in Rome he then worked with Marcello Piacenti (Italian Rationalism) before setting sail to live and work in Sao Paulo.

Warchavchik was the first to introduce the Modern Movement to Brazil while working with the Simonsen Construction Company. Throughout his creative life he worked with many luminaries in Brazilian Modernism including Mário de Andrade and Lúcio Costa who would later give life to Corbusian Purist models for the Brazilian Pavilion at the New York International Fair of 1939 (The World Fair), by adding gardens and terraces to a rather barren 'pilotis landscape' and also with Oscar Niemeyer in the design for Brasilia in 1956. What this cross-pollination demonstrates is that Modernism did not arrive in any one location as if from a far planet. It is often through much more complex relations across many countries and years that architectural expression grows.

4. Hungarian Influences: István Medgyaszay, Károly Kós

In Hungary, as in Austria-Hungary, a hybrid Secession style was replaced in the first decade of the twentieth century with a drive towards a National Style in all the arts. As an almost equal partner in the Habsburg Empire, Hungary as the land of the Magyars had a long and complex history of invasion and cultural change. Hungarians were intent on rediscovering their history; as with all such ventures an inspiration was sought. This was found in the form of *Fiatolok* (The Young Ones) a group of Hungarian architects who rejected Odon Lechner's Monumental Secessionist Style. This led to architects exploring the National Romantic style, much of which was printed in the comprehensive opus *A Magyar yep művészete* (The Art of the Hungarian people).

Ede Thoroczai–Wigand and Károly Kós and their followers found that Lechner's monumental architecture and that of his followers, Jakab Dezsô, Marcell Komor and most importantly Béla Látja, provided a negative focus to searches for indigenous folk

sources. It was believed that the Magyars came from the Kalotazeg region of Transylvania where the Székely people spoke a distinct dialect with different cultural underpinnings and that this clan of ancient Magyars had escaped any Ottoman influences as the Turkish hordes swept through Central Europe. The reason for this was that these people were the descendants of Magyar mercenaries who were protecting the furthest frontiers well away from the trails of occupation by the Janissaries and Attila's Huns.

Wigand became the largest collector of folk artefacts and assembled a large collection of sketches, photographs and illustrations that he published in 'My Village' and in 'In times of Yore' which explored the culture of the villages from flowers to myth and legend. By the 1910s a tour of this region was almost de-rigeur for all architects, painters and designer/craftsmen. Malonyay, as the author of 'The Art of the Hungarian people', proposed the argument for a National Style in his preface:

> Scientific thinking – supposedly the great victory of human progress – protested at the beginning strongly against the national idea in the name of so-called universal joy of humanity; little by little, however after the practical fiasco of theories we understood that the higher goals of humanity can be most efficiently realized within the framework of a nation.[16]

This approach to a national style was also being echoed in Dalarna, Sweden and Karelia, Finland. In concert with these national sentiments painters established a number of schools and workshops where particularly the Hungarian and Finnish became kindred spirits probably because, unlike the rest of Europe, their languages came from the Finno-Ugric route and they could understand each other. Geza Maroli was a good friend of Eliel Saarinen for whom he went to work at the Cranbrook Academy in the 1930s. The greatest contribution of The Young Ones to modern architecture was a clearly developed understanding of the connection between architecture and the immediate topography.

This understanding was exemplified in the architectural works of István Medgyaszay. As a student of Otto Wagner, Medgyaszay made the required field trips to study Hungarian villages from the plain to the mountain but unlike Kós and Wigand and The Young Ones did not arrive at the same architectural forms. The villas of the Gödöllo Artists Colony for Leo Belmonte (3.8-9), an artist of Swedish-French birth, and Sándor Nagy, the Hungarian painter (3.8-9), both from 1904, show the influences within Medgyaszay works. They are not only from the narrow tract of a Hungarian National Style based on the Kalotaseg region but also via his knowledge of architecture through

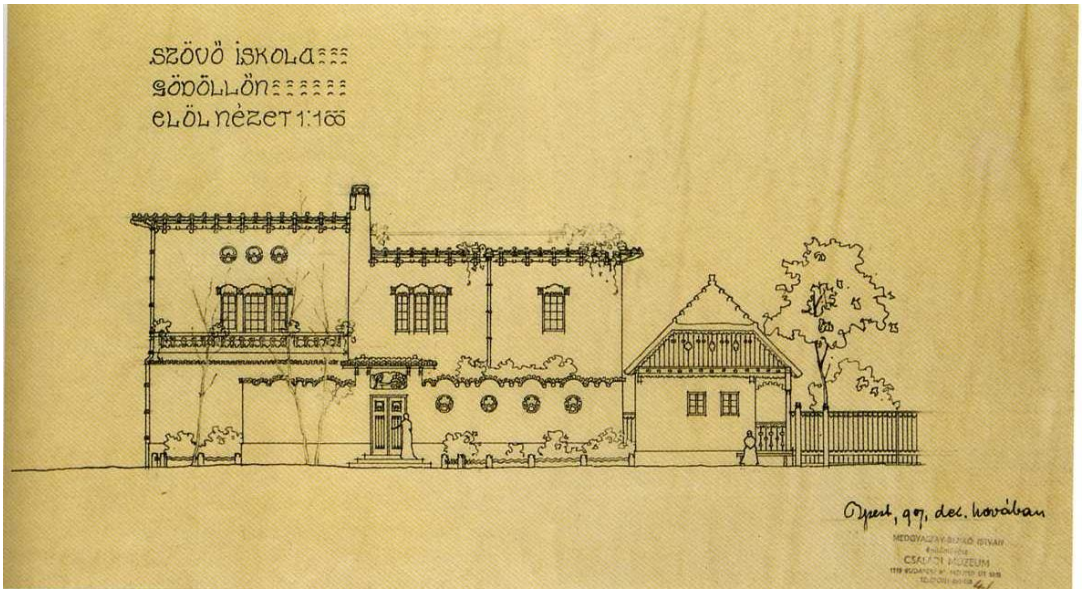
3.8 István Medgyaszay, Gödöllo Studio-Villas, Gödöllo, Hungary 1904

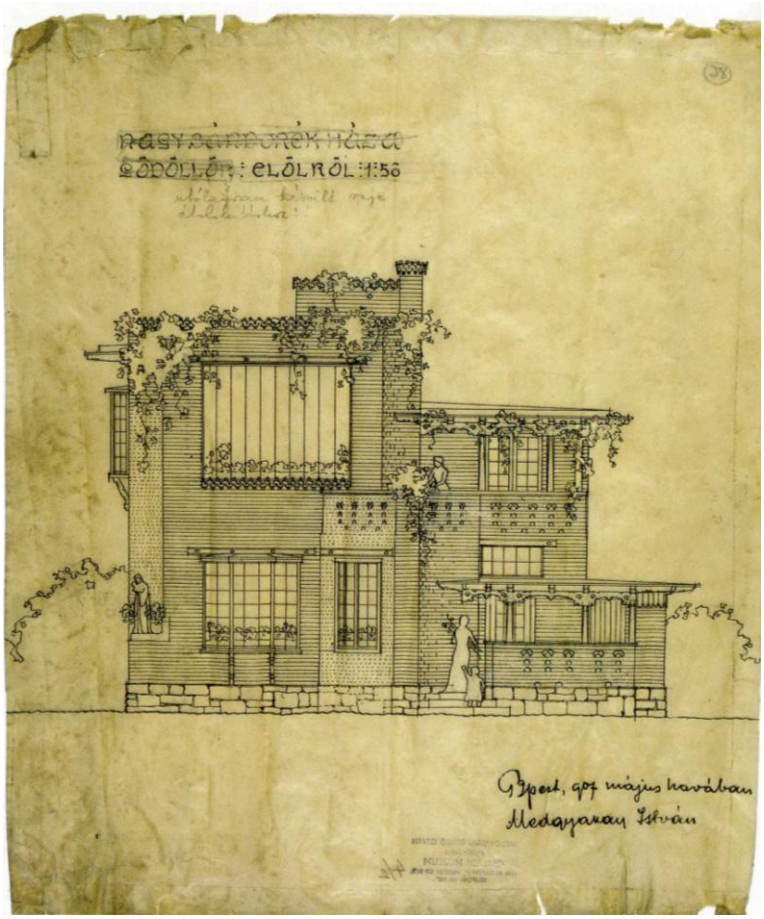
An early photograph of the Leo Belmonte studio-villa

A recent photograph of the Sándor Nagy studio-villa

3.9 István Medgyaszay, Gödöllo Studio, Gödöllo, Hungary 1904

Two original drawings of the Belmonte studio-villa and the Nagy studio Villa





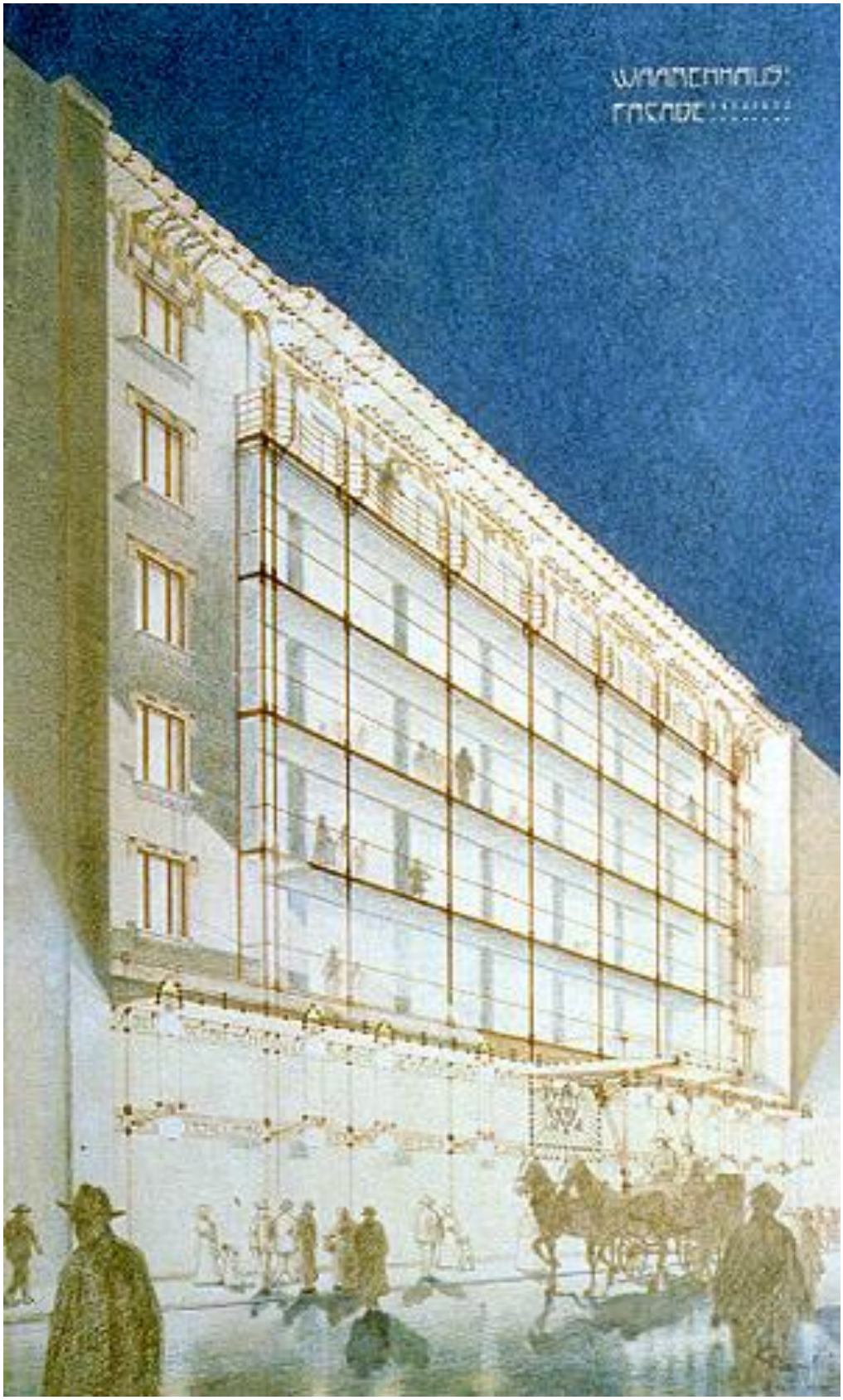
Central Europe to the Balkans, Near East, Turkey and on to North Africa and Egypt – all places he would visit from 1911 onwards.

Following Medgyaszay's apprenticeship with Otto Wagner at the *Akademie der Bildenen*, *Kunst* (Academy of Architecture), Vienna, moving to the *Technische Hochschule*, (Technical High School), Vienna, and finally graduating from the Palatine Joseph Technical University, Budapest, in 1904. By which time Medgyaszay was working with a blend of both domestic and functional architecture where unadorned brick was used within stepped terraced, cubic structures realised in revolutionary reinforced concrete with glazed curtain walling. The Gödöllo studios were a new form, echoing Kotěra's Villas and some of Garnier's houses in the '*Cité Industrielle'* although this was not published until much later in 1917.

The construction of the Belmonte Studio in Gödöllo used modern ideas and materials throughout, be it the use of brick without a coat of whitewash or plaster or the reinforced concrete lintels. The Nagy Studio that appears at first glance to have more traditional elements especially in the ornamentation belies the use of reinforced concrete. The earliest of his modernist buildings of any type was a design that came from his training with Otto Wagner. This design for a Budapest department store in 1902 (4.10) shows this stunning building having a façade which, from Medgyaszay's night time rendering, clearly shows a reinforced concrete skeleton. This skeleton had two vertical fenestrated wings from which projected a large glass box divided by four lateral bands. All was surmounted by a fifth floor which rises to cornices of lacy lightness draped over impossibly slim iron cantilevers. Medgyaszay's nocturne revels in the effects of electric light and all the possibilities of the beauty of the big city as the colours change in rain and fog from the effect of the lights hung from overhanging cornice where the reflections dance and glitter across the wet pavements.

The use of electric light in a retail environment was also a first, not surprisingly being an extension of Wagner's Hotel Bristow in Warsaw for which Medgyaszay designed and patented a method of hanging bulbs in multiples for the illumination of interior spaces. In referring back to (3.10) it is noticeable that a further two floors below the glass box construction are lit by eighteen separate lamps suspended from a canopy of great lightness of touch with a cantilevered glass porch to keep customers dry. When compared with Fabiani's Portois and Fix Building, Vienna 1899-1900, and Plečnik's Zacherl House, Vienna 1903-05, which were undoubtedly modernist buildings, it can be observed what sets Medgyaszay apart; this difference is best put by Franz Fammler.

3.10 István Medgyaszay, Department Store, Budapest 1902



Note the incongruity of the horse and carriage, representatives of the nineteenth century, with the modernism of the façade executed in glass, steel and reinforced concrete as indicators of the beckoning twentieth century

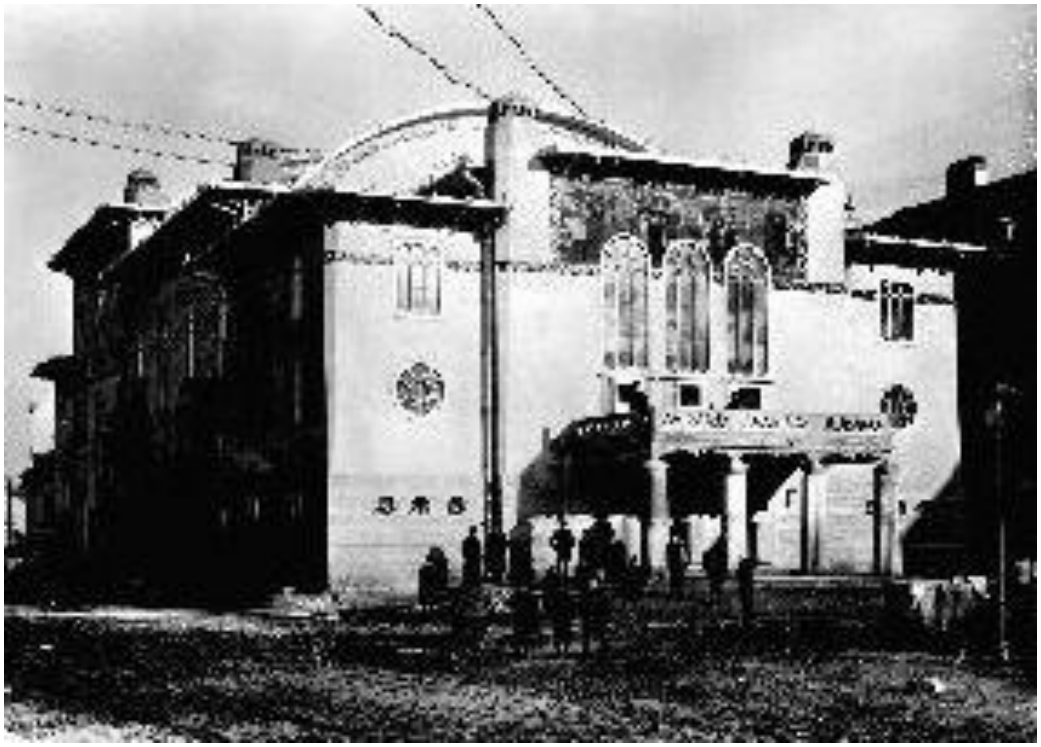
> It is frequently said that shop windows [are] decorated according to modern artistic principles and places for the cultivation of art that were born from a practical and sober business life can awaken the natural artistic sensibility dormant in peoples' souls and can support the education of taste. It is obvious that the artistic efforts to transfigure everyday life are now closer to a general success due to the modern architectural design of storefronts. This proposition is reinforced in Moravánszky's view. Curved glass panels at the corners of the entrance eliminate disturbing frames and urge the customer to enter the store with a symbolic gentle hint.[17]

Having learned his craft in Hennebique's studio in Paris where he learned about the properties of ferro-concrete architecture Medgyaszay then delivered an immensely significant lecture, 'The Artistic Design of Ferro-Concrete' at the 8th International Congress of Architects, Vienna 1908, where he praised concrete as a uniquely versatile material but abhorred the aesthetic problems of the finish. So it was that when Medgyaszay was commissioned to design the Theatre of Veszprém 1908 (3.11) and the Theatre of Sopron 1909 (3.11) he exploited all the properties of ferro-concrete. He designed balconies supported by prefabricated consoles, patented windows, column capitals, pergolas and lampposts all of concrete.

To solve the problem of spanning the auditoriums of both theatres he used a double-layered vault of a moulded soft inner ceiling suspended below a reinforced concrete barrel vault. This usage was extended further in 1910 with the building of the Raros Mulyrad Tomb-Church now Mul'a, Slovak Republic. In this church Medgyaszay covered an octagonal space in ferro-concrete with an 8 centimetre thick shell-dome which merges into a belfry tower with a 4 centimetre thick concrete shell. The cupola consists of prefabricated segments of ferro-concrete with a visible steel ring securing the whole structure. The pavilion of the Military Exhibition in L'viv 1916 echoed these methods of construction.

In all his work Medgyaszay resisted what he and many of his contemporaries saw as the modern pollution of dreary, grey blocks of soulless concrete proposed by German modernism under the principle of 'purposeful construction', which to the Hungarians lacked aesthetic appreciation or even the lightest artistic touch. As Medgyaszay put it, basing his works on Hungarian traditions in no way limited his modernism but this reinterpretation allowed an architectural happiness to permeate his and others' work at all times.

3.11 István Medgyaszay, Theatres at Vezsprém 1908 and Sopron 1909



One of his greatest works though never realised was the design of the National Pantheon, Budapest, situated on the dominating slope of the Gellert Hill. This design won awards in 1903, 1906, 1907 and 1909 in Vienna, Budapest, Paris and London respectively. Medgyaszay's influence on modernism in form, materials, especially steel skeletal structures with reinforced concrete construction, glass box and lighting, verandas, roof terraces and pilotis – all parts of his visual vocabulary by 1904 – cannot be underestimated. The same is true of his use of Perso-Turkish forms in modified *köşk*, *yali* and *çikma* construction, observed afterwards and employed in the work of Charles Edouard Jeanneret, later to call himself Le Corbusier after his visit to Central Europe and Turkey in 1911.

The importance of these Turkish styles of architecture is made clear in Sibel Bozdogan's book Modernism and Nation Building – Turkish Architectural Culture in the Early Republic, 2001.

> The official history of modern architecture was written in the West with Le Corbusier as its main author and protagonist at once. According to this account, which has become a part of the mainstream cultural history of the 20th Century "modernism" or the "Modern Movement" as it was then called, encompassed a revolutionary aesthetic canon and a scientific doctrine in architecture originating in [Western] Europe during the interwar period.[18]

This history is flawed in the chronological, topographical and cultural context. Just how important Le Corbusier's visits to Central Europe and Turkey were in informing his and many others' architectural vocabulary will be discussed later particularly in regard to Perso-Turkish influences and his contact with Devětsil and Karel Teige.

5. Turkish Influences: Vedat Bey, C. E. Jeanneret

The study of modern architecture beyond Central Europe is a relatively new study. This is particularly true of the Islamic and Ottoman culture where scholars concentrated on the 'golden age' of the sixteenth century classical period. For these writers every part of Turkish Islamic architecture had not retained any authentic or pure traditions since that time. This argument is particularly focused in nineteenth century Turkey where Ottoman revivalism, as with all other revivals, was expressed as a decorative historical and historicist envelope wrapped around modern materials and modern construction techniques.

Political changes from the mid-nineteenth century allowed the formation of the Young Ottoman movement, composed of European-educated bureaucrats and intellectuals. They began to think of a reformed Ottoman nation that realised the importance of the Dardanelles and Bosphorous Strait as strategic targets within European history – as did many other nations. This was especially so with the Russians, as evidenced in the Crimean War 1853–56, the Ottoman Empire declaring bankruptcy in 1876 and the Russo-Ottoman War of 1877.

The Russians presumed they could step in and take over the lands of the 'sick man of Europe' as described by many commentators. Bernard Lewis, the eminent historian, in describing Turkey's plight remarked,

> Young Turks may have failed to give Turkey constitutional government; however they gave Istanbul its drains.[19]

The failure of an organised national government was due to the fact that an Islamic elite ruled a number of segregated religious societies identified as the Ottoman Empire. The Young Turks and their approaches to architecture was further commented on by Le Corbusier, the simplicity of their fathers, was preferred through the 'classic mosques' and the tradition of wooden architecture. Paradoxically, Le Corbusier used these forms as part of a modern architectural vocabulary based on Central European and Turkish vernacular architecture, as discussed by Adolf Max Vogt in the Noble Savage, 1998.

As with many Western European buildings the work of Vedat Bey often disguised an underpinning of great modernity. The Central Post Office in Sirkea, completed in 1909, is contemporaneous with Otto Wagner's Postal Savings Bank in Vienna, 1906. Beyond the confection of classical Ottoman forms, Corinthian orders, Beaux Arts axial plan and symmetrical layout lies a magnificent interior space formed by a ferro-concrete and iron truss arrangement, spanning a large hall lit from above by an elegantly simple glass roof. Like Vienna, Istanbul was a city emerging from turmoil and the Sirkea work was a symbol of an imperial, cosmopolitan power desperate to change their fortunes under the Young Turks.

From 1908 to 1931 a new style of architecture emerged in Turkey known variously as The First National Style by non-contemporaneous historians or more properly as the National Architecture Renaissance that began with Vedat Bey but also found voice in the works of a corporate style for ferry termini. Vedat Bey designed the Haydarpaşa terminus while Ali Talat Bey was responsible for the Beşiktaş building and Mihran Azaryan completed a palatial arched and domed pavilion in Büyükada. Similar to many

Western European movements, the National Architecture Renaissance did not have one, clearly delineated form based on a cultural or political ideology; all was in a state of flux. As with the development of modern industrial states worldwide, the old Ottoman Empire had to join the twentieth century. The re-invention of traditional types or the revival of cultural aesthetics was in denial of a very active population where old ways were still very much alive.[20]

It is this aesthetic that both Medgyaszay and C. E. Jeanneret recognised and used, although transported across continents, significantly re-scaled and rendered in the most modern materials. Although this is difficult to prove as Medgyaszay's notebooks and sketch books are part of a family museum the understanding gleaned by both Medgyaszay and Le Corbusier of Anatolian/Central European means and methods is clear. The importance they placed in their knowledge of Turkish traditional architecture is ever present in both works. Striking south towards the Balkans and Turkey, Jeanneret encountered the atypical Oriel Principle or *Çikma* Construction of the town of Veliko Turnovo, now in Bulgaria, which he sketched assiduously. Here he learned about cantilevered house structures that climbed the mountainside freely, which was inherited from Anatolian houses as identified by E. A. Kümürcüoglu. Jeanneret was astounded by the two-storey oriel projecting over the ground floor, especially so in the lowest houses where the upper oriel flies in defiance of the mountain precipice. Continuing the journey south, Jeanneret drew a conspicuously protruding oriel and enormous garden wall in Rodosto/Tekirdağ on the northern shore of the Sea of Marmara. South of this his travels brought him through Anatolia and on to Istanbul where he and his travelling companion, Auguste Klipstein, occupied an fruitful seven and a half weeks.

However their passage to Istanbul was less than auspicious:

> the leaden gray sky poured down, a gray drizzle turning the sea gray. The Golden Horn full of mud… the mosques dirty like old ruins rose sharply against the gloomy wooden houses.[21]

Despite the abysmal weather – it rained and rained – Jeanneret threw himself into a quest to discover every type of oriel structure he could find. In Stamboul, the oldest part of Istanbul based on early Byzantium, he drew many oriel structures as both frontages and all around projecting upper floor. In addition to this, Jeanneret observed and drew two superb examples of *çikma* construction that explored the relationship between housing, gardens and their containing walls where an external pavilion is supported on pilotis. As his architectural vocabulary expanded Jeanneret realised the possibilities of

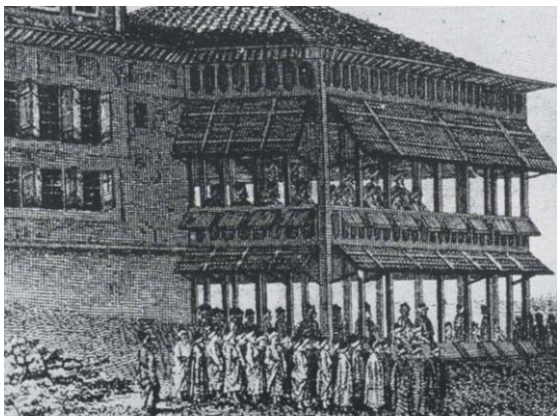
these forms when expressed in glass, concrete and steel. One particular divided pane end window has great similarities with the work of Charles Rennie Mackintosh.

Vogt makes tenuous connections in his book 'Le Corbusier, the Noble Savage' between what Jeanneret saw and the resultant architectural forms by which he would later be identified. Nevertheless, this reasoning cannot be accepted too easily. From the Turkish drawings to the Salvation Army Building, 1926, or the Weissenhof Siedlung, 1927, the similarities are not sufficiently clear and Vogt goes too quickly, passing over Jeanneret's other discoveries that would make more sense of this progress.

The *köşk* or pavilion can trace its routes back three hundred years in veneration of water as a purifying symbol of the Islamic religion; it is believed in the case of the Alay Köşkü in the grounds of Edirne Palace a fountain was placed in the central part of a pool. Another observation by Jeanneret with regard to folding shutters handling air currents and light allowed a further understanding of oriels as defined more completely by E. A. Kümürcüoglu in 1966. Additional to this was the observation of Köprülü seaside pavilion where it was noticeable that if the oriel façade is divided into three bands, the upper third and fourth bands have no windows, contrasted by the lower band that has continuous window openings, which provide a cool, high roofed open space. As with the Edirne Palace, this form goes back to 1699. Here an immense oriel projects over the waterside. As opposed to the *çikma*/oriel construction this form was known as a *yali* (summerhouse on the water).

In its most impressive form the *köşk* employed that ubiquitous, later Corbusier staple, the pilotis (3.12). Unlike the European tradition of enormous columns and orders, these pilotis are presented as simple forms buttressing enormous paired oriels as in the Sofa Köşk in the grounds of Top Kapu Saray, the Sultan's Palace in Istanbul 1752. In addition to Jeanneret's observations there had been an examination of Turkish buildings that were explored in the engravings of Anton Ignaz Melling. As a draftsman, builder and engraver, Melling's images have a stunning precision and sensitivity (3.12). The collection *Voyage pittoresque de Constantinople et des rive du Bosphore*, Paris 1819, might well have been known to Jeanneret in some form, probably after his return from his Voyage to the Orient in 1911. The publication of Mellings work lasted from 1809, when he set up an engraving studio, to 1819 when he completed the forty-eight views and three maps. A labour of love, his accomplishments were celebrated in Paris and throughout Europe well in into the 1870s with reviews of 'infinite artistic sensibility' in the *Gazette de Beaux Arts*.

3.12 Le Corbusier's sketch of the Oriel Principle in the town of VelikoTurnovo, Bulgaria



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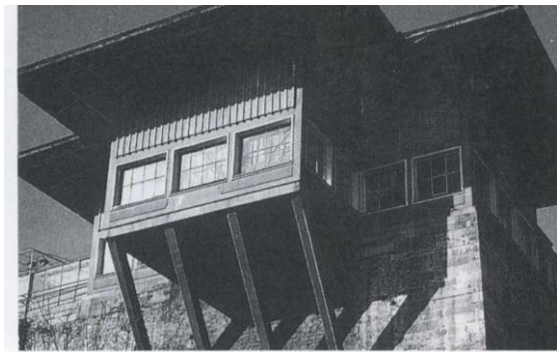

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1. Double-decker oriel, 2.Needle thin pilotis, 3.Cantilevered oriel with wide overhang and 4. An engraving, showing the action of air through shutters and the presence of flowing water within a garden courtyard. All would become staples within Le Corbusier's architectural language.

> You recognize these joys: to feel the generous belly of a vase, to caress its slender neck, and then to explore the subtleties of its contours, the intoxication of the fantastic glazes.[22].

Melling's career and evocative engravings would have appealed to the romantic in Jeanneret, as he would have seen a reflection of himself in Melling who at the age of nineteen began his travels in Turkey; Jeanneret was twenty four at the start of his 'Useful Voyage' both men clearly had an ego and talent to match. By introduction from the Danish Ambassador Melling met with the Sultan's sister, Princess Hatice, who asked him to rework designs for her home at Ortakeuil where he landscaped and improved services. He then met with Sultan Suleiman III who very quickly appointed him imperial architect. The licence to explore and roam extended to Melling was without parallel even to the Harem within the most secret and private recesses of the Palace.

With the upsurge in interest in Orientalism at the beginning of twentieth century it is reasonable to assume that Jeanneret would wish himself to be, a foreign adventurer who had position and power comparatively. Jeanneret would also have searched for the very best observed and executed visual records, architectural drawings and design as reference materials. Melling's Turkish portfolio could be said to be one of the finest ever produced. As Corbusier would say in later life:

> I practiced architecture without professional lectures, without schools, without diplomas. I set out on a road across Europe: Paris Constantinople, Asia Minor, Athens, Rome, I looked, saw, observed, discovered. Life belongs not to those who know, but those who discover.[23]

This is what Melling achieved a century earlier, Melling and the young Jeanneret were clearly kindred spirits with a lust for life and a belief in their own greatness. Prior to Melling's engravings there is a drawing by the Swiss-born, French-speaking painter, Jean-Etienne Liotard, known as The Turkish Painter. Liotard was a prominent member of the Bosporus painters from 1738–1742 when he resided in Istanbul. His love of Turkish motifs and the nuance and sensitivity of the country and the people were demonstrated provocatively in wearing Turkish dress on returning to the West. The images of people in oriental clothing within a Turkish interior are his usual metier, but it is the drawings of traditional country houses from 1740 which clearly show oriels surmounting lower open floors supported by pilotis which are the most pertinent.

The analysis of the Borecki house by Kümürcüoglu (3.13) shows how the living quarters and the utility spaces are wholly independent of one another, with the upper storey

being built on a raft of timbers supported by pilotis anchored with angled braces. Many of these forms can be seen in the Villa Savoie, Poissy 1929 (3.13), by Le Corbusier. Although it is clear that C.E.Jeanneret could never have seen this house (situated in the remote farmland of Ortalica near Tosya) nor would he have known of the autarchic and ethnological context, nevertheless there are similarities that demand comparison in the two buildings stylistic constants and their diametrically opposed cultural context.

> The raised dwelling of the self-supporting poor that goes back to un-recorded times meets the raised dwelling of the affluent and its modernity. Their needs are completely different, but they choose the same construction; for completely different reasons, they choose the same raised site for their completely different styles of living.[24]

It is clear that Jeanneret on this trip did not have access to ethnological collections and data. He also is noted for not keeping a diary, his sketchbook serving to record times, places and key words. Therefore Klipstein's account of his and Jeanneret's reaction to architecture in Istanbul has to be relied upon:

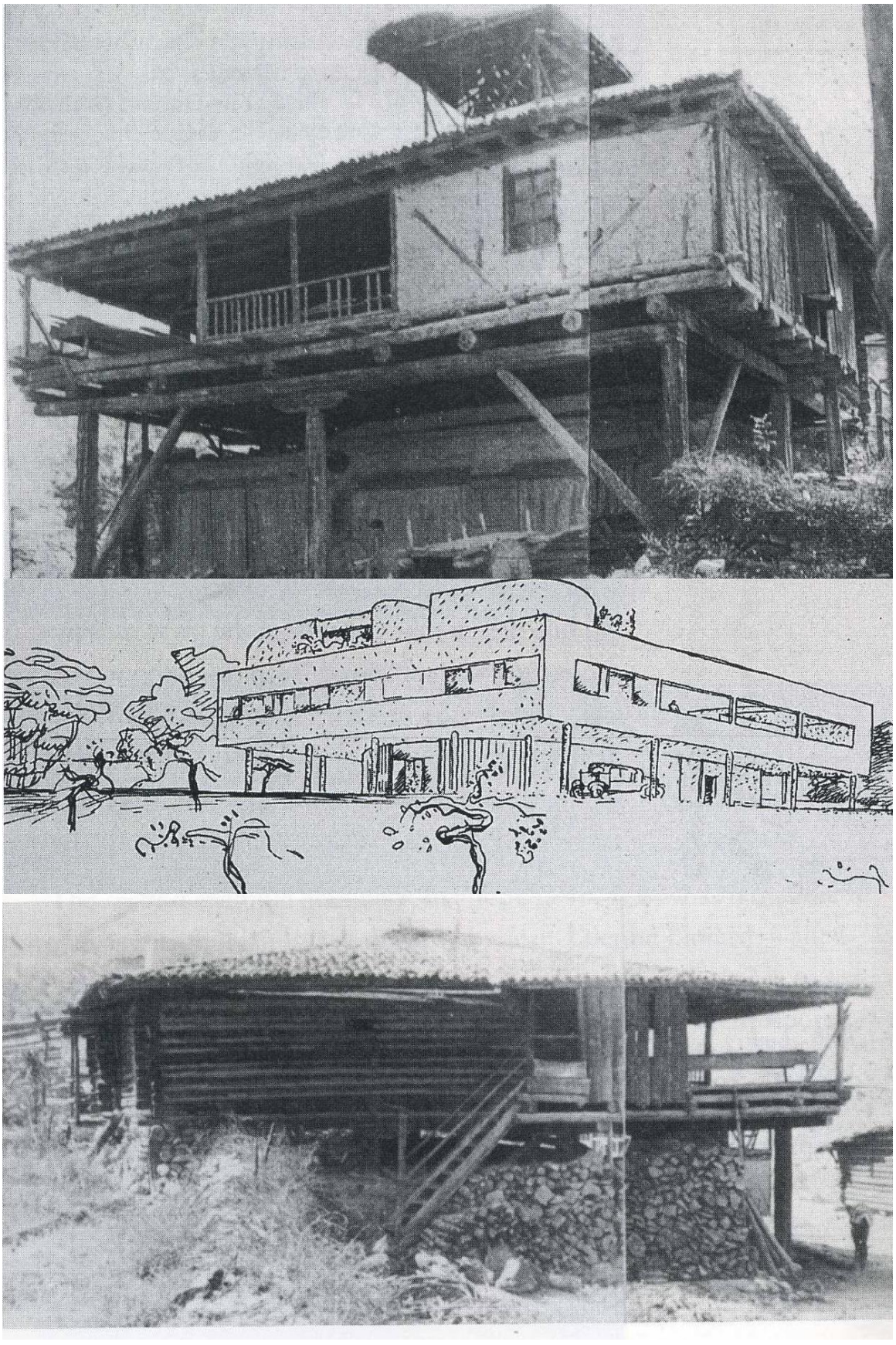
> The more we get to know these buildings the more we like them [we] would like to see such a house on the inside. The rooms must be of a generous size and designed to hold a lot of light.[25]

After seven and a half weeks the travellers moved on and so it was that Jeanneret returned to Europe eventually. This kit-of-parts, which he would use extensively in his architectural works, was retained for recall at will from his renowned elephant-like memory.

While allowing for Jeanneret's knowledge the mistake made by chroniclers is to presume others were not aware of these architectural forms. Many of the ideas of oriels, kosks, yali and old Turkish houses existed outside of Turkey. This was due to the Ottoman occupation of the Balkans and Central Europe and the dissemination of knowledge of these building types particularly by architecture students on their voyages of discovery; two such being Medgyaszay and C. E. Jeanneret.

István Medgyaszay demonstrates this knowledge clearly from both Perso-Turkish-Anatolian and Hungarian sources but probably more importantly he is the first to use many of these forms in their entirety in the Gödöllo Studios, 1904. Here oriels unite with

3.13 The Borecki House in Ortalica, Mid. Eighteenth Century and Le Corbusier's, Villa Savoie 1929-31



pilotis in villas which, like their Turkish counterparts, allow air and light to penetrate the whole of the interior space unencumbered by small doors or windows as in the Western European model governed by the needs of privacy and propriety. Although more decorative and formalised in the Gödöllo Studios, many Anatolian staples are employed: roof terraces are arranged on which to grow plants, taking full advantage of the passage of the sun around the villa or, as in the original Turkish example, fruits and herbs are arranged for cultivation and sun drying with a shaded pergola for growing vines and highly perfumed flowers. The whole clearly engages all of the haptic, optic and mimetic sensations but equally interesting are that most of the other studios in Gödöllo were self-build as the members of the colony were conservationists and environmentalists, before their time. Therefore Medgyaszay had to satisfy their reaction to the Belmonte and Nagy studio villas as these were an integral part of the whole community. In stylistic terms the complex use of forms and materials within an understanding of conservation and approaches to architecture that might be seen as organic in their intent, if not outward appearance, predate other complete cubic structures with cantilevered floors, terraces, gardens and pilotis .

This is not to say that Medgyaszay and Jeanneret were isolated in this knowledge as the principles of these forms were used by many others, either as extant examples of their own cultural traditions or as a result of the influence of the large number of illustrated publications featuring the Exotic Orient which were prevalent throughout Europe from 1850 onwards and were a constant reference source of reference for architects and artists throughout Europe. The traditional forms of Perso-Turkish-Anatolian architecture clearly impacted on the resolution of modernist architectural forms across Europe, particularly in the hands of Medgyaszay and (somewhat later) Le Corbusier. To bring these advances to a wider audience both commercially and aesthetically the nations of central Europe now embarked on an ambitious programme of creating trading show grounds, building exhibitions and industrial garden cities as could be seen most notably for example, in the case of Zlin.

Notes to Chapter 3

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CHAPTER 4

THE DEVELOPMENT OF FUNCTIONALISM IN THE NEW CZECHOSLOVAK REPUBLIC 1924-1939

1. **Prague – The Trade Fair Palace1926-28**
2. **Brno – The Exhibition of Contemporary Culture in the Czechoslovakian Republic (10th Anniversary)**
3. **Brno – The Czechoslovak Werkbund *Nový Dům* (New House) 1928**
4. **Zlin – 'Factories in Gardens' 1914-27 and 'Cities in Gardens' 1927-39**
5. **Prague, Brno and beyond – Private Villas**
6. **Prague – Baba, the Werkbund Housing Estate 1932**

Chapter 4

1. Prague – The Trade Fair Palace

A constituent part in the development of modern capitalist economies was the function of trade fairs. With the increase in trade and commerce throughout the Czech lands these were essential. Initially these cultural displays staged in Prague were the Prague Jubilee Exhibition (1891) and the Chamber of Commerce Exhibition (1908). However, these exhibitions were not annual as there was no permanent organised exhibition ground. Czech entrepreneurs and industrialists travelled to fairs in neighbouring countries, particularly in Leipzig in Germany.

The absence of trade fair grounds became an embarrassment to Czech politicians who saw the Czech Lands becoming one of the most developed and prosperous nations. The high Gross National Product (GNP) and income per capita of the land of the Slavs demanded that a permanent Trade Fair site be established. In 1912 Václav Boháč had founded the Association of Czech Trade Exhibitors and the National Economic Union. The 1st November 1912 edition of *Národní obec,* where Boháč was the editor in chief, published the following exultation:

> There is no need to justify the idea that Prague is best suited to host a Slavic Exhibition – it is after all, the future Slav Mecca, and it is up to Prague's leaders to make it the richest city of the Slavs.

The Panslavism exhibited by Boháč was resisted by the Vienna-based government, which gave no support to this idea. The realisation of the Prague Trade Fair project would have to wait for the fall of the Austro-Hungarian Empire. By 1919, with the support of the National Socialist Party who numbered the ministers Klofac, Benes and Hotowetz as his friends, Boháč became the president of the Prague Trade Fair Committee. It was incorporated as a cooperative stock company, with the city of Prague being the major shareholder in 1920. The Fair was established on an exhibition site alongside the Stromovka Park in the Bubeneč district, housed within Bedřich Muzberger's Industrial Palace, a Beaux Arts confection of iron and glass. The first Trade Fair was held in September 1920 with others in May and September 1921.

Boháč popularised the Prague Trade Fair throughout the world in magazine articles, billboards were erected along many railway lines and roads, and a Trade Fair propaganda train toured Europe in 1922. With the support of the President Thomas Mazaryk and other foreign dignitaries including the French Prime Minister, [Boháč was

awarded the French Legion of Honour in 1924 in addition to being an Officer of the Tunisian Order from 1923], he clearly was a highly regarded man with many contacts and supporters. By the end of 1923 the deficiencies of the Bubeneč site were apparent. A new site was sought that would take full advantage of the emergent transport and social infrastructure while being linked to Prague's older city centre and the newly developed commercial area of Dejvice. According to some, including Boháč's daughter Vera Beladova, Boháč invested his life savings in purchasing the defunct Melichar and Umrath factory which was located across the railway adjacent to the old Bubeneč site. A payment of seven million Czech crowns was paid to buy the site.

Boháč envisaged a group of four buildings (4.1) composed of two exhibition houses, A and B, providing year-round displays of industrial products. Building C was to provide offices for the Trade Fair administration and apartments for employees; building D was designed as a hotel for foreign visitors and honoured guests. This configuration of four buildings was said to be an allusion to the four continents of Europe, Asia, Africa and America with which Prague had forged trading links – as yet the city had not reached out to Australasia. The Prague Trade Fair Building Co-operative was formed in 1924 with invitations to six selected architects to submit plans. The six, Alois Dryák, František Roith, Josef Fuchs, Miloš Vaněček, Oldřich Tyl and E. Koteck (who was hardly known) entered the fray. Although they were being asked to design a Functional Modern building their respective architectural trainings were very different.

Alois Dryák, the oldest of the group, began his architectural career in the twilight of Historicism which was being replaced by Beaux Arts and Art Nouveau, although as a mature architect he was minded to respond to and work with modern ideas. František Roith, like many, began his architectural studies under Otto Wagner. Jože Plečnik trained Josef Fuchs at the Prague School of Applied Arts where Plečnik, as Wagner's student and confidante, was also erroneously labelled as a classicist and monumentalist in retrospect. Like Wagner, Plečnik's modern aspirations were often evidenced in the work of his students. Miloš Vaněček and Oldřich Tyl, both having been trained at the newer Prague Technical University, had experimented with Cubist and Expressionist forms but had now moved on to Functionalist and Constructivist styles. So it was that the judging panel could pass the six architects off as being from six differing architectural styles, although this was far from the truth.

4.1 Bohuslav Fuchs and Oldřich Tyl, the Trade Fair Palace, Prague 1924-28

Reconstruction by SIAL 1986-95

No such difference or individuality was demonstrated in the selection of the members of the jury who actively supported Functionalism and the architectural avant-garde. A number of the jury were friends and colleagues of Tyl and Fuchs. Oldřich Starý served on the editorial board of *Stavba* (Building) while Oldřich Tyl, Josef Štěpánek and Josef Fuchs as fellow students of Jože Plečnik shared their views in the architectural review *Stavitel* (The Builder), one of the first publications to bring Functionalism to a wider public.

The history of the competition is well documented in *Stavba* and *Stavitel* from 1924 with a commentary provided on the intention and purpose of the Trade Fair Palace by V. Louda who was Boháč's secretary. The entries by winners Dryák, Fuchs and Tyl were fully documented in *Mezinárodni obchod a průmysl* (International Trade and Industry), the Trade Fair magazine of 1924 where all entries were of Boháč's four building arrangement. The competition requirements were that the main buildings be situated on Belskeho Avenue separated by Rudolfova Street. Both main buildings had to have space for offices, warehouses and restaurants as well as exhibition spaces. Building A would also contain a large internal courtyard for heavy machinery exhibits with administrative offices in the galleries. Building B would house public baths while building C had residential floors and office spaces. Building D was planned as a hotel of sixty rooms with ten top floor suites. The jury recommended that the contract could not be awarded to any of the prize winners individually preferring to award one competitive entry to Alois Dryák and a second to the team of Josef Fuchs and Oldřich Tyl, as they now were paired, to produce new designs for the second Prague Trade Fair competition with the results seen late November to early December 1924.

A comparison between the first entries and second entries shows how Dryák, Fuchs and Tyl adjusted their designs from their initial plans. The most radical re-design was that of Alois Dryák moving from a playful Art Deco style with towers on the corners of the structures. The building's silhouette revealed vases and sharp gables topping a planar composition of unending bevelled windows providing both ornament and function. The other major issue was that as a totem of the commercial city the advertising tower was in the opinion of the Functionalists critically flawed.

Dryák's second design eschewed all playful references and ornamentation in favour of a functional design replete with ribbon windows in a plain façade with a clearly separated administrative block. It was clear from this second entry that Alois Dryák had learned many lessons from Fuchs and Tyl, however his adherence to axial composition meant that space was sacrificed in favour of materials within a traditional syntax. In other

words, despite the absence of internal supporting walls that previously would have dictated the necessity of corridors in controlling traffic flow within this plan there was no such restriction. Dryák was unable to comprehend these changes from the normal conventions and as a consequence the freedom of space usage that the building demanded was lost. Therefore Dryák was unsuccessful in the competition.

Fuchs' and Tyl's design had no such drawbacks and the design when built was the first Modern Functionalist building in the Czech Republic for a number of reasons – the design was a bespoke solution to meet the specific needs of twentieth century commerce and, unlike some of the functional factories, the enormous size of the four-building complex was designed to allow functional usage for many decades to come. The four buildings had to be constructed within an extant street plan where Fuchs and Tyl had to overcome the odd shaped plot of land. Tyl ignored the diagonal slant of Strojnícka Street by fracturing the central wings of the building with parallel fractures in the side façade. The immense size of the footprint of the four buildings was echoed in the size of the exhibition halls A and B. Although only building A was ever constructed the sheer size of the Palace and the total of materials used in this construction established this one structure, composed of the three utopian materials equally; ferro-concrete, steel and glass, as one of the very first Modern Functionalist buildings. The Palace could at any time accommodate 10,000 visitors and 4,000 exhibitors in a building 140 x 75 x 37 metres where nine floors totalled 24,000 square metres above an exhibition hall of 400 cubic metres.

To achieve this structure work began on site on 19 March 1926. The year 1927 saw the pouring and construction of the reinforced concrete framework with the whole building being opened to the public on 21 September 1928 – just thirty months from start to finish – completing the largest Modern Functional Building anywhere. This would be remarkable given twenty first century technology, but for the time it was truly impressive. The necessary site management and control to allow for 249 loads of timber to construct the scaffolding and 48,000 cubic metres of sand was only matched by the raising of a 26 million crowns loan from the Czechoslovak Legions Bank with the Berlin Victoria Savings Bank lending a further 36 million. The total cost of construction had reached 81 million Czech crowns by the time of opening.

Some recent observers would argue all manner of influences and references for this building from the Turin Fiat Factory 1915–1921 by Giacomo Matte Trucco, a truly impressive work, to drawings by Mies Van der Rohe, Mart Stam and from Le Corbusier whose Swiss College in Paris 1930 fed from ideas of Czech Modernism discussed with

him by Karel Teige at the time. The essential difference is that with the exception of the Turin Factory, which will be considered further, all of the other works were drawings, ideas and plans which were never built. If all of these ideas are to be included then the work of one of the greatest architectural design draughtsmen and seers of the Modern Movement, Antonia Sant'Elia, needs also to be considered. Reyner Banham puts it so succinctly:

> The drawings entitled *Dinamismo Architettonico* (Dynamic Architectonics) makes it clear that 'movement' as a quality of individual buildings has a very special meaning in his hands… The *Citta Futurista* (The City of the Future) 1914 drawings suggest that far form trying to introduce movement (as Giedion states in Space, Time and Architecture) Sant'Elia is basing his whole design on recognition of the fact that in the mechanised city one must circulate or perish.[1]

There can be no doubt that this one factor, although perhaps not expressed in words, was central to the Czech Modern Movement as a whole and Central European modernism as a whole. In the words of Bernard Tschumi:

> when Sant'Elia reintroduced the Viennese motifs of the influential Otto Wagner in the Futurist drawings, it was not the result of passéist weakness. On the contrary, the self transgression explored by Sant'Elia announced an obsession particular to the twentieth century. Namely, each time a law – economical or technical – is verified by implementation the architect will try to break it. He will do so either by alteration through foreign elements, for example, or by exaggeration, insisting on its extreme severity, experimenting with symmetry and repetition, for orthodoxy provides only ephemeral guidelines.[2]

In looking at the Trades Fair Palace this definition fits extremely well and, even though Sant'Elia left behind no finished buildings, his pronouncements on the technological cities presaged the developments of the 1950s and 1960s.

This understanding of Modern architecture was expounded in *Messagio* (Message), May 1914, by Sant'Elia and his apparent collaborator, Ugo Nebbia:

> to raise the new-built structure on a sane plan, gleaning every benefit of science and technology, setting nobly every demand of our habits and our spirits, rejecting all that is heavy, grotesque and unsympathetic to us (tradition, style, aesthetics, proportion) establishing new forms, new lines, new reasons for existence, solely out of the special conditions of Modern living, and its projection as aesthetic value in our sensibilities.[3]

Again this is clearly stated in the architecture of the Trades Fair Palace but how does this aesthetic work in relation to the Turin Fiat Factory?

Although Giacomo Matte Trucco was never a Rationalist he exhibited at the 1928 Exhibition of Rationalist Architecture in Rome, this being the only project of this exhibition ever realised. It can be argued whether this is truly a building of the Modern Movement or a modern reinterpretation of Roman classical tradition in accordance with Fascist dogma and the wishes of Mussolini. Despite the fact of the works extending over a 40 hectare (100 acre) site the shape of the building and the test track on the roof echo an enormous circus maximus constructed in mega-structural, reinforced concrete framing with hundreds of 'punched through' windows devoid of the elegance of the Trade Fairs Palace ribbon windows that are accomplished in a façade of balanced harmony.

Reyner Banham presents one other group of buildings, The Dessau Bauhaus as being of superior character:

> The Bauhaus remains a masterpiece of the new architecture. Indeed it was the first really great work in the style.[4]

This is Banham's view of the Dessau Bauhaus Buildings, 1925-26, Walter Gropius. Although these buildings are in the vanguard of the Modern Movement, it can be argued that they are not the first masterpiece by examination of the evidence. From Medgyaszay's Budapest Department Store, 1902, through Poelzig's Milch Chemical Factory, Posen (Poznan) 1912, and Max Berg's, Hala Ludowa, Wroclaw 1913, and then to the second decade with Häring's Gut Garkau Farm Buildings, Lubeck 1924, to Kahn's Glass Plant, Ford Motor Company, River Rouge, Michigan 1922, it can be seen that other architects had been creating masterworks. Indeed if the focus of this work were American advances one could easily cite the Ford Plant at River Rouge through sheer scale and advanced use of materials as being one of the first masterpieces.

Banham's view is questionable for the following reasons. In being able to select a green-field site bordered only by Friedrichsallee and the old hospital, Gropius was able to determine the configuration of the Bauhaus buildings, as there was no pre-existing architecture or roads. Within this complete freedom Gropius built three buildings all of which with their interconnections constituted an L shape arranged around the central point (4.2). This 'masterpiece' viewed from the air (as Gropius intended) does not inspire reverence as the mixed heights of the blocks and their relative interpenetration leave the whole as an unresolved work. Despite all of the architectural adulation offered

in support of these structures today, a differing view of the facade was offered by contemporaneous critics.

> The ordering of the openings in the wall surface is quite as important as the avoidance of apparent reveals in the presentation of the integrity of the wall plane… Contemporary buildings often have entire walls of transparent glass constituting one enormous window even though the independent supporting skeleton is perfectly clearly seen behind. Such altogether transparent walls are not by any means the easiest for the architect to handle.[5]

This lack of ease and discomfort is clearly visible in the handling of the façade of the Bauhaus School Workshops, where we progress from the recessed ground floor with its poorly weighted supports, to the first floor banding and on upwards to the base of an impossibly heavy over-hanging glass box. This box was composed of thousands of standard glass windowpanes [it is suggested by Reyner Banham and others, that perhaps Gropius was given these as a cheap job lot] rising to a rather unfortunate roof cap. This lack of ease in execution is remarked upon further as:

> the supports of the centre section are awkward in shape.[6]

These observations are often overlooked and as such the Dessau buildings cannot be seen as a fully resolved plan. These deficiencies were compensated for in the far better handled masters' and directors' houses both of which from without and within were works of great function and beauty. This may have been because Frau Gropius, Ise Frank, made sure that her husband's ambition:

> to live in a pine tree forest.[7]

was fulfilled. It is clear that the intervention of Fraus, Gropius, Klee, Muche, Kandinsky and Schlemmer in helping to design the masters' houses composed an idyllic modern grouping of three semi-detached duplexes.

If the Dessau Bauhaus Buildings were not the first works of the Modern Movement there were a considerable number of other buildings contesting that honour? One was the Trade Fair Palace which despite its clearly stated Modernity and fitness for purpose, was doomed to failure in Western European commentary. This Czechoslovak

4.2 Walter Gropius, the Dessau Bauhaus Building with Workshop 1925-26

anomaly is dealt with rather curiously as even Banham cannot define the Czech contribution to the Modern Movement except by citing,

> several Czech architects who failed to establish themselves but were highly regarded in Germany at the time.[8]

This ignorance of Central European Modernism denies not only the Trades Fair Palace but many other individual buildings, town and city plans and developments through these lands. These omissions are all the more amazing as the Club of Architects, through the review *Stavba*, organised a series of lectures entitled 'For New Architecture' in Prague and Brno across the new year from 1924–25. Among the contributors were J.J.P. Oud, Walter Gropius, Amédéé Ozenfant, Le Corbusier and Adolf Loos – all of whom were highly respected architects. With cross pollination of ideas from the graduates of the School of Architecture at the Czech Technical University in Prague, Oldřich Tyl, Oldřich Starý and Ludvik Kysela in particular, they all helped fire the cause of the Modern Movement. The Trade Fair Palace was extremely important in the opinion of Le Corbusier as this observation reveals.

> When I first saw the Trades Fair Building [Palace] I felt totally depressed, although I did not approve of the building whole-heartedly. However I did realize that the large and convergent structures I had been dreaming of really existed somewhere.[9]

In addition to the Trades Fair Palace Le Corbusier would have been made aware of a number of architects and their buildings throughout Prague. In the most recent comprehensive publication on Prague 20th Century Architecture there are 225 entries from 18 Prague architects with a further 74 entries in a supplement – 'other interesting buildings', all of which exclude work other than by Czechoslovak -born architects.[10] Within Czechoslovakian Republic Prague was not the only city with architectural ambitions and drive, as Brno from 1925 would begin to rival Prague's supremacy.

Perhaps it is appropriate to let Le Corbusier close this section with another comment on the Trade Fair Palace taken from an article in Architectural Review, August, 1975

> It is very instructive for me to see architecture on this scale in actual reality. I, who have so far built only a few relatively small buildings, understand now how I must design big buildings.

Although the author, Frank Arneil Walker laments the tragedy of the fire in August 1974, which destroyed much of the fabric of the building, reducing the whole to skeletal frame and ruptured concrete, his despondency did not last.[11] Rather than the building being

lost, a complex set of negotiations between 1979 and 1995, and a new patron in the form of the Trade Fair Palace for the National Gallery, allowed this truly Functionalist Modern Movement work to re-emerge from the ashes.

The reconstruction was undertaken by SIAL *Sdruženi inženžrů a architektů Liberecka* (Association of Liberec Architects and Engineers) between 1985 and 1990. All parts of the reconstruction process have taken careful note of the original and apart from some changes of use the whole is as faithful as possible.

> It may appear as if nothing happened at all. At first a structure the size of a residential block was built here. It was simple and unobtrusive. After it was destroyed by fire, the building was reconstructed in a slightly different manner [allowing for new health and safety and building regulations] but with the same simplicity. It is beautiful, and once more it is going to age well.[12]

2. Brno – The Exhibition of Contemporary Culture in the Czechoslovakian Republic (10th Anniversary)

The 10th anniversary of the republic was to be celebrated in Brno on a purpose-built exhibition site. Brno was chosen as since the 1890s the Moravian capital had developed a very strong commercial and industrial base through textiles and engineering. An equal part of this was the development of a planned and zoned city. The birthplace of Adolf Loos in 1870 and Jan Kotěra in 1871 had developed as the home of Czech modernist architecture.

To begin the development of Czech modernism a robust system to train architects was required. This started with the founding of The School of Building in 1886 where many innovative architects would study. Among these were Josef Hoffman, Jindřich Kumpošt, Hubert and Franz Gessner and, most importantly, Bohuslav Fuchs. This development of architectural education continued apace after the First World War with the founding of the University of Brno and the Technical University of Brno, both in 1919.

One other component of the birth of Czech modernism and the later Modern Movement was the publication of a large number of theoretical treatises and architectural design publications. One of the greatest figures in all of this activity was Karel Teige. Unfortunately because he became a persona-non-grata on both fronts at once, marginalized by apparatchiks and by transatlantic historians alike, he is better known for his disagreement with Le Corbusier's 1929 proposal for Paul Otlet's Mundaneum. This was one of the last and most complex critiques on Le Corbusier's Modernism, earlier in

the 1924 *Stavba* article *Knove architekture* (Toward a New Architecture) Karel Teige had taunted Le Corbusier by saying he was:

> too much of a Frenchman [albeit he was Swiss born] not to betray his traditional roots in classicist harmony, and not to refer to historical examples.[13]

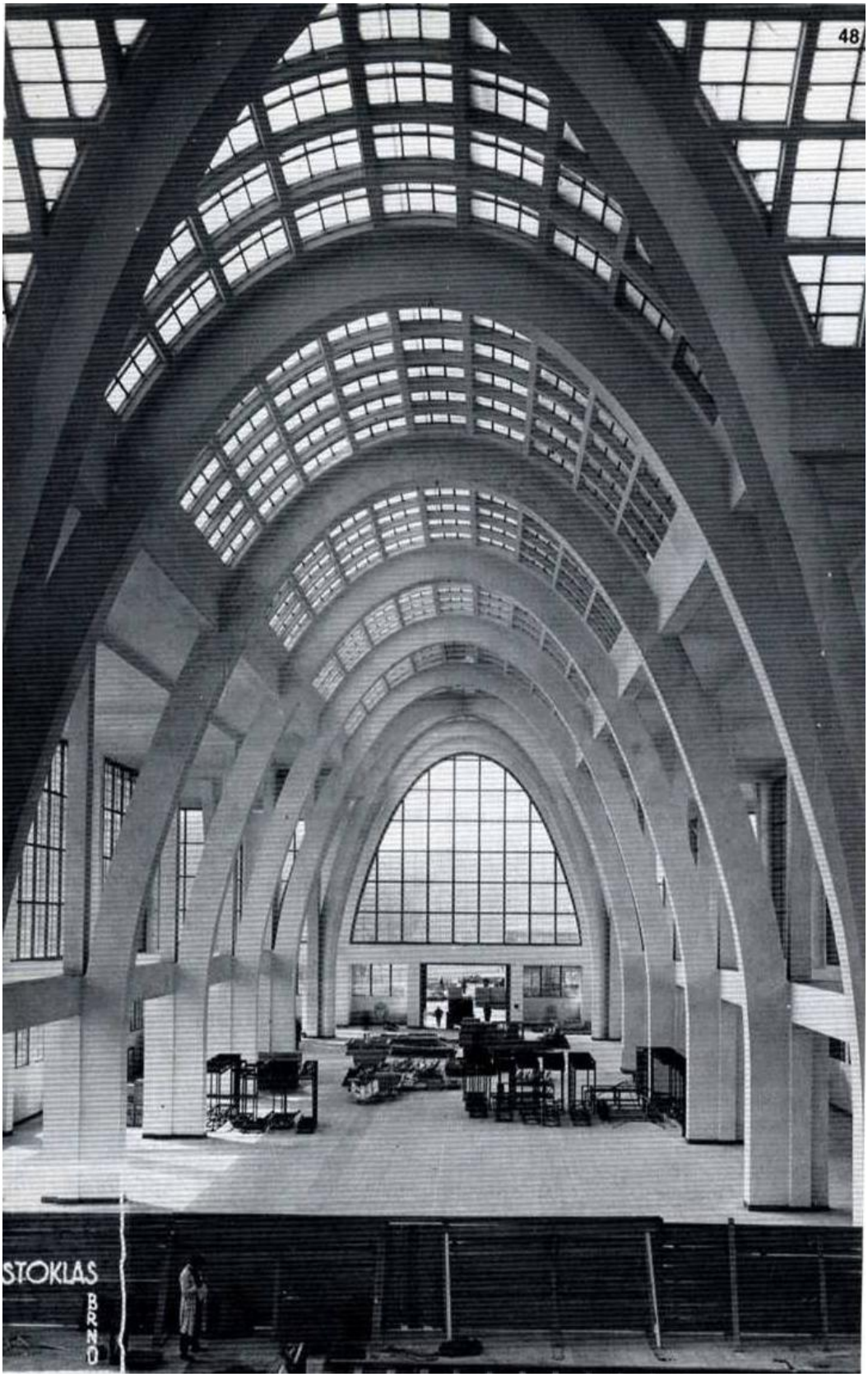
Teige was well placed to make comment on avant-garde architecture as from 1924 he travelled to Vienna, Milan, Lyon, Paris, Strasbourg and Stuttgart with visits to Moscow and Leningrad in 1925. Pronouncements of this type were offered further in a *Stavba* editorial of 1924*, Náš názor na novou architekturu* (Our view of the new architecture) where the architects of *Stavba* would use scientific principle to achieve a unity of form as opposed to Le Corbusier's view of abstract geometrical order to achieve the same outcome. So it was that throughout the three years 1924 to 1926 enormous debate led to a revolution in the development of design and build. Private and public partnership became a growing part of Brno's architectural practice with a number of architects taking a leading role.

Jindřich Kumpošt, Bohuslav Fuchs and Karel Teige added to their number and Arnost Wiesner, who's Brno Crematorium which gave great consideration to the buildings' setting within a balanced complex of structures, contained the first roof garden in Brno, which Le Corbusier admired during his stay in town.[14]

The approach to the maturing of Brno Modernism is best seen in three cafés, Fuch's Zeman Café, Kumpošt's Savoy Café and Weisner's Esplanade Café 1926-27. All three buildings had a particular label applied to them. The Zeman Café in Na Kolišti Park was a work of White functionalism with an implicit free space plan. Jindřich Kumpošt developed a bold space plan with interplay of angular and circular forms on several levels. In the Esplanade Café Weisner used a low glass cupola in the central dining room replete with mirrors to increase apparent space.

Josef Kalous and Jaroslav Valenta won the competition for the main pavilion of the 10th Anniversary Exhibition. *The Teollisuden Palatsi* (The Palace of Industry) (4.3) within the *Aikaume Kutuurin nayttelly* (The Exhibition of Contemporary Culture) 1927–28. The complex of buildings was composed of massive glass and reinforced concrete parabolic arches as the centrepiece dominating the exhibition site. In addition to this

4.3 Josef Kalous and Jaroslav Valenta, Main Pavilion for the Exhibition for Contemporary Culture, Brno 1927-28



main pavilion many other pavilions were designed by leading Prague architects and the outstanding Modernists of Brno: Jiri Kroha – the Man and Mankind Pavilion; Emil Kralik – the Exhibition Theatre; Bohumir Cermák – the Tradesmen's Pavilion; and Bohuslav Fuchs – the Pavilion of the City of Brno. The impact of this exhibition is incalculable as the focus that had been on Prague was now trained fully on Brno.

3. Brno – The Czechoslovak Werkbund *Nový Dům* (New House) 1928

One of the challenges which faced architects the world over post First World War was developing a system for building the new collective house which would contain all modern advances. As before, one of the major influences within this debate was Karel Teige who continued to exert enormous influence on European Modernism via the publications *Stavba, Stavitel and Devetsil Re D*. To answer this question Czechoslovak Architects from diverse trainings converged in 1928 on Brno to take part in the Czechoslovak Werkbund, *Nový Dům* (New House).

In many ways *Nový Dům* echoed the Weissenhof Seidlung in Stuttgart one year earlier, but there was one vital difference. Rather than the official state patronage the financing came from the construction company, Uherha and Ruller, who constructed sixteen detached houses. Zdenék Rossman and Bedřich Václavek expressed the intent of the *Nový Dům* Exhibition in 1928:

> The ground-plan of the modern flat is the ground-plan of modern life, which is now more dynamic, open and hygienic than ever before. The new plan has necessitated new methods of construction and new structural materials. No longer are there load bearing walls; the modern house is built on concrete or iron piers and the thick outer walls have been replaced by thin breeze blocks with a high insulation capacity. The pier-based construction system allows a maximum width of windows, which are mostly framed in iron, moveable and double-glazed to allow 100 per cent of the light to pass through, and sunshine means health. An important contribution to modern architecture is the flat roof converted into a garden-terrace. The focal point of the modern house plan is today's democratic man, whose vital needs are light and air.[15]

These ideas were resolved in what became known as 'White Architecture'. Eight architects from Brno and one from Prague were selected to work as a collaborative unit at the Exhibition Colony of the Czechoslovak Werkbund in 'The New House' 1928 – Hugo Foltýn, Miroslav Putna, Bohuslav Fuchs, Josef Štěpánek, Jiri Kroha, Jaroslav Grunt, Jan Visek, Jaroslav Syřiště and Arnost Wiesner. Jiri Kroha in his one-family

house (4.4) demonstrates a mastery of lightness of touch. House Nr. 9 reveals a beautifully articulated structure of plain façade with windows of varied size according to their function and relative layout. The double house, Houses Nr 10/11 by Hugo Foltýn and Miroslav Putna, demonstrate in the elevations that the fenestration can be varied to a large degree without destroying the unity of the whole.

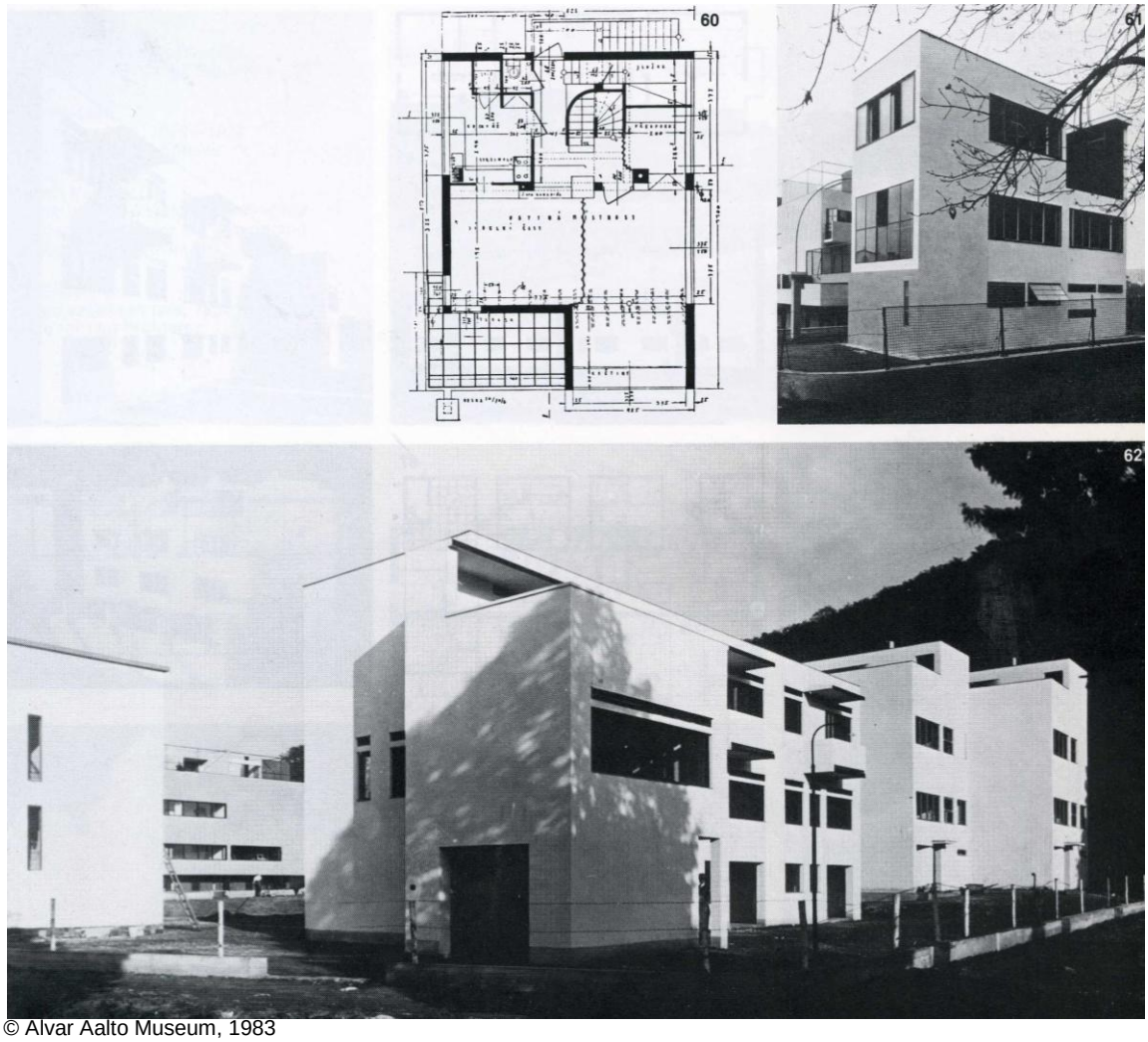
Of all the houses, House Nr. 1/2/3 and 8/7/6 by Bohuslav Fuchs and Jaroslav Grunt respectively are indicators of what was known as the *Nejmensi byt* (the Minimum Dwelling). Within this idea of the minimum dwelling Teige envisaged a new way of living where the floor plan was not dictated by the institution of marriage or families.

> Each adult should live independently in a small but architecturally well-designed residential cell. Women, who in the era of industrial production were to join men in the labour force, would not be burdened with a second shift of household chores and cooking, functions to be taken up by collective canteens and laundries. The upbringing and education of children were to be handled by professional caretakers in nurseries and kindergarten, rather than by the parents themselves.[16]

In Tiege's world, a Marxist approach to living, dictated that a new housing type was a sociological necessity governed by rationalization and industrialization of construction, standardization, and mass production. This approach led to architects expanding the forms of White Architecture to encompass far greater tenement houses; two buildings in particular, *Vuokrataloryhma* 1926–27 by Josef Polášek and *Osuuskuntavhokrataloja* 1928–29 by Jindřich Kumpošt for the Blahobyt and Stavog Cooperatives, reveal this approach. Despite the vast size of the blocks and all their multiples, both cuboid forms retain a dignity and sense of purpose which does not dominate the individual inhabitants.

In response to the needs of workers living in the *Zábrdovice* quarter with old housing without bathrooms, Bohuslav Fuchs built the *Zábrdovicen Klypylä* (town baths of Zábrdovice), an enormous complex of baths and wash rooms as a social and functional arena supporting Teige's mantra of light and air in hygienic surroundings. Although Fuchs clearly understood some of the Marxist views expressed by his colleagues he

4.4 Jiří Kroha, House No. 9, The Exhibition Colony of the Czechoslovak Werkbund, ‘The New House’ 1928

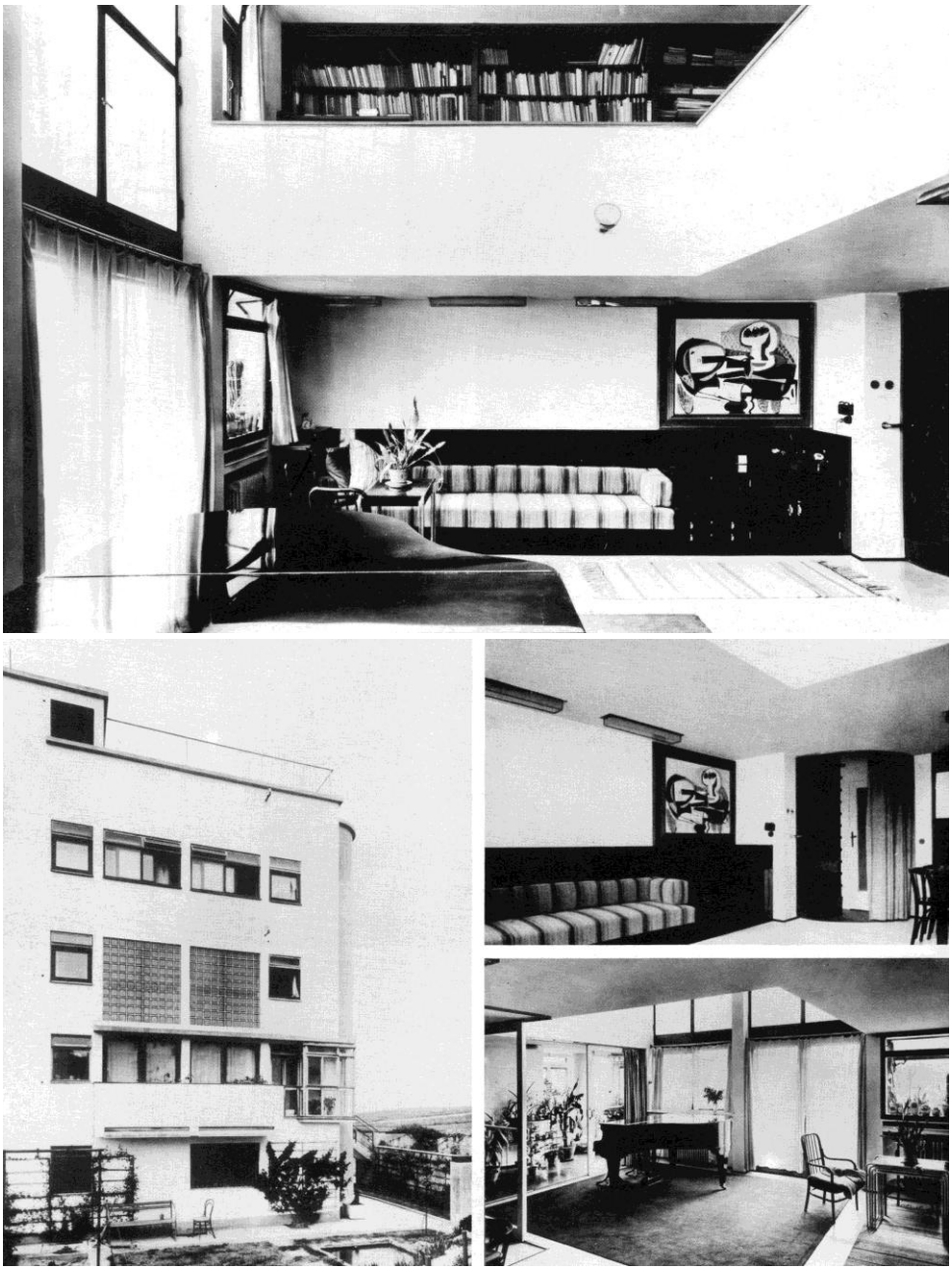


had no intention of living himself in a minimal-sized apartment. The Villa Fuchs, Brno 1927-28 (4.5), is a Modernist five-storey block with attached studio on the exclusive Kraví Hill set within its own grounds. A double-height living room with galleried library is illuminated by light penetrating the interior from the moveable glass dividers of the glazed conservatory that is separated from the rest of the villa. In this villa we have a clear statement of the developing principles of the Czech Modern Movement.

Fuchs clearly demonstrates an ability of form and space with few limitations in a villa setting but he was also adept when it came to building on extremely difficult plots. The Avion Hotel 1927-28 was constructed between two earlier facades limiting the site to 8.5 metres wide by 34 metres deep. The solution to this restricted site was to design a hotel distributed between the floors and half floors allowing particularly interesting views, the feeling of spaciousness being multiplied by lateral light fittings and a number of mirrored walls throughout the public rooms. Josef Kranz, 1927-29, also employed this aspect of light and space with illumination and reflections in the Era Café. The resultant elemental space was created by a considered disposition of large windows kept in balance by small louvres providing necessary ventilation.

The concerns over the nature of public health, education and welfare led to an enormous upsurge in the building of schools, swimming baths, tenement houses, hospitals, theatres and sanatoriums. Particularly in Brno, the Modern Movement began to enjoy a high point when the master plan for the *Pod Vodojencen* (villa quarter) was created in 1933-35. This was so that the individual advances of Czech villa building were made available to clients other than the wealthy. To select some building types from the above: Vesna School for Girls Brno, 1929-30, Bohuslav Fuchs and Josef Polasek; Koldom Small Flat Competition, 1930-31, Prague, Ladislav Zak, Josef Havlíček and Karel Honzik; Machnáč Sanatorium, 1930-32, Trečianské Teplice and Jaromír Krejcar; French Schools, 1931-34, Prague, Jan Gillar Theatre, 1934-35, Ústí nad Orlici. The Apartment Buildings by Eugen Rosberg 1935-38 and Josef Stolc 1937-38 are worth special mention. In producing modern mass housing that worked within a city context, Richard Podzemny in the Provincial Bank Apartment House, Liberty Square, Prague- Dejvice 1936-38, had clearly progressed from the rather stultifying arguments over Form Follows Function to progress to Czech Functionalism and *Forma Sleduje Vědu* (Form Follows Science), 2000, as advanced by Rostislav Švácha and others in the book of the same name.[17]

4.5 Bohuslav Fuchs, The Villa Fuchs, Brno 1927-28



The maturing of this idea through the 20s and 30s was based on three precepts:

Standardization – raising the quality of housing and life to the optimum by a process of gradual improvement through a standardized mass building programme. The mass produced components coming from factories, which also adopted this standardization of construction.

Typification – relating to a free space floor plan from a scientific formula which would preclude having to invent and reinvent apartments, schools and office buildings.

Normalization – making all parts mutually compatible in a unified harmonious whole regardless of who created them.

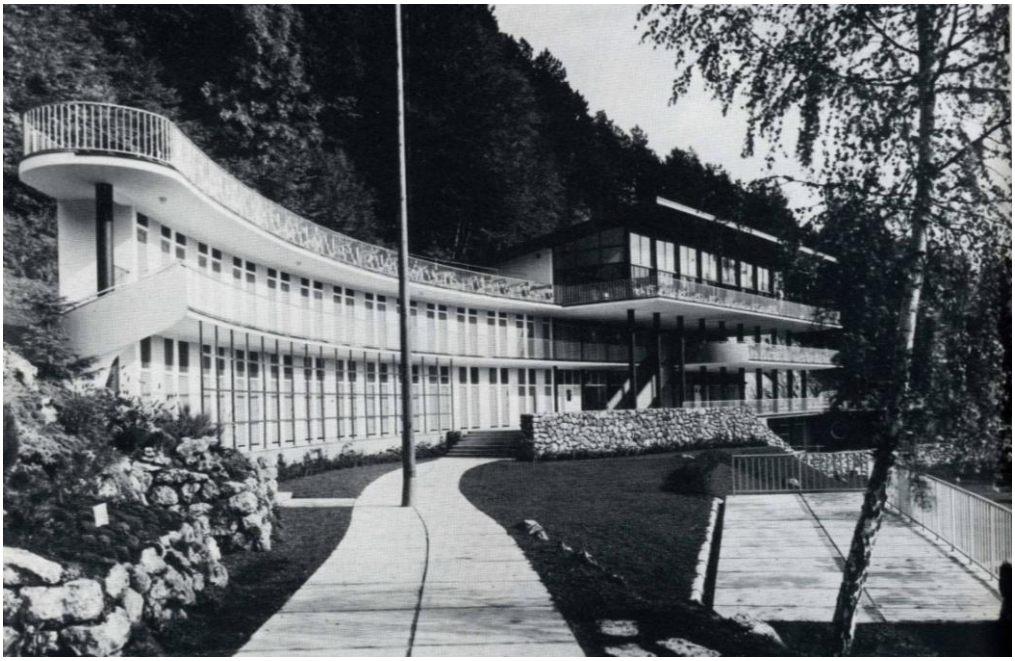
This approach to building was seen outside of the city in the sanatoriums and spas. The Morava Sanatorium, 1930-31, Tatranská Lomnica, (Slovakia) by Bohuslav Fuchs or, one of the finest buildings of Fuch's career, the sinuously arranged *Zelena Žaba Baths* (Green Frog Thermal Baths), 1936-37, Trečianské Teplice (4.6) where the bath took full advantage of its setting, Fuchs intended that:

> The thermal baths are situated within a natural forest with cafes, a wine cellar, an open air swimming pool, terraces, a bowling room, playgrounds, sun-lit areas and a children's playground with a special swimming pool. This has all been done in a very natural way so that the surroundings and structure are in harmony. The main structure is light and plastically rich, using colour for emphasis. The garden links the structure and its surrounding buildings.[18]

4. Zlin – 'Factories in Gardens' 1914-27 and 'Cities in Gardens' 1927-39

Zlin was to be the epitome of Czech Modern Movement. The architectural and pictorial representation of the changes in Czech Society 1914-39 was first made flesh by Jiri Kroha in Tomáš Bat'a's industrial city. When Tomáš Bat'a founded his business in Zlin in 1894 he changed Zlin from a rural market town with 2,834 inhabitants to a bustling town with a population of 40,000 by 1935. To accommodate a great influx of people the number of houses being built increased from 499 per year to 2,676 per year over this period. Zlin was created as the Garden City for a new era, an unapologetic modern functional arrangement of workers and production centres to allow batch production, growing to mass production as markets grew. Bat'a turned the art of the cobbler, as a home-based craft production, into an organised, factory-based production

4.6 Bohuslav Fuchs, *Zelena Žaba Baths* (Green Frog Thermal Baths), Trečianské Teplice 1936-37



of lightweight fashionable shoes. In establishing Zlin, architects, town planners, factory workers, municipal officers, landscape gardeners and many other professionals created a unique cultural statement as a modern urban society that lost none of its humanistic scale or values as realised in 'factories in gardens'. The original formative years were from the First World War, when military orders from the Austro-Hungarian Empire were bolstered by the exclusion from military service for 2,000 of Bat'a's workforce.

As the First World War developed workers and prisoners of war were assigned to producing 10,000 pairs of shoes per day by 4,000 workers. Following the World War Bat'a began to lose markets in neighbouring countries torn by inflation. Bat'a, ever a pragmatist, cut prices by 50%, reducing wages by 40%, having first provided for his employees' needs. This brutally honest paternalistic approach to management was a Bat'a hallmark. The first architect of Zlin was František Lydie Gahura who was charged with building the 'factories in gardens'. Gahura's solution was to use the natural geography of the valley placing the factory complex in the Drevnice river valley, above which the green slopes were furnished with standard homes for two and four families in the newly created towns of *Letna* and *Zalesna*; this arrangement being an illustration of Bat'a's views that people should work collectively but live individually. Bat'a hoped that with this understanding of his workforces' needs they would be able to use the most modern materials and techniques without feeling alienation from the advanced technologies. Equally workers housing was available at the rate of one crown per week with everything designed to be a part of the equivalence of one year's average salary

By 1928 12,000 employees made 75,000 pairs daily; to be able to sell this number of shoes Bat'a used the newly emergent art of advertising to promote his products. Standardised building methods were required to expand the Bat'a Empire. Arnost Sehnal, the builder, designed a reinforced concrete skeleton filled with 6.15 metre blocks, this being the metric translation of the 20 foot unit as used in the United States which Tomáš had brought back with him in 1927. The evolution of this module led to what became known as the Bat'a Standard. A reinforced concrete block 6.15 metre length by 3 metre in width which was used universally as a starting point for all Bat'a buildings, benefiting from being inexpensive and very flexible in construction this block advanced the building process considerably

The architects, engineers and building workers established a great modern city where they as individuals remained anonymous. The development of Zlin was paralleled with the creation of Bat'a stores throughout the land and abroad. Large footwear stores *Domy Služby* (Service Houses) were built to the Bat'a standard in Prague, Brno,

Ostrava, Liberec, Bratislava and Olumuc. These stores were the houses of all foot care; internally they were an oasis of calm and light based on the latest technology. Pavel Halik, speaking at a conference in Zlin in 1991, recalled buying shoes as a young boy at a Bat'a store.

> Even here the presence of Zlin radiated through Bat'a's salerooms, all glazed, with lightweight armchairs from metal tubes, full of light and airy, pleasantly smelling of rubber.[19]

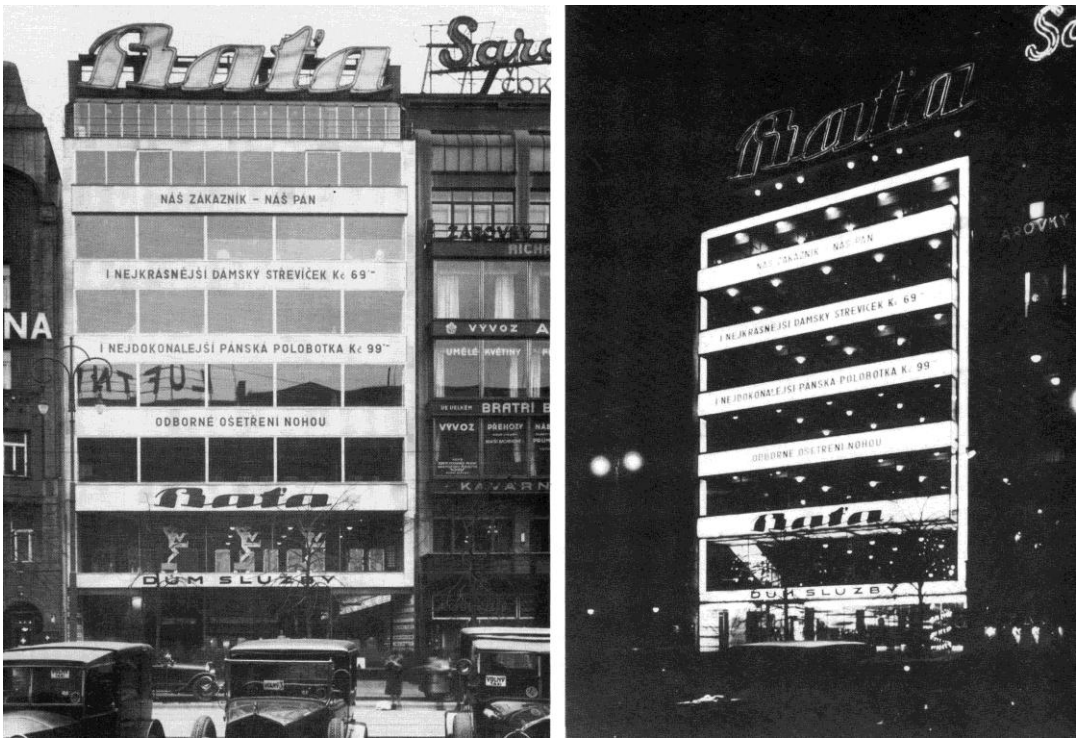
The standardised light green interior confirmed an impression of competence and professionalism that was added to further by the glazed façade, above which was the ubiquitous "Bat'a" electric sign – an ultra modern symbol (4.7) in contrast to the surrounding historicist and classicist buildings.

As with these external developments Zlin needed to expand its production base but Tomáš Bat'a had a very clear view of architects and 'their' work.

> I get the impression that the majority of architects are mostly interested in building monuments to themselves. We aren't interested in that: a building should serve us and our people. There are other factors as well: time, science and technology and of these the most valuable to us is time. The success of this venture is attested to in Zlin being recognised by CIAM as the most complete example of Modern Functionalism without all of the ideological baggage of CIAM.[20]

So it was that 'factories in gardens' were replaced by 'cities in gardens'. F.L. Gahura began this process of change from 1927 with the Mašaryk School and monument. This was followed by a nine-story department store built on the standard skeleton. The zenith of Gahura's architectural work was designed to hold 2,270 moviegoers, built on steel supporting pillars above which was a plastered lattice structure. Gahura's most poignant work was the Bat'a Monument Building dedicated to Tomáš Bat'a after his untimely death in an aeroplane accident in 1932. As with all Bat'a buildings this was the standard frame with circular reinforced concrete pillars, the whole structure being clad in glass through which could be seen Tomáš Bat'a's aeroplane suspended in mid air. Tomáš was succeeded by Jan Bat'a, his half brother, who took up the challenge of expanding the business.

4.7 Ludvík Kysela, Bat'a Department Store, Prague 1928-29



Antonin Vitek, one of Pavel Janak's students of the Art and Crafts school of Prague, met this challenge. Vitek designed numerous projects for housing and several large department stores as well as master plans for a number of satellite industrial cities: Best in Holland, Ottmuth in Germany, Mohlin in Switzerland, Borovo in Croatia, Chemilek in Poland, Hellocourt and Vernon in France and Martfu in Hungary. At the same time Bat'a hired Vladimir Karfik who was working in Chicago at the time, having been in practice with Frank Lloyd Wright in Wisconsin and Arizona, Holabird and Root in Chicago, and in Le Corbusier's studio in Paris in 1925.

As the prosperity of individuals in Zlin grew there was a desire to replace the need for perennial cheap housing with privately owned, higher quality homes. Miroslav Lorenc who came to Zlin in 1930 was allowed to build private houses and shops for patrons as the town became a self-confident, self-propelled community, dominated by the Bat'a comp any, but no longer entirely dependent on it. Lorenc also built the first business school to complete the original school district in 1931. This was added to by the building of the Corporate House, an 11-storey complex, containing restaurants, a café and gambling rooms with a 300-bed hotel complete with all the latest en-suite facilities. The top floor was used as a viewing platform and as a terrace for parties where dancers might survey all of Zlin.

Two years later the Zlin cinema was built as an enormous rectangular building that departed from reinforced concrete in using a large steel framework to support the largest single span roof in the country. The seating for this capacious space was to hold 2,270 people. Lorenc also built the Technological Study Institute which was intended to have four large rectangular buildings dedicated to science, technology, art and social science but of these only the technology block was built in 1935. All of this new building added to the previously constructed House of Social Care 1925 and the Hospital in 1926. The success of this configuration of buildings in Zlin meant that it was emulated in other centres in Czechoslovakia: *Sezimovo, Ústí-Velky Dvur*, *Batovany (Partizanske,) Zruc nad Sazavou.*

Vladimir Karfik's major work was the Bat'a Administration Building 1937-38, seventeen floors built on 6.15 metre x 6.15 metre reinforced concrete skeleton, filled with air-bricks and clothed in ceramic tiles. Within this building Jan Bat'a installed his office in one of the 6.15 metre x 6.15 metre lifts complete with air conditioning, communication and a sink. A door on both sides allowed him to survey his empire at all times keeping in direct contact with all departments at the touch of a button. Jan Bat'a continued to develop the ideal of the industrial city by proposing a work environment with housing for

10-20,000 people. Josef Gocar was charged with the idea of elaborating a plan based on zones. These would extend from the factories to social, commercial, administrative and recreational areas surrounded by housing for workers. This was not the collective housing of CIAM or Le Corbusier whose ideas of putting numerous collective blocks on the hillside above Zlin were rejected by Jan Bat'a in April/May 1935. All hopes of working for Bat'a were extinguished when Le Corbusier's design for the Bat'a pavilion in Paris in the World Exposition 1937 were turned down. Jan Bat'a, like Tomáš Bat'a, found Le Corbusier [as an architect] rather individualistic and in any case too expensive.

> Thus Le Corbusier's hopes died out in the correspondence, not always pleasant, on financial questions.[21].

Although there was further development in Zlin the whole model of expansion was now controlled by the students of Pavel Janak at the Arts and Crafts School of Prague. The new town planning department was established where Robert Hubert Podzemny and Vladimír Kubečka drew up further development plans, to be replaced by the new authorities State Planning Departments in the post Second World War era.

5. Prague, Brno and beyond – Private Villas

From the mid 1920s to the late 1930s there was a demonstration of the Modern in many private dwellings throughout the Czechoslovak Republic. One of these is the Villa Fuchs, Brno 1926-28 that has been discussed previously. The progression from that point forward was a dramatic embracing of Modern Movement.

> I am convinced that one of the special features of this kind which we would not have encountered anywhere in Europe at that time, is that special combination of naivism and magic realism with which the members of the Purist Four (Fragner, Linhart, Honzik and Obrtel) endowed their drawn studies and a large majority of uncompleted projects, along with a number of kindred architects.[22].

To return to the work of Karel Honzik, Prague 1929, in partnership with Josef Havlíček, the Villa Smíchov (5.8) reveals the extent to which the situation, design, and materials stage in villa construction became a fully resolved whole. The villa standing on high ground, constructed with a reinforced concrete frame, hollow concrete breeze block walls and a reinforced beam and slab roof occupies three floors, the whole being

4.8 Karel Honzik , Josef Havlíček, The Villa Smíchov, Prague 1929

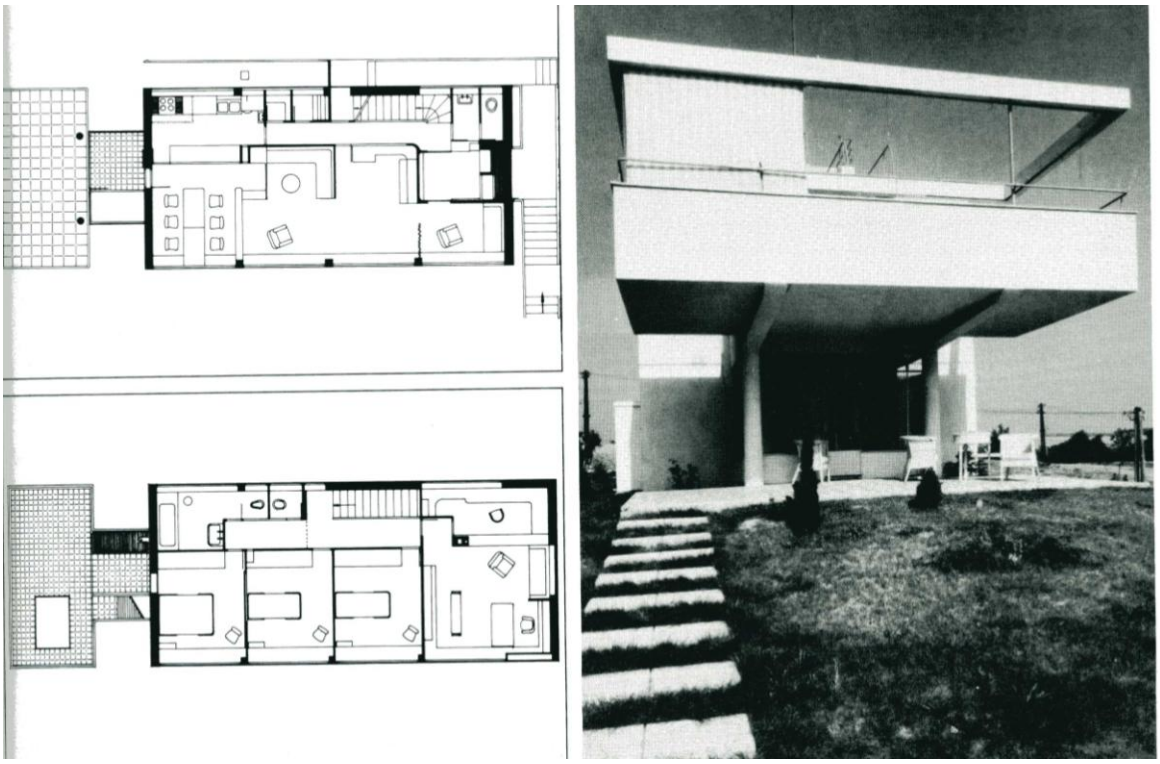
The house stands on high ground, and the terrace, approached from the landing at second floor level, commands a view over the landscape to the southwest.

surrounded by gardens. The exterior was rendered in bright white fine marble chippings embedded in white cement. The floor plans show that the lower ground floor was the service areas with kitchen, laundry and cellar. On the ground floor the villa expanded in all directions increasing the floor area by 50%. The open plan living and dining room are serviced from below by a lift which rises to a concealed position under the staircase balustrade just below the upper part of the ground floor. The space is lit by a large window that runs the entire width of the wall and up through the two floors.

Although the Villa Smíchov was not the first of the 'White Cube' villas, it was distinct among them because of the handling of form, space and light. Two houses which had the same presence as the Villa Smíchov were from the drawing board of Amyas Connell – High and Over, Amersham 1929-30 and Basil Ward – New Farm, Grayswood 1932. In looking at New Farm we can see a very complex arrangement of forms and levels, all tied as one by the glazed staircase tower above an offset cantilevered porch roof echoing the rise of the stairs above. The wrap around corner window on the right side relieves the mass of white render above a lower floor glazed gallery. Equally the glazed staircase is balanced by a vertical window to its left This type of cubic massing often arranged over three floors was the norm for two to three years, being superceded by a horizontal, often two-storey form, frequently with a bridge head observation platform on the roof and to one end or side an enormous overhanging deck, under which one could rest in shade. The weight and mass of the deck was supported on two cantilevered columns. An example of this type of construction was Ladislav Zak's, Villa Hain, Prague 1932 (5.9), where all the latest materials were used. Thick, hollow blocks, Petras Liko, were covered by Rabitz wire mesh to stop cracks appearing in the rendering. Heraklith insulation boards for walls and Luxfor glazed bricks were utilised for the best use of light and heat; the whole being supplied with hot water by a Strobel boiler.

The floor plan and photographs reveal rooms that are divided by dwarf partitions which on occasion are fitted with bookcases and other furniture. This built-in furniture was mass produced in alder with oak veneering rejoicing in the name 'Jerry'. Equally important to the ambience of the interior was the lighting designed by the engineer M. Prokop. For 1932 the advanced use of indirect channel reflector lighting, task lighting and suspended pendants and wall fittings reflected in the Xyolin and Lincrusta-covered walls, or playing across the wooden roller doors of the cupboards, created a modern building. With pale yellow sprayed outer walls, sitting within a landscaped garden of birch, cypress, juniper and poplar trees, overlooking the Prague aerodrome at Ruzyne

4.9 Ladislav Zak, Villa Hain, Prague 1932-33



both the villa and aerodrome read as statements of a buoyant economy leading to the very latest design, as stated by Adolf Bens.

> By working in the spirit of modern architecture, we are creating a new life style and a new character for human beings, with space, light, and air in place of the gloomy, closed arrangements of the past. We are thus creating the possibility for a free and bold people with a new attitude to society.[23]

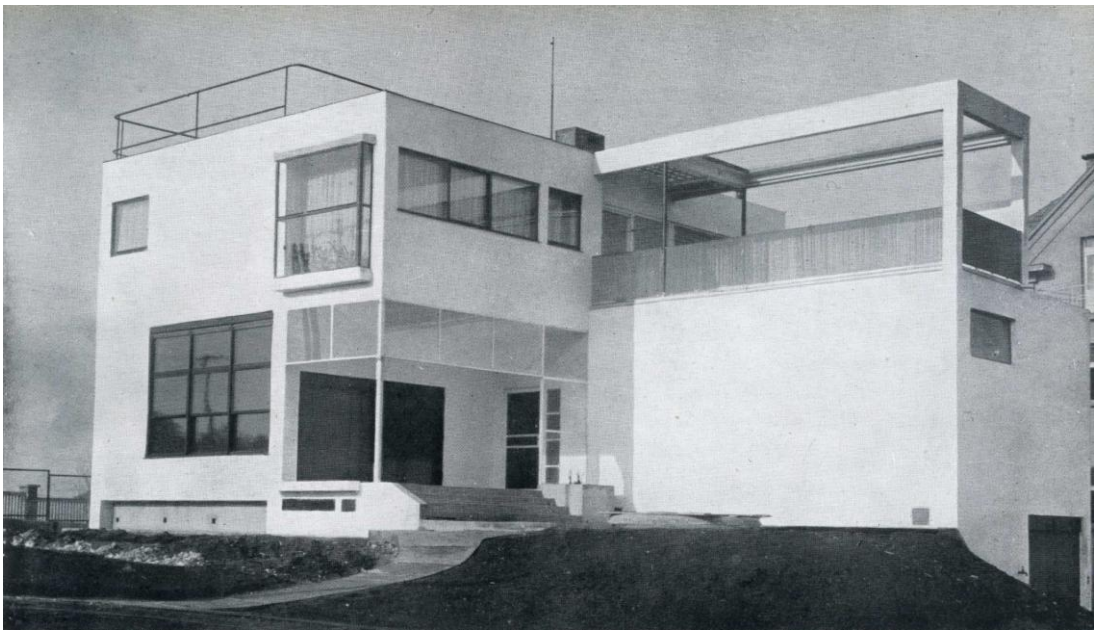
F. R. S. Yorke's seminal work, 'The Modern House', first published in May 1934, updated 1935, 1937, 1943, 1944 and reprinted 1946, features within its pages 94 architects from 14 countries – all working in similar 'Modern' ways between 1926 and 1944. For our purposes if we discount those houses after 1939 and exclude the American houses, we find a Pan-European white cubic style with sun porches, flying bridges, internal and external spiral staircases and open plan rooms with vast expanses of glazed banding. From France to the Czechoslovak Republic, from Norway to Greece this was a prevalent style developed by many nations at the same time as the Modern Movement – a solution to the 'new society' as explained by Bens and many others.

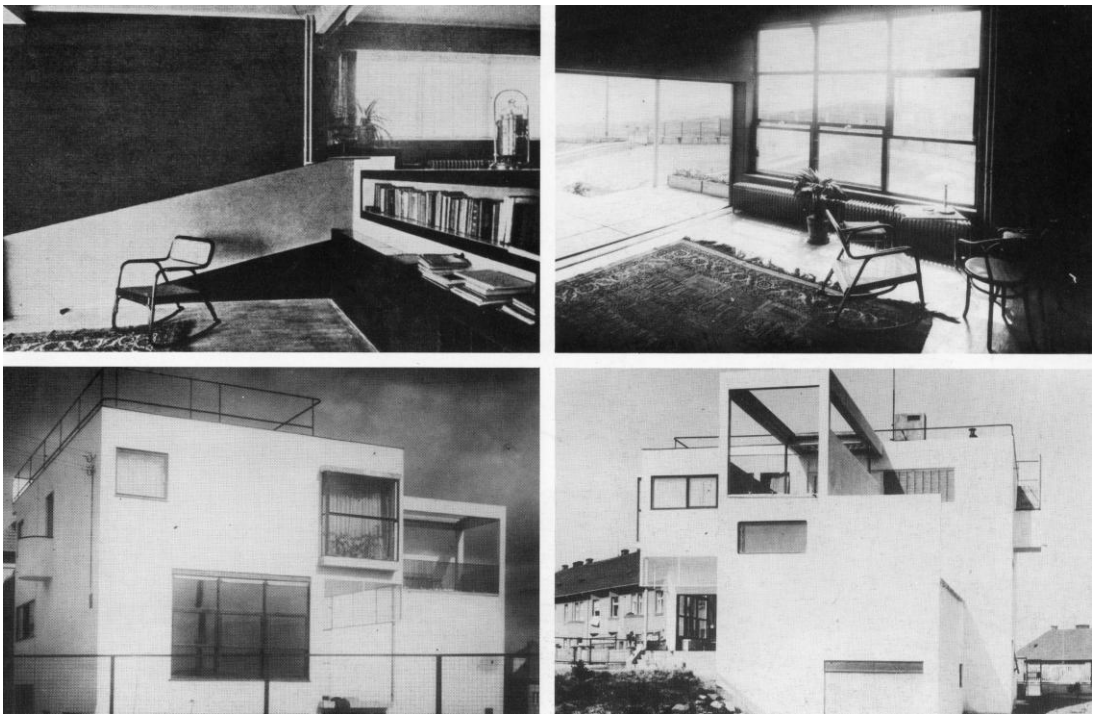
It is therefore questionable when Wojciech Lesnikowski and Vladimir Slapeta should attribute the first design of a Functionalist villa in Prague, Evžen Linhart in his own house of 1926-28 as being,

> inspired by Le-Corbusier.[24]

Unless this observation is due to the meetings of architects in the winter of 1924-25 (referred to previously), where despite Le Corbusier's expressed admiration for Czech architecture, we are in retrospect obliged to see his ideas and works as the progenitor of works that followed. Although it is accepted that from 1925 Le Corbusier started to gain considerable influence in architectural circles he was not at this time the *eminence grise* he later became. Architecture throughout the Czechoslovak Republic demonstrated advanced use of materials and form in both theory and practice and from 1926-1929 much work would be generated that would bring these unknown architects to greater public attention. Evžen Linhart's house (5.10) displays form and construction that is an enlivening of Le Corbusier's Purist vocabulary, from the covered entrance arranged as a *sala terrena* (a ground floor room opening directly onto the garden) to the semi-circular balcony on the eastern façade and a number of roof terraces on the northern facade reached by an exterior projecting staircase. Most revolutionary was an interconnecting ramp between the two floor levels of the living room.

4.10 Evžen Linhart, House in Prague 1930





The two key works of Le Corbusier and Pierre Jeanneret, The Villa De Monzie [Stein], Garches 1927, and the Villa Savoie, Poissy 1930, straddle the germination and birth of the Linhart House where the debate was now in regard to Le Corbusier and his 'five points of architecture'.

Arguably, in order of chronology outside of Central Europe the most influential buildings of the period are The Schroder House, Utrecht 1923-24, Gerrit Rietveld; Workers' Houses, Pessac 1925, Le Corbusier and P. Jeanneret. Beyond Europe it is undeniable that two works, one by R. M. Schindler, The Beach House for Dr P. Lovell, California 1925-26; the second, Demonstration Health House, [Lovell House], California 1927-29 by Richard Neutra are very important. In addition, the Masters' Houses at the Dessau Bauhaus by Walter Gropius, 1926, deserve praise. One final group of houses worthy of mention are Hans and Wassili Luckhardt and Alfons Anker, Am Rupenhorn, Berlin 1928, which despite comprising three houses can be looked at individually for their articulation of landscape with decks and platforms.

It is clear that Le Corbusier by the actions of *Congres Internationaux d'Architecture Moderne* (CIAM) and his theoretical treatises on architecture became the voice of the Modern Movement. The first (CIAM) conference at Chateau La Sarraz near Lausanne in 1928 promoted themselves as the voice of International Modernism. The group founded by Helene De Mandrot, Sigfried Giedion and Le Corbusier with the attendance of Walter Gropius somewhat belatedly proposed that the:

> most efficient method of production is that which arises from rationalization and standardization.[25]

These words were much in tune with Adolf Bens, Tomáš Bat'a and the activities of the Moric brothers who had established design and build in Brno from 1924:

> The La Sarraz Declaration also took a radical attitude to town planning by calling for a functional order [where] the redistribution of land [is] the indispensable preliminary basis for any town planning.[26]

A good deal of this thinking had been demonstrated in city planning in Zagreb, Ljubljana, Brno and particularly Zlin, the CIAM form being an extension of those ideas enhanced and improved by the passage of time.

The CIAM meetings were supportive of Le Corbusier whose views of social architecture, urbanism and housing led the direction of the Congress until 1947. In fact Reyner

Banham observed that the Athens Charter based on debates about 'The Functional City' with its

> insistence upon rigid functional zoning, green belts and a single type of high density urban housing was actually just the statement of an aesthetic and intellectual preference.

Banham was polite in his view but Auke van der Woud in 'CIAM, Housing, Town Planning a review of an exhibition and original documents from CIAM, Kroller Muller Museum, 1983, was less reverential:

> In the beginning there was darkness and chaos and the spirit of Gropius and Le Corbusier moved over the waters. And CIAM divided the water, land and functions and said, let there be light, air and sun. And there was light, air and sun. After that CIAM created a paradise, or rather it wanted to do so, but with that everything went wrong that could go wrong.[27]

This is clearly an overstatement of the failings of CIAM but it does contain certain truths. Van der Woud was unconvinced by the arguments put forward by CIAM however retrospectively he viewed them. In 1933 when Emil Kaufmann wrote his 'Von Ledoux bis Le Corbusier' or in 1936 when Nikolaus Pevsner published 'Pioneers of Modern Design', and in 1941 when Sigfried Giedion published 'Space, Time and Architecture', Le Corbusier's position as *eminence grise* of the Modern Movement was assured. With these books, and particularly the last-named work, the historical and cultural dimensions of the architectural production of the 1920s were defined for many years. Clearly Giedion's friendship and collaboration with Le Corbusier particularly in CIAM led to,

> a static and hermetic historical picture, the elements in which continually refer to each other.[28]

What is most revealing about the La Sarraz Declaration and the later Athens Charter is that a number of the authors of the work were not even acknowledged. This was particularly annoying as observers could see in the presentation of detailed proposals that issues of zoning and urban development were approached with analytical exactitude.

6. Prague – Baba, the Werkbund Housing Estate 1932

The Prague Werkbund differed from all other Werkbund housing estates in Wroclaw/Breslau and Zurich in a number of respects: the houses were all single family, flat-roofed, two-storey urban villas where every property had a surrounding low fence with harmonized planting and street furniture. The lighting of all streets and paths was uniform, conferring a sense of safety and security. The whole estate and development of facilities were financed from private sources.

The architects working on Baba came from three distinct eras; Pavel Janák and Josef Gocár were representative of Cubist ideas as the 'Godfathers'; Evžen Linhart and Oldřich Starý were champions of a Purist/Functionalist form as the 'Lieutenants' and Ladislaw Zak as a champion of the latest ideas within the Modern Movement was distancing himself from White Functionalism as one of many 'Young Pretenders'.

In order of how the houses appear on the official Werkbund site plan the names of the houses and their architects are as follows:
1. Munk House, Josef Fuchs; 2. Perina House, František Kerhart; 3. Rezác House, Vojtech Kerhart; 4. Zaorálek House, Ladislav Zák; 5. Vavácek Triple House; Oldřich Starý; 6. Lisý House, Evzen Linhart and Antonín Heythum; 7. Joska House, Jaroslav and Karel Fišer; 8. Bouda House, Oldřich Starý; 9. Koštál House, František Kerhart; 10. Dovolil House, Pavel Janák; 11. Jiroušek House, František Kerhart; 12. Letosnik House, František Kavalir; 13. Villa Suk, Hana Kucherová-Záveská; 14. Cenek House, Ladislav Zak; 15. Zadák House, František Zelenka; 16. Luzná House, Zedenek Blazek; 17. Polácek House, Jan Evangelista Koula; 18. Moravec House, Vojtech Kerhart; 19. Linda House, Pavel Janák; 20. Bantz House, František Kerhart; 20a. Villa Glücklich, Josef Gocár; 21. Villa Mojziš-Lom, Josef Gocár; 22. Herain House, Ladislav Zak; 23. Balling House, Hana Kucherová-Záveská; 24. Herman House, Oldřich Starý; 25. Palicka House, Mart Stam; 26. House for a Painter (never built), František Kerhart; 27. Špíšek House, Ladislav Machon; 28. Uhlír House, František Kavalir; 29. Sutnar House, Oldřich Starý; 30 Belehrádek House, František Kerhart; 31. Kytlica House, Josef Gocár; Maule House, Josef Gocár; 33. Pavel Janák.

The houses were all named after people in the public eye – politicians, sociologists, government ministers, educationalists, designers architects, statesmen, army officers, composers, historians, activists company directors, builders, conservators, reporters, customs officer and statisticians – the founders of the new Czechoslovak Republic.

Despite the degree of private patronage, the well-educated bourgeoisie who were driving this building forward came under continual attacks from the 'Left'. The 'Leftist' view was that the Baba (old woman) did not address the apartment block, row house or any kind of communal living. Therefore the Baba could not be seen as a vehicle for change as in other Central European countries. However, given that all of the architects were determined to create space for people to live within their own controlled boundaries, working as client and architect in a symbiotic dialogue, the 'Left' should have understood the ideas embodied in Baba. Although often dismissed by the 'Left' with only a cursory glance, the houses were very varied in their conception, from the needs of a childless couple in a minimal dwelling, to large villas with staff quarters and multi-family houses and studio houses.

Baba was not an architectural laboratory for experiment and exploration as all of the architects had mastered their craft years previously. The truly amazing fact of Baba is that every architect and every construction engineer and building firm was Bohemian. This was not an International Exhibition in any sense – though Mart Stam, because of his connections, was allowed in. The Dutchman enjoyed a collaborative relationship with Karel Teige as they both shared similar views enshrined in 'architecture is science' and prior to that Stam had a dialogue with Bohuslav Fuchs as the master of Czech architecture through Lotte Beese, who was Fuchs' assistant for a time.

The survival of Baba over the decades was due to it disappearing in a sea of greenery of high hedges and trees that screened the houses. Within this green oasis the original inhabitants and their families cared for their properties, immersed in their fate; neighbours were forced to flee, some were imprisoned to be replaced by politically acceptable occupants who enjoyed the very last of all the Werkbund estates and all it had to offer.

Initially as a model for cosmopolitan living we see that the President of the Charles University was able to talk to the painter 'over the garden fence'. This factor alone should have alerted the 'Left' to Baba being able to mix people from all backgrounds, incomes and social groups. It was not until the Communists installed their preferred residents that this mix broke down. In effect the 'Left' (Communism) undid the very thing for which the Baba Estate was designed. To understand this mix of people better an evaluation of selected events and houses reveals the possibilities of the Baba Estate.

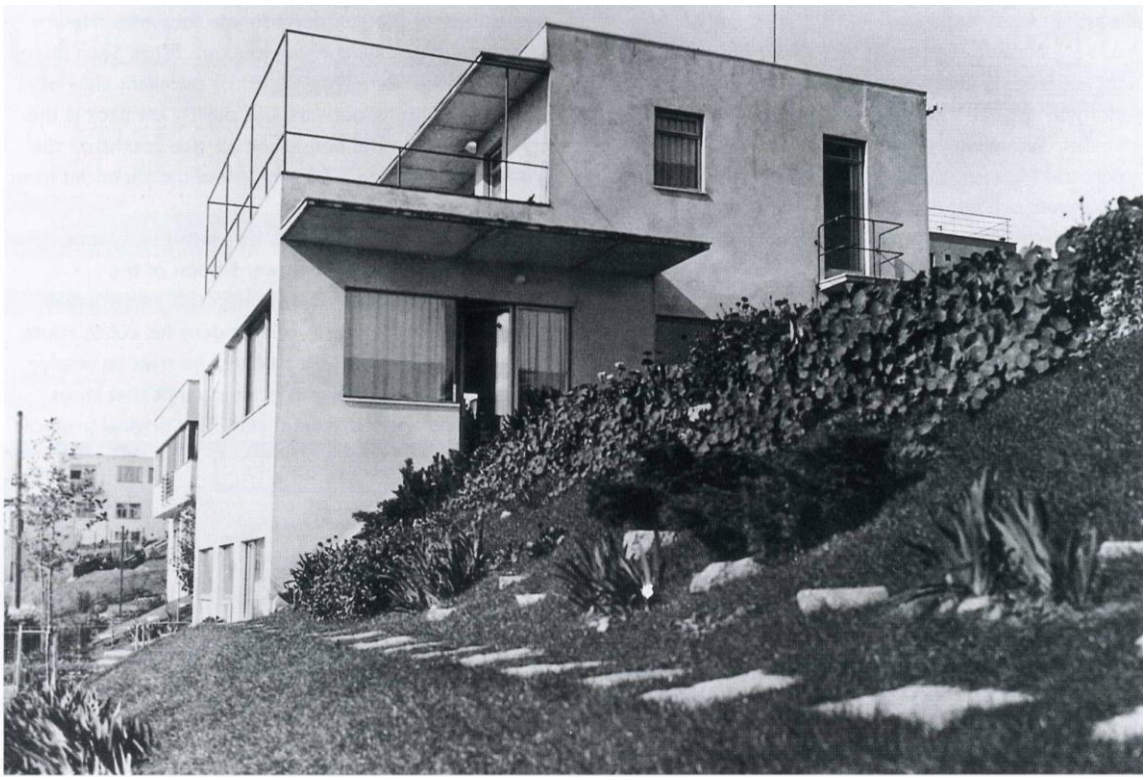
The first knowledge of Baba was seen in the publication *Zij'eme* and through a travelling exhibition of Czechoslovak design and architecture in Geneva, Malmo, Bucharest and Strasbourg from 1930 -1932. Many of the views and images used in these arenas were in direct opposition to the CIAM 1929 Convention with an emphasis on the collective house. Despite all of the Tiege's critique of how modern housing should be divided into:

> The smallest apartment in a collective house shall be for living in, a room for an adult person. These cubicles shall be arranged in the fashion of a large beehive. The way of leading one's life necessitates abolishment of the traditional family household and socialization of children's upbringing and education. In these cubicles there is no dining room, no living room, and no children's room. It is a place for sleeping, for resting alone, for studying and for cultural work, for the intellectual and personal life of each individual.[29]

This view of life and family could prevail as Antonin Urban and others were to find. Urban had proposed a work on the theme of a 'growing house' where cubicles were arranged around a central core of sitting room, kitchen and bathroom. This proposal was turned down, as was a proposal for a semi-detached house by Bohuslav Fuchs and row housing from prefabricated parts by Havlícek and Honzik. All were refused as private capital and entrepreneurship rejected this approach to living, clearly insisting on single family houses instead.

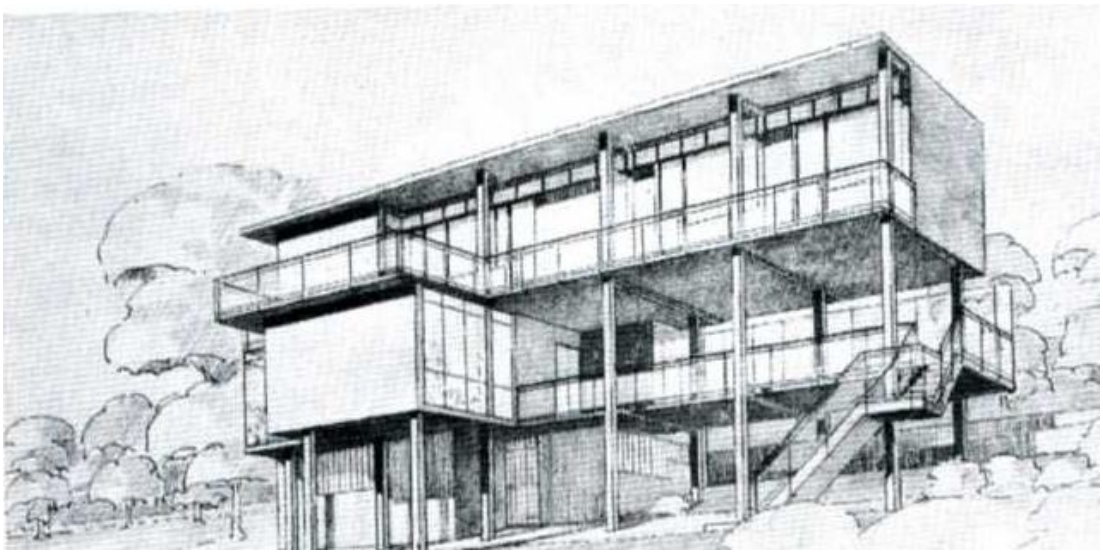
Rather than viewing houses in isolation it is far better to view them in context with their neighbours, (4.11) shows the Janak House, Balling House and Herman House are part of the same complex and Palicka House (4.12) which all work independently as singular houses but also as units within a clearly defined boundary. The disposition of villas reveals a space-defining bank with small trees that despite the difference in relative heights, the footprint allows for all to be light and airy. All are provided with large windows to permit air flow. Sun balconies, and in two cases sun terraces benefiting from their flat roofs, are incorporated almost as 'another room'. In looking at the Palicka House by Mart Stam we see all of the cross-pollination from east-west and west-east in this particular work, although what we see here is only 20% of Stam's intended concept. The client, master builder, Jirí Palicka, changed many of the original design ideas; these ideas can be best seen by comparing (4.12) as designed with the same elevation in (4.12) as built.

4.11 Pavel Janak, Janak House, Werkbund Housing Estate, Prague 1932



During Construction

4.12 Mart Stam, Palicka House, top the original design and below as ‘modified’ by the owner Jirí Palicka



The most visible change is that the external stairway leading to the garden in the original is outside of the house proper, whereas as constructed the stairway is placed inside the end wall of the house. The projecting glazed box 'bay window' has been removed, leaving an unbalanced space after the area created by the double-height columns with first floor rail. The floor above, although echoing Stam's design, is equally unresolved as it ends unhappily squared off, abutting a clumsy, imbalanced rectangle with no fenestration above the ground level which, because the main entrance floor is lifted above, appears even lower, trying to bury itself in the ground. All of this was in contradiction to Stam's 1924 study 'The Expandable House' upon which the Palicka House was supposed to be based.

The greatest trespass this house committed against Stam's intended form was in building the lower floor directly into the hillside instead of terracing the whole. This latter solution would have resulted in a house where one can see through, under, around and over spaces creating room for an integral garage, above which the house rises from the ground up. In the built form the house is rather stolid and uninspiring, not quite the 'dumb box' but it is only just saved by visible framing, that is, the concrete skeleton for the non-supporting walls and screens.

Although Gocar was seen by some as the 'older statesman of Cubism', in the Villa Glücklich he constructed a residence for Julius Glücklich who championed the great Bohemian patriot Budovec of Budov. Budovec was executed by having his head cut off in Old Town Square, Prague in 1621. As a consequence in his building Gocar used a cubist version of the English Country House, from the rusticated wall base to the formal entrance porch. The elongated villa beckons people in through lighting the way via a porch roof punched through with ten square interstices. Visible, via two bands of strip windows, is the reinforced concrete skeleton which is dictated by the exterior arrangements. The porch is duplicated on the top floor as a sheltered area with supporting columns to a continuation of the upper floor roof. The internal arrangement is a logical development of the exterior and, as in all Gocar's work; one can define inner space from external appearance. The three rectangular rooms along the front elevation are balanced by the three square rooms adjoining despite their subdivision as staircase, cloakroom and other utilities. On the north side is the delivery entrance, servants' entrance and quarters; all of which reinforces the hierarchy, tradition and regimen which Glücklich worked with throughout his life.

Houses 4, 14 and 22 (as named above) were a compendium of new building materials: 'Petrašek' moulded bricks, Heraklith wood-wool insulation, slabs, Rabitz stabilizing

mesh, (Xylolith) (sic) [Xylolin] compressed fibre board, Luxfar Glass Brick, all of which were discussed earlier, as ‘House at Prague 1932’, an evaluation of the house for Miroslàv Hain. This was very similar to the Zaorálek House and needs no further description here. The Herain House and Cenek House have far more similarities and, although they were Zak’s first constructed works, they propelled him instantaneously into the pantheon of Czechoslovak architects.

In both houses the medium scale and longitudinal plan on the ground floor are in contrast to the rectangular cells of the upper floor which house bedrooms and a bathroom within a delicately balanced, slim concrete skeleton. The Cenek House adds variance with a change in roof on the north elevation which with its step down looks like the drop from the side of the bow of a ship to deck level. This nautical reference is also found in a port-hole window in the same elevation. Structurally the most interesting part is the glazed verandah on the west elevation which with its vast windows cuts into the total block, yet is scaled in proportion and therefore does not overpower the whole. Finally, the L-shaped section on the roof, i.e. the rise in height from ‘deck to bow’, provides a unifying element. The glazing of the verandah is in balance with the other glazed section on the ground floor.

Zak’s understanding of space and proportion allowed him to design asymmetrical buildings which with their juxtaposition of wall, glazing and open vistas, appear both harmonized and symmetrical. It is from this development that the typology of the single-family house is seen, from Teplice to Kostolec, from Brno-Pisárky to Barrandov and Jevany. Designed by Zak, Oehler, Frágner, Fuchs, Gregr and the Slapeta brothers, all these buildings remained rooted in their local context and specific topography. And nowhere was this mastery of context and topography better resolved than in the re-planning of Ljubljana by Jože Plečnik where a harmony of classical balance imbued with modern vitality was achieved.

Notes to Chapter 5

[1] Banham R., *Architectural Design 51 1/2-1981, From Futurism to Rationalism The Origins of Modern Italian Architecture*, p.38
see also Banham R., *Theory and Design in the First machine Age,* The Architectural Press, London, 1980, p.116-137, for a thorough evaluation of the ideas of Antonio Sant'Elia.through, *La Cita Nuova,* 1914.
[2] Ibid. Tschumi B., p.26
[3] Op.cit Banham R.,1980,p.128
[4] Ibid., p.288
[5] Hitchcock H.R. and Johnson P., *The International Style,* Norton Library, New York, 1966, p.46
[6] !bid., p.143
[7] Isaacs R., *Gropius an Illustrated Biography of the Creator of the Bauhaus,* Bull finch Press, Boston, Toronto and London, 1991, p.120-123
[8] Op.cit., Banham R., 1980, p.287
[9] Peichl G. and Slapeta V., *Czech Functionalism,* Architectural Association, London, 1987, p.45
The exhibition catalogue of Czech Functionalism was the first English language publication to contain this quote, the accuracy of which was verified by Vladimir Slapeta.
[10] Slapeta V. and Templ S., *Prague 20th. Century Architecture,* Zlaty rez, Prague 1999,
Practical guide to Prague's modern architecture organised by districts, with highly detailed maps with all buildings. This was a constant guide during the Prague episodes of this research.
[11] Walker F.A., Professor Emeritus of the University of Strathclyde, Department of Architecture and Building, Glasgow. Frequent writer on architecture, architectural history and urban form.
[12] Sramkova A., *The Trade Fair Palace in Prague*, Prague, 1995, p.3
[13] Dluhosch E. and Švácha R. (eds.), *Karel Teige 1900-1951 L'Enfant Terrible of the Czech Modernist Avant Garde,* MIT Press, Cambridge MA., 1999, p.112
[14] Slapeta V., *The Brno Functionalists,* Alvar Aalto Museum, Helsinki, 1983,p.19
[15] Op.cit., Peichl and Slapeta, 1987, p.65
[16] Op.cit., Dluhosch, 1999, p.155
[17] Švácha R., *Forma Sleduje Vedu* , (Form Follows Science), Prague, 2000
[18] Op.cit., Peichl and Slapeta, 1987, p.131
[19] Op.cit., Meller, 2001 p.133
[20] Ibid., p.133
[21] Ibid., p.131, see also p.129-145 for an exploration of 'Garden City Building in a Modern Idiom'
[22] Švácha R., *Zlaty Rez (Golden Section) No.13, Winter 1996,* Prague, p.10
[23] Op.cit., Peichl and Slapeta, 1987, p.117
[24] Lesnikowski W., (ed.) *East European Modernism Architecture in Czechoslovakia, Hungary and Poland Between the Wars 1919-1939,* Rizzoli, New York, 1996, p.61
[25] Op.cit., Blau and Platzer, 1999, p.228-235, *From CIAM to CIAM Ost,*
[26] Ibid
[27] van der Woud A., *CIAM Housing Town Planning,* Delft University Press, Rijksmuseum Kroller- Muller, Oterloo, 1983, p.11
[28] Op.Cit., Blau and Platzer, 1999, p.37
[29] Templ S., *Baba The Werkbund Housing Estate Prague,* Birkhauser, Basel, Boston and Berlin, 1999, p.19

CHAPTER 5

JOŽE PLEČNIK, THE REGULATION OF LJUBLJANA – CLASSICAL MODERNISM 1928-1939

CHAPTER 5

Jože Plečnik, The Regulation of Ljubljana – Classical Modernism 1928-1939

The other major developments in architectural work and town and city planning in Central Europe are not to be found in the efforts of a large number of people but in the work of one man whose architectural oeuvre enriched firstly Prague and then Ljubljana. He was Jože Plečnik; Plečnik is the central figure in a forgotten chapter in the development of international modernism.

> The Slovene architect Jože Plečnik has become the central personality of a so far largely ignored development taking place behind the façade of functionalist slogans of theoreticians and prominent creative personalities of international modernism including Le Corbusier, Mies van der Rohe, Frank Lloyd Wright and Alvar Aalto.[1]

Plečnik had for years remained largely unrecognised even though one of his works, Church of the Sacred Heart, first drawn in 1922 (5.1), arriving at a final design in 1927, dominates a square in Vinohrady, Prague – a robust building which can stand alone or be seen as a focus for Plečnik's work especially in the

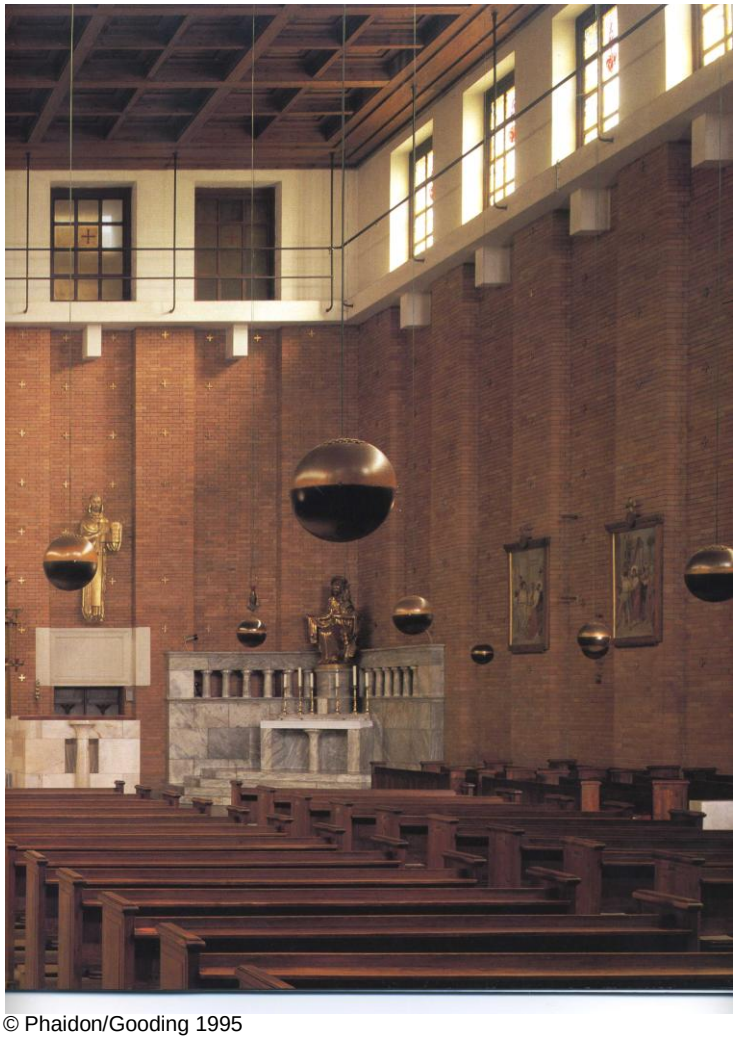
> inventiveness in the use of historical, regional and even local elements in new, original wholes, ranging from minute details, to major planning projects.[2]

Plečnik's return to Slovenia from the Czechoslovak Republic was by no means certain for two reasons: in 1920 Plečnik was invited by Tomáš Mašaryk, President of the new Czechoslovak Republic, to be architect in chief in the remodelling and restoration of Hradcany (Prague Castle). Mašaryk wanted the medieval and feudal edifice that Hradcany represented to be transformed into a beacon for independence and democracy in a Modern State. The President stated his aims thus:

> The main aim of the renovation is to make the castle a proper seat for a democratic president. At every level the design should express simplicity, but in a noble and artistic way, symbolizing our national independence and democracy.[3]

In appointing a Slovenian to succeed Kotěra, the archetypal Czech patrician architect, Mašaryk resisted all complaints, because he knew that above all Plečnik would deliver a new work that observed both the value of antiquity while being imbued with empowering humanist principles. Plečnik was aided in his task by Dr Alice Mašaryk, the President's daughter who was intent on using Plečnik because of his devotion to the Slavic nations

5.1 Jože Plečnik, Church of the Sacred Heart, Prague, Vinohrady



as a whole. The friendship between Jože Plečnik and Alice Mašaryk allowed the remodelling to take place from 1921 to 1935. Although, much later, when complaints about his appointment reached his ears (Masaryk had always protected him to this point) during a visit to Slovenia in 1933, Plečnik decided not to return to Prague. Instead he used Otto Rothmayer as his trusted student associate to complete the work by meetings and correspondence to Plečnik's wishes. When Mašaryk's health began to fail in 1935 Plečnik resigned and from that point the anti-Slovenian hostility in Czech society grew. Plečnik knew that despite working through Otto Rothmayer he would have to resign, to be replaced by Pavel Janák.

In deciding to return as Professor of Architecture to Ljubljana in 1920, Plečnik faced another problem; Ivan Vurnik as the Head of the Department of Architecture offered him a teaching post within the newly-established University of Ljubljana but at the same time Vurnik offered a post to Maks Fabiani. Because of the unexplained antagonism between them Plečnik may have decided to wait for Fabiani to make the first move. Fabiani in deciding to teach in Gorizia left the way clear for Plečnik to take up his post in Ljubljana in tandem with his post in Prague.

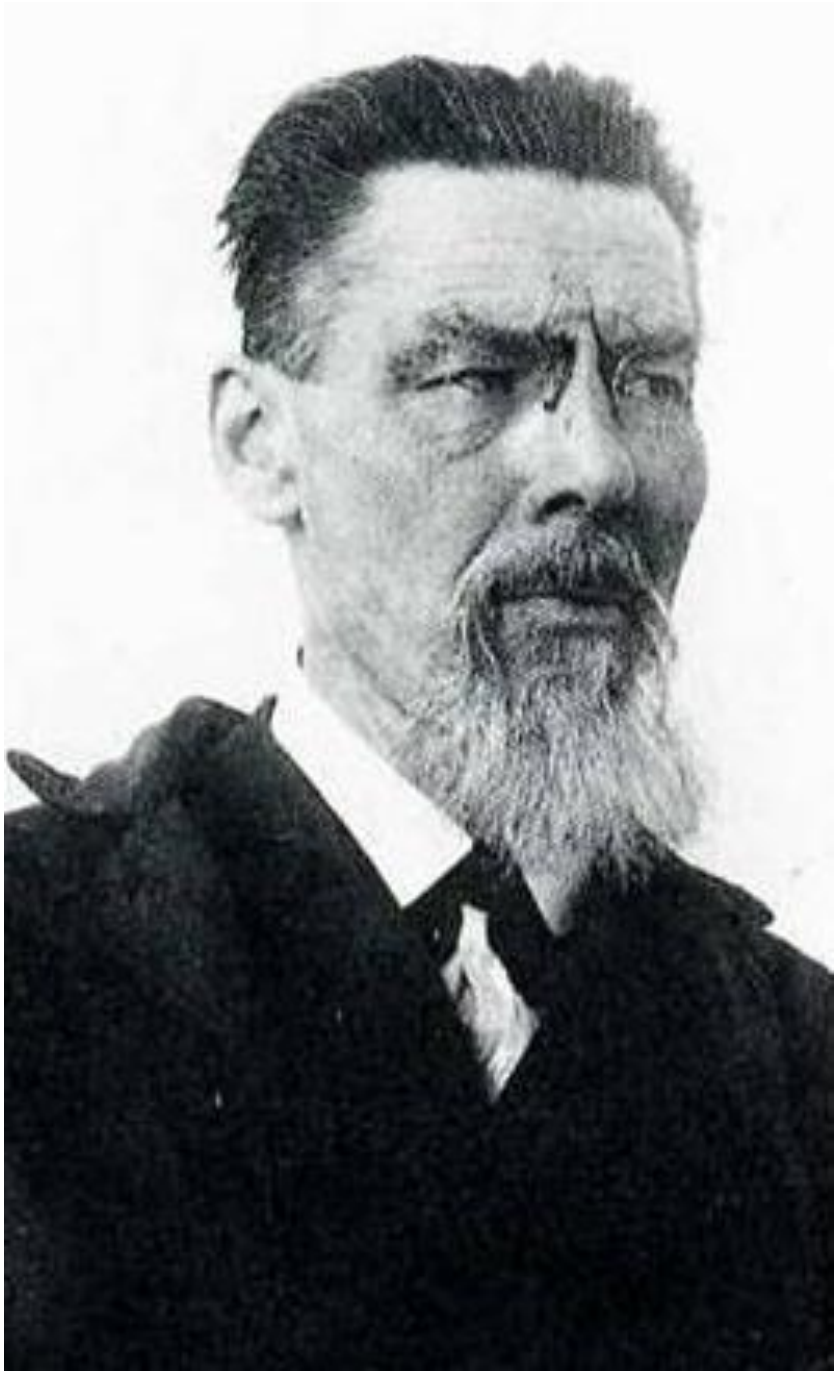
Before he did so he wrote from Prague to establish his views of the reorganisation of the Department of Architecture. Plečnik put this safeguard in place because at the same time Ljubljana beckoned he had two further offers – the Chairmanship of the Prague Academy of Fine Arts in December 1919, this being a most honoured appointment which would have assured his reputation, and from 1922 a Professorship at the Royal Academy of Arts and Crafts in Zagreb. All of these posts were under consideration as the future in Ljubljana was unclear. There was no certainty how youthful and enthusiastic, liberated Slovenes would react to Plečnik's conviction that to ensure 'national health' and a 'joyful soul' all his students would require dedication and hard work.

On first meeting his future students in 1921 while visiting his sister's house in Ljubljana, he made an impression through both his personality and appearance.

> He was dressed in black. Instead of a collar, he wore a black silk scarf, tied around the neck and falling over his chest.[4]

This, in combination with his fierce stare behind glasses and long, trimmed beard, reinforced the idea of a Good Shepherd and his flock (5.2). But it was the almost biblical nature of his words and their delivery that stunned all equally.

5.2 Jože Plečnik, c.1930



> Each word was like a seed falling on fallow ground, which would then sprout instantly and create a bond between us and the master. We listened as though a mysterious, inherently good force bound us to him… He was so persuasive that if he had decided to play a game or cry we would have done the same.[5]

Having established his teaching strategy by following his students' assignments to final execution, Plečnik became the ultimate professor. In all of this he rarely considered notions of modernism in the way that some tried to express ideas through town planning and architecture.

> Le Corbusier, for example, seems to negate architecture. For him, it is a social means, a tool he uses to help man.[6]

Plečnik countered this idea by seeing architecture as sacred:

> We must re-awaken our sense of eternity.[7]

To this end Plečnik was determined to extend the work of Maks Fabiani (whom he regarded as a foreign influence, perhaps a reason for his antagonism) in the planning of 'his' beloved Ljubljana. He did not approve of much of Fabiani's re-planning as he saw this as interference from an agent of the Austro-Hungarian Empire. Plečnik wanted to introduce Fabiani to his master plan – the concept of a Slovene Athens following his visit to the Acropolis in 1927. His understanding of the rhythmical flow through Ljubljana of roads and rivers allowed a very personal approach to re-planning.

Perhaps very deliberately Plečnik chose to live in a rather unobtrusive suburb in Trnovo with the idea that all the family should live under one roof. Initially lodging with his sister, but lacking space, he then moved to the empty house of his brother Andrej, second brother Janez, Professor of Medicine at the University of Ljubljana, and sister Marija who would be 'obliged' to join them living together, but separately. In fact the house at Karunova No. 4 never knew this family. Marija died in December 1929, followed by the death of Andrej in 1931 in Reprije, never having returned to Ljubljana. Janez did move in but he and Jože argued constantly and soon he went back to his old apartment leaving Jože on his own. From Trnovo Plečnik could observe all that was going on in Ljubljana from a distance. Having completed his first work in Ljubljana in 1920-21, the Old Technical Building, he was able to turn his mind to extending the house in Trnovo.

In fact from the purchase of the original house in 1915 at Karunova Street No. 4, the property was altered and extended many times. Between 1921 and 1927 there was a continuous process of improvement. He developed his idea from a ground floor rectangular extension and a free-standing construction further into the garden.

Additionally the final decision was to build a round, one-floor extension with a gently sloping pitched roof and a special entrance. From 1927 a glazed porch was added in front of this entrance. With the purchase of Karunova Street No.6 in 1928, a glazed conservatory with a row of pseudo-Ionic columns could be added (5.3). Despite being a Professor, Plečnik was a man of limited means, unlike his previous employers, the Czech State. As a consequence, some of the materials were leftovers from other projects.

The courtyard to the west of the house was paved with highly irregular stone plaques (flags), bordered by a spare column from the *Čevljarski most* (Shoemaker's Bridge) shortened for the purpose and topped by an iron cross. A shorter column with a vase on top, sits close into the wall of the circular extension. The garden at the front, planted with tall trees, bushes, flowers, a beehive and a rockery, created a relaxed yet considered informality. Garden paths of individual plaques embedded in earth flanked by half-sunk horizontal concrete pipes are all part of Plečnik's deceptive use of modern materials in a natural setting. An orchard and a vegetable garden complete the scheme with the planting of birch trees and white daffodils along the eastern edge.

The contents of the house have been preserved since the death of Jože Plečnik in 1957 by the *Arhitekturni muzej Ljubljana* (The Ljubljana Museum of Architecture). In visiting and observing this house an understanding of what made Ljubljana a modern city, while retaining a classical Mediterranean ambience becomes clearer.[8] It can be seen how a balance between ancient and modern could be achieved from Plečnik's remodelling plan of Ljubljana in 1928. For this Plečnik did not need the utopian materials of concrete, glass and steel exclusively but was able to mix these with stone, brass and copper throughout his works.

Much of what happened in the re-planning of Ljubljana was considered as Plečnik walked along the Ljubljana River from Trnovo to his office in central Ljubljana. His view of Ljubljana was based on the 'Persistence of Place', a phrase which had resonance for many, particularly the Serb architect Nikola Dobrović and the Hungarian Modernists: Farkas Molnár, Lajos Kozma and many others in their pursuance of a national identity for the modern architecture they created. As an addition to Fabiani's rediscovery of the Roman routes which dissected the city and created a rigid harmony, Plečnik now wanted to take the most visible parts of Ljubljana: castle, squares, bridges and river, all to be used in recovery of a complete history of Emona/Ljubljana. While using these reference points a modern appreciation in the advances in town and city planning since the turn of the century emerged. Jože Plečnik's Regulatory Plan for Ljubljana, 1928,

5.3 Jože Plečnik, House in Trnovo, the Conservatory Extension 1930

(5.4) demonstrates very clearly how he would interweave the folk traditions of Slav culture with the establishment of a new empire in the Istria/Illyrian world.

The attractions of the Modern Movement as expressed by its more extreme spokespersons seemed to increase Plečnik's hostility towards some of its more extreme proposals. As Dušan Grabrijan one of Plečnik's former students observed much later.

> I would not wish Plečnik's love, his pedagogic ways, his faith and pessimism on anyone. And yet I sense genius in them. The question is, is all this necessary? If so, then I reject genius.[9]

Plečnik's students, France Tomazic, Dainto Furst, Eric Medvašcak, Edo Mihevc and Edvard Ravnikar would doubt Gabrijan, although as Plečnik's students they would endure *Antrieb in Vokominerie* (the drive for perfection) within an immensely autocratic setting. The benefit from this led to creative obedience and patient intellectual training with the aim of attaining independence.

The *Tromostovje* (The Three Bridges) encapsulates Plečnik's approach to architecture and planning being an extension of what already existed being adapted to a new modern purpose. When Plečnik first came to Ljubljana from Prague he had a mind to cover over the River Ljubljana, as in the River Wien in Vienna, and build a wide sun-lit avenue where the river runs through the old city.

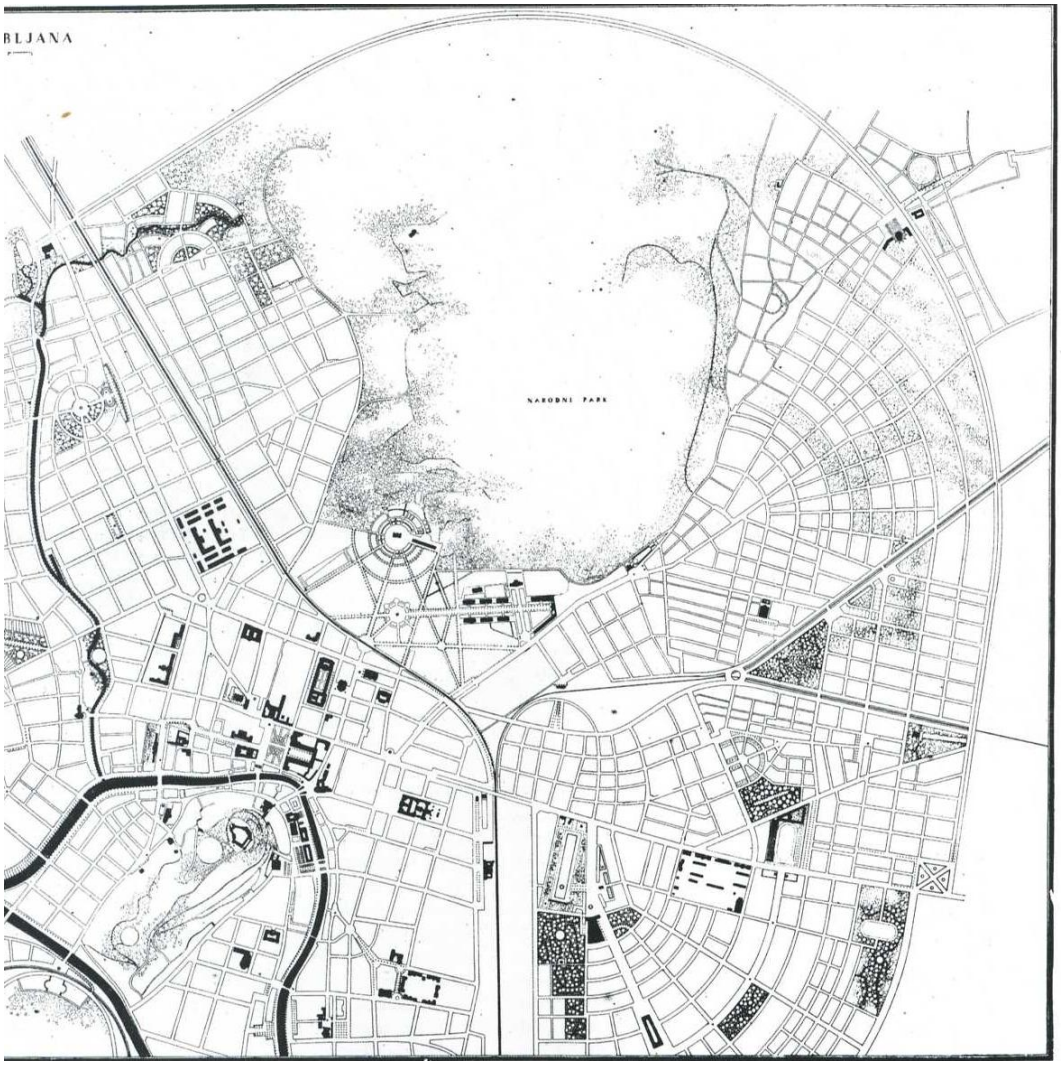
If this had happened we would have lost the Mediterranean look which Ljubljana then acquired through Plečnik's work; it was 'his Ljubljana'. In trying to understand Plečnik's work it is necessary to consider the place of his birth,

> Plečnik wanted to introduce into his master plan the concept of a Slovene Athens.[10]

So it is that a bridge like *Čevljarski most* (Shoemaker's Bridge) sits under the castle and wooded hillside providing a classically modern yet understated triumphal way (5.5). The modelling of the Roman-inspired Stoia (5.6) is the high point of the completion of proposals for monuments, market halls, parks and municipal fittings. Equally, the re-planning of the Ljubljanica returned these beautiful walks to the town's people with the *Tromostovje* (The Three Bridges) (5.7) acting as a crossing point and focus to The Square of the Virgin.

Plečnik never knew that his own family home stood very close to the forum[11], though the southern walls of Emona at Mirje were a short walk away and well known to him.

5.4 Jože Plečnik, Plan for the Regulation of Ljubljana 1928-29

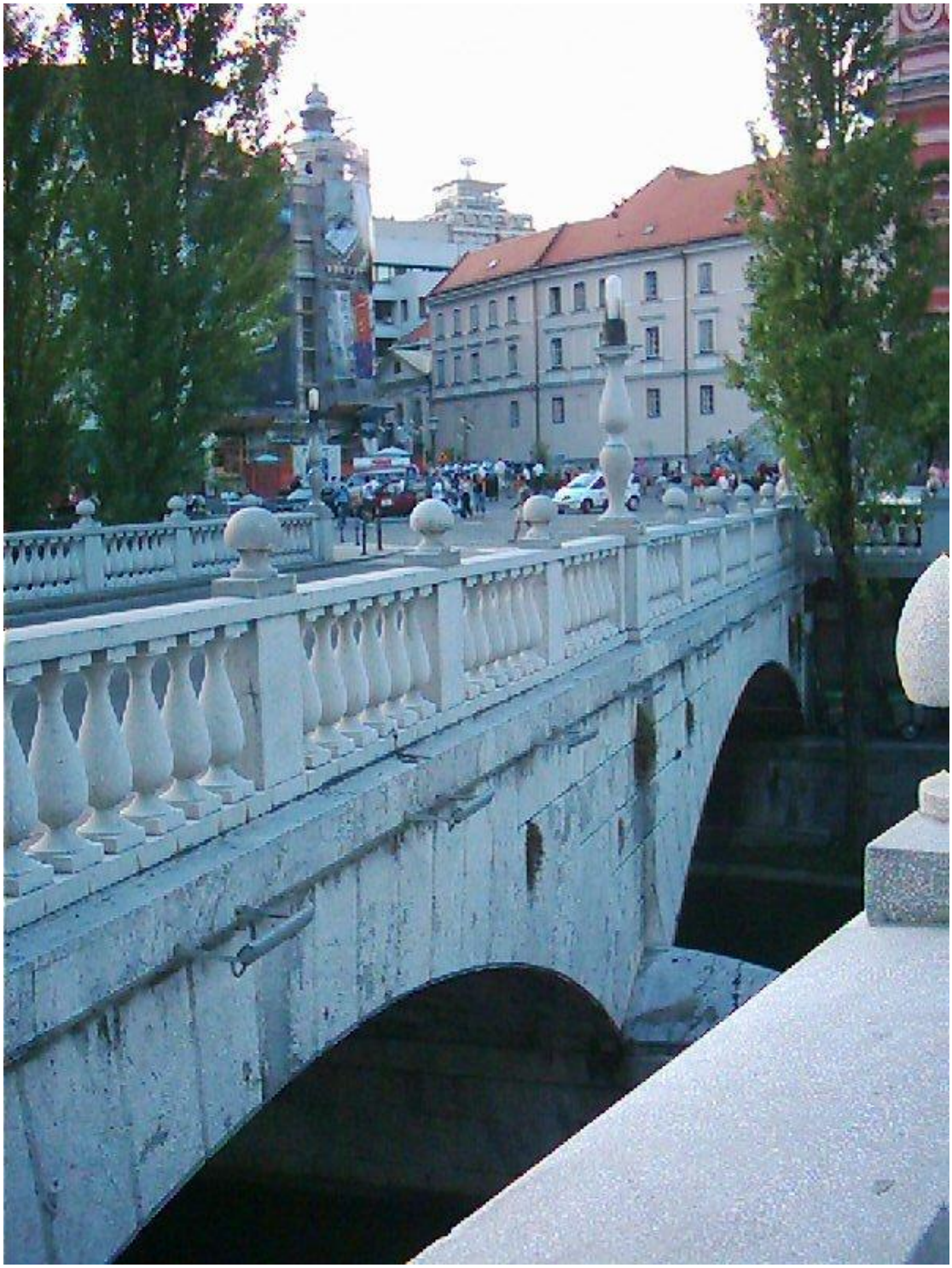


Academy/Krečič 1993

5.5 Jože Plečnik, Shoemakers Bridge, Ljubljana 1931-32

5.6 Jože Plečnik, the Stoia, Ljubljana 1940-44

5.7 Jože Plečnik, *Tromostovje* (Three Bridges) 1929-32



The start of recovering the Mediterranean ambience in Ljubljana began with Plečnik's remodelling of the river and embankments, undoing much of the hard, engineered character of Austrian/Wagnerian conservatism from the proposals of Alfred Keller in 1913. This austere notion was countered by the nature of the inhabitants of the Slovene Karst where the Latin was in combination with the Istrian, Dalmatian and Greek. Although Slovenian politicians could not at first see Plečnik's vision he did find allies in Matko Prelovšek, city engineer, and historian France Stele.

The beginning of this redevelopment was in 1931 with imaginative treatments of the Ljubljana embankments culminating in the lock gates 1939-44. In 'Plečnik, The Complete Works', Peter Krečič identified rivers and waterways as being seminal to the future development of Ljubljana. It was along the Ljubljanica and the Gradašcica rivers, allied to four or five other axis that Plečnik explored from his childhood to maturity as an involved pedestrian. From the dredging of the Ljubljanica in the 19th century the spoil was merely dropped on bank, raising the sides and deepening the cut. Following the removal of the town's fortifications and the filling in of the ramparts, the river became considerably faster flowing requiring a number of new bridges. It was inevitable that the river channel would be lined with concrete thereby establishing a rigid flow within a rather grey concrete setting. To combat this greyness, in extension of Cerdà's and Sitte's 'parks and gardens as Lungs of the City', Plečnik established a linear form of greenery as an architectural setting:

> Plečnik stepped the embankment to produce a long stretch of shallow terraces with a hedge sometimes running along the water's edge – willow trees with their cupolas, poplar trees as columns, hedges as framing devices or cornices or lawns as an equivalent to paving or flooring.[12]

This natural landscaping gives way to a taming of greenery in drifts either side of the embankment from the progression of the Ljubljanica to the mouth of the Gradašcica where the river moves into the city. At this point the embankments are replaced by a low wall from *Sentjakovski Most* (St James' Bridge) to *Zmajski Most* (Dragons' Bridge); there the embankment becomes high only lowering at the lock after *Šempetrski Most* (St Peter's Bridge). From this point on the Classical modernism builds, as evidenced in the *Čevljarski Most* (Shoemaker's Bridge) which, because of its placement, size and impact make, the space of the river every bit as powerful as the space of the city.[13]

Nowhere is this more evident than in the *Tromostovje* (Three Bridges) where one of the oldest medieval routes crossed the river into the city. The original road bridge being flanked by two new footbridges, fanning out towards the Square of the Virgin on either

side. From the roadside, staircases descend to the lower embankment terraces of the river in the Venetian tradition of the Canal Grande. As the river flows on from the Three Bridges it passes alongside the modern classical market place which winds with easy elegance along the embankment, the start being marked by two classical pavilions serving as a florist and tobacconist on either bank. Past the Dragons' Bridge and onto the lock gates which herald water passing through the city and flowing out to enrich the landscape.

Although there was 'little love lost' between Fabiani and Plečnik it is vital to remember that Fabiani solved many of the problems of traffic flow through the city which then allowed Plečnik to concentrate on individual architectural works and axis within the city. The most commanding of all these works is the National and University Library in Ljubljana 1936-41 (5.8). Located on one of Plečnik's 'axis', with a north-south parallel from the river between the embankment and the Križanke monastery of the Teutonic Order. The library stands sentinel over The Square of the French Revolution, the Illyrian monument 1929, and, under the columned canopy, the Simon Gregorčič memorial 1937. The photograph (5.9) shows a later version (1950s) where the original timbers of the vine-covered pergola had to be replaced with concrete arches. Plečnik also added a vase as a visual symbol of the imprisoned heart of his favourite poet Simon Gregorčič who came from the Soca river valley which was ceded to the Italians after the First World War, the vase representing the fate of the poet bedevilled by the

> small-mindedness of his people; it was a fate which Plečnik believed he shared.[14]

In Plečnik's case this 'fate' was hard felt, particularly resulting from the publication of his regulation plans in *Dom in svet* (Home and World) when he had met resistance from the Modern Functionalists. Unlike the dictates of CIAM which addressed large urban plans Plečnik was faced with giving an appropriate look to Slovenia's independent new capital. It was a matter of course that an essential knowledge and acceptance of traditions was part of all of Plečnik's work in Ljubljana and especially so in the University Library Ljubljana. Few of Plečnik's works offered the Functionalists so much scope for criticising his architecture as the building now known as the National and University Library in Ljubljana.

> As critics have sought in vain – in this building for what Plečnik deliberately refrained from putting into it they [the critics and the Functionalists] were bound to overlook what makes it one of the classic works of the modern age in a formal respect, and from the standpoint of today.[15]

5.8 Jože Plečnik, University Library, Ljubljana 1936-41

5.9 Jože Plečnik, Memorial to the Poet Simon Gregorčič, 1936

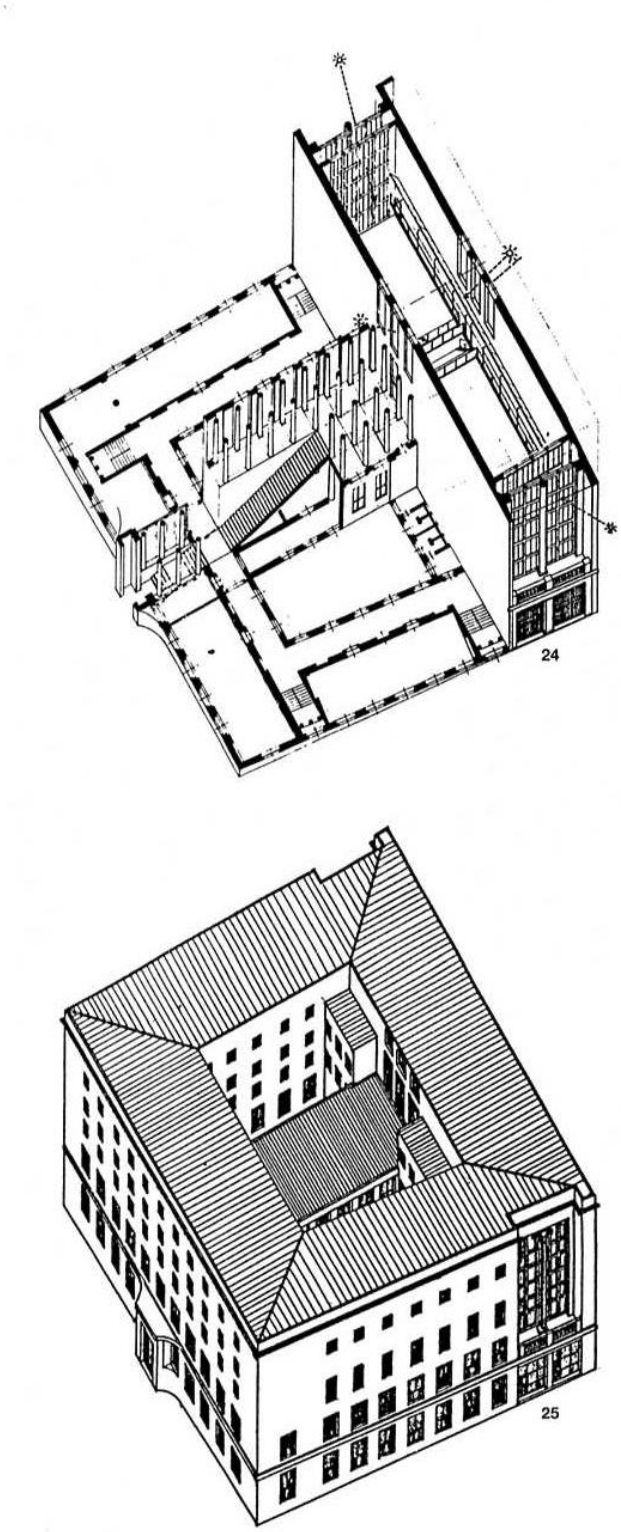
The site with which Plečnik was presented for the University Library had no space for an approach or court or forum. Indeed the trapezoid site bordered by *Vergova Ulica* (Vega Street) on the west façade is the only semi-open vista, the front door of the Library opening onto the pavement of Turjaska Street and to the side *Gospoka Ulica* (Gentleman's Street) forms the other boundary. The rear of the building is so close to the houses it was merely rendered in concrete which is in complete contrast to the handling of the extensive mix of materials in every other elevation (5.10*).* As with the Church of the Sacred Heart, Prague, the University Library occupies space with an obdurate presence that accommodates changes in scale, rise and fall in land levels and complements the bulk of the adjoining buildings*.* The section and axonometric projection (5.11) reveal the massive qualities of the whole plan, tightly filled within the trapezoidal plot around a central interconnecting courtyard.

Although the interior may appear as being a lavish reworking of classical motifs in the landing hypostyle with their paired Podpec marble columns, looking towards the Exhibition Room doors this is clearly a modern re-interpretation of a classical theme. The east colonnade (5.12) reveals Plečnik's standard lantern resting on squares of Hotavlje marble possibly leading one to believe that Plečnik was using a vast amount of expensive materials but, as in the use of concrete pipes as path edging in the Trnovo House, a similar economy was used ingeniously in the library. The 'marble columns' are a deception as they are in fact large-bore concrete drainage pipes, used for their cheapness. A practical application of inexpensive materials typical of Plečnik, whose high mindedness and love of traditional materials, stone and wood, never limited the use of the near-at-hand, as seen in his employment of gas pipe, brass and ironwork industrial fittings in the Reading Room, staircase and elsewhere in the Library in a drive for thrift. (5.13)

This economy of materials also has external references in the courses above the first floor rustication and grilled cellar windows. The massive reading room window with its pseudo-ionic column is flanked by English windows in an oriole arrangement within brickwork embellished with stone and marble taken from the cleared library site, where prior to the earthquake of 1895 stood the Prince's Mansion, an extremely fine baroque palace of 1660. To counterbalance these historical references slabs of flush-rendered concrete are also included. Peter Krečič concludes in his volume on Plečnik that this was his most important singular work in his native Slovenia and his beloved Ljubljana.

5.10 Jože Plečnik, National and University Library, Ljubljana 1936-41

5.11 Jože Plečnik, National and University Library, Ljubljana 1936-41



Section through and axonometric projection

5.12 Jože Plečnik, National and University Library, Ljubljana 1936-41

Looking towards the staircase from the east colonnade

5.13 Jože Plečnik, National and University Library, Ljubljana 1936-41

Use of gas piping as handrails and other fitments

Although the University Library is a tour-de-force, Plečnik's mastery of his own form of modernism was far removed from the dogma and controls of Functionalist Modernism; but in no way less modern was the development of the old *St Kríž* (Holy Cross) Cemetery on the edge of Bežigrad as identified in Plečnik's plan of 1929. The complex of buildings, 1938–40, later to become known as Plečnik's Žale Cemetery, demonstrates how a modern function can be given to classical orders. This modernism becomes apparent, not in examination of the whole as revealed in the totality of the site plan but in the placing of individual elements and their specific decoration as in the walls of the workshop. Below the Byzantine-inspired, iconic entablature is a frame of blue-glazed engineering bricks within which are arranged twelve canted squares of indigo blue tiles of two sizes, framed and punctuated with round pebbles. Situated either side of a window, with an extremely plain granite surround, sits a standard six panel window. Two further brick, tile and pebble panels sit either side of the second set of windows (5.14) with a half panel of brick and tile leading to a small, recessed window flanked by a rough-set pebble wall. Beyond this is a pebble-set column holding up a dramatically flat roof. Below the level of granite band which incorporates the window sills is a layer of pebble walling above a smooth concrete base.

From the 1920s Plečnik was commissioned to produce funeral monuments for the Jesuits and Franciscans as well as graves for Ljubljana's greats such as the wrought-iron cross made for Perić the late mayor. These monuments and markers were developed further as simple yet commanding and elegant tombs. The Vodnik tomb of 1939-40 is the simplest of marble forms, a rectangular stepped platform surmounted by a bi-prism-shaped house with a small door acting as a symbol for the final dwelling. The forms for this are derived from Vodnik's occupation as Plečnik's stonecutter. The two intersecting prisms of the monolithic tombstone formed as a cross are representative of Plečnik's care for those he valued even in death.

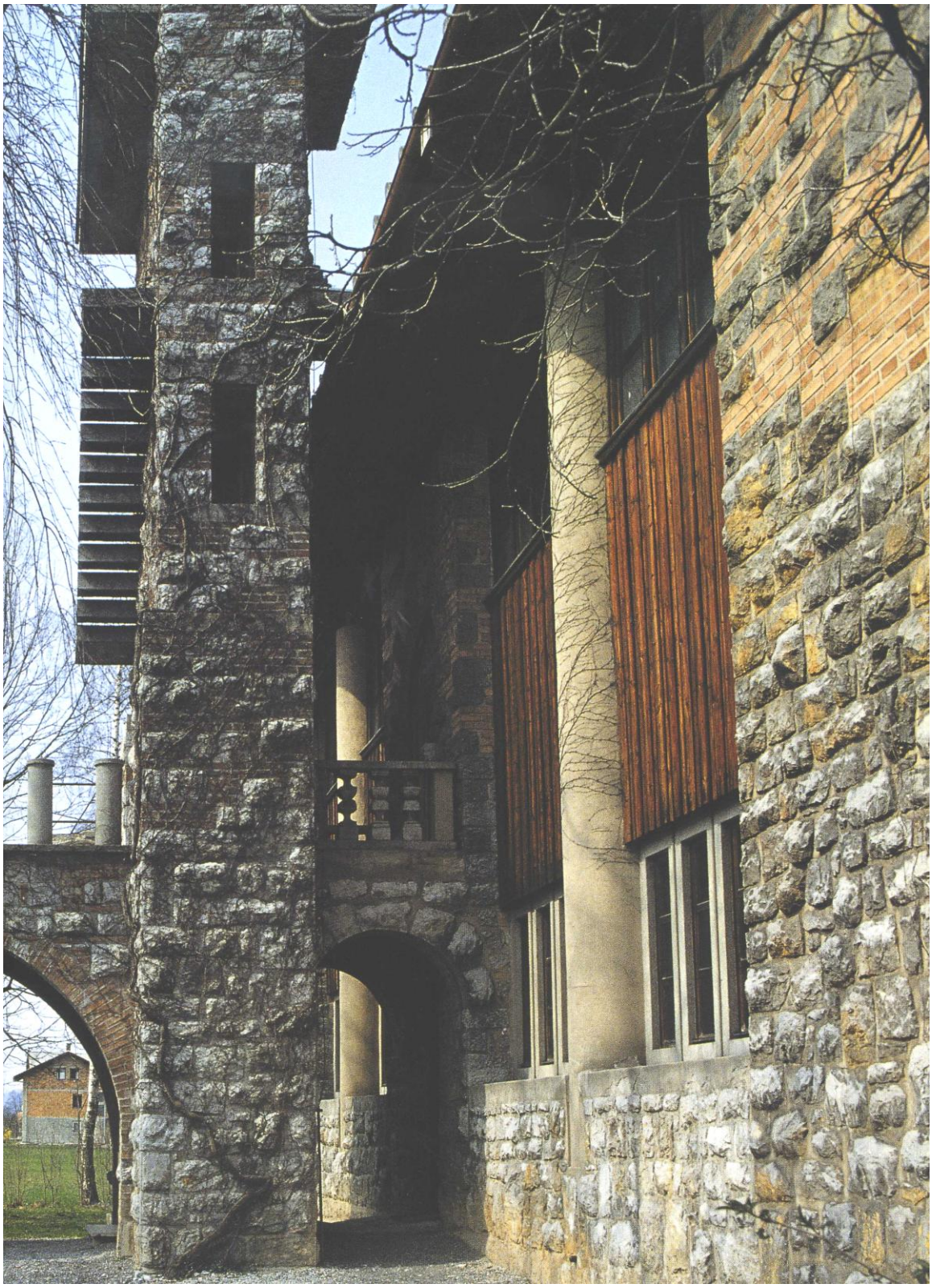
These simple tombs were contrasted by elaborately modern baldacchino as seen in the tomb of Dr Ivan Sušteršic, a respected politician. Here Plečnik's detailing is seen in the vase-like capitals, all of unique form, and in the entrance to the Tivoli Park. Examples of Jože Plečnik's other work are worth cataloguing as they led to Plečnik's mature modern style: Church of St Francis, Šiška, Ljubljana 1925-27; Central Stadium, Ljubljana 1925-35; Public Savings Bank, Celje 1928-31; Mutual Insurance Building, Ljubljana 1928-39; Church of St Anthony of Padua, Belgrade 1929-32; The Prelovšek Residence, Ljubljana 1932-33; New City Hall, Ljubljana 1939-40 and finally one of the most evocative marriages of folk tradition within a Modern idiom, the Church of St Michael in the March,

5.14 Jože Plečnik, Workshop Buildings, Žale Cemetery 1939-40

Barje, Črna Vas 1937-39 (5.15) which vividly illustrates what can be achieved through modern understanding.

Perhaps the most moving icon of all that Plečnik had achieved can be seen in his own gravestone, a simple polygonal stone set on the edge of the family plot. Simply inscribed *Arh Jože Plečnik*; the headstone is an appropriate sign of the modern. Despite its reserved simplicity, it stands out against all the surrounding elaborate, embellished graves with all their vases and ornate carvings much as does his architecture and planning against the welter of historicist forms that surround it. This simplicity of style was to form the underpinning for the Constructivist and Functionalist building forms which would follow soon after.

5.15 Jože Plečnik, Church of St. Michael, Barje, Črna Vas 1937-39



Detail of Entrance Front and Bell Tower

Notes to Chapter 6

[1] Podrecca B.(ed.), *Jože Plečnik The Architect And His Ljubljana*, Architecture Museum Ljubljana, 1993, p.12
A catalogue to accompany an exhibition in Graz in a reappraisal of Plečnik's work by Central European and Western scholars.
[2] Ibid., p.12
[3] Krečič P., *Plečnik The Complete Works*, Academy Editions , London, 1993, p.55
See also pages 53-69 for a fuller explanation of the partnership between Plečnik and Masaryk in the remodelling of Prague Castle.
[4] Ibid., p.72
[5] Ibid., p.72
[6] Ibid., p.90
[7] Ibid., p.90
[8] As mentioned in the notes on Chapter 3, I was aided in this search by having as my guide Dr. Peter Krečič, the Director of the *Architekturni muzej Ljubljana* (Museum of Architecture, Ljubljana), a world-renowned expert on Plečnik.
[9] Op.cit., p.89
[10] Bentley I and Gržan-Butina D., *Jože Plečnik1872-1957*, Oxford Polytechnic, 1983, p.59
[11] Op.cit., Podrecca B.(ed.), see R. Gilkey Dyck, Classical Urban Design Revisited, p.51-73
[12] Op.cit., Krečič, 1993, p.114
[13] Ibid., p.115
[14] Prelovšek D., *Jože Plečnik 1872-1957*, Yale University Press, New Haven and London, 1977, p.276
[15] Ibid., p.253

CHAPTER 6

HUNGARIAN FUNCTIONALISM AND POLISH CONSTRUCTIVISM – ARCHITECTURE AND PLANNING AS SOCIAL ADVANCEMENT 1923-1943

CHAPTER 6

Hungarian Functionalism 1925-1943

As with the experience of the Czech people, the first decades of the 20th century had seen the Hungarians move away from eclecticism and the excesses of art nouveau. In common with Wagner, Loos and Fabiani there were pre-cursors of the modern: Béla Látja, Béla, Málnai and József Vágó. Their collective works clearly echo in form and construction their Viennese counterparts. However, this certainty in a developing architectural style was severely damaged.

> Hungary bled to death during the First World War and the two revolutions that immediately followed. A country that lost a significant portion of its territory in the 1919 Treaty of Versailles, that suffered from economic stagnation after the war and then again during the depression, was not the most fertile soil in which to plant the seed of modern architecture.[1]

For this reason the beginning of modernism in Hungary was removed to other countries following the revolution of 1919, an event that led to mass emigration that anticipated anti-fascists fleeing many parts of Europe due to Nazi oppression some thirteen years later.

Writers, artists and designers moved to Berlin, Vienna and to Moscow where they found a number of expatriate Yugoslavs and Rumanians. Chief among these were Moholy-Nagy, Nemes Lampérth and Lajos Tihanyi, who attended the Weimar Bauhaus, and Lajos Kasak who moved to Vienna where he published and edited the arts review *MA* (Today) that echoed the magazines of the German Expressionists, while a little later turning toward the Berlin Dadaists and their views on anti-art. Béla Kun, Georg Lukács, Béla Uitz and Sándor Ek were all working in Moscow. Uitz and Ek were impressed by the ideas of Aleksandr Rodchenko and Productivism and the dynamics of Agitprop. With the rise of Nazism and Stalinism the very freedom that all of these experiences led to was being extinguished by totalitarian edicts so as a consequence many chose to return to Hungary where rule by Miklós Horthy, as ‘so called Regent’ was far more tolerable. Despite admiring Hitler’s German Nationalism and paying lip service to anti-Semitism, measures designed to restore power to the Germans and Magyars, Horthy presided over the growth of a middle class elite in Budapest and larger Hungarian towns.

Sándor Bortnyik, who had been a spokesman abroad for *MA* from 1917–1922, returned via the Czechoslovak Republic in 1924 to find that *MA* had from late 1922 developed contacts with many major foreign periodicals: *DerSturm* (The Storm)*,* Berlin; *De Stijl* (The Style)*,* The Hague and Weimar*; Merz,* Berlin*; Het Overzicht,*(The Overview) Antwerp*; 7 Arts,* Brussels*; L'Esprit Nouveau* (Spirit of the New Age)*,* Paris*; The Little Review,* New York; *Noi ,* Rome*; Disk* (Disc)*,* Prague*; Contimporanal* (Contemporary), Bucharest and *Manomètre,* Lyon. Reciprocally, *MA* advertised in many of these journals. Between 1924 and 1925 another magazine *Magyar Iraś* (Hungarian Writing) published all of the Constructivist, Dadaist, Futurist, Suprematist and Zenitist manifestos.

Of the returned architects three were extremely influential in creating Modern Movement buildings in Hungary: (Alfred) Fred Forbat, Farkas Molnár and József Fischer were the envoys of a new style. Forbat studied in Walter Gropius' Bauhaus Studio from 1920 to 1922, where Molnár was also a student from 1921 to 1925. These and other Bauhaus students, Marcel Breuer and József Fischer, were all members of the Hungarian CIAM group. As with their Western European counterparts, they wished to publicise and address inhumane living conditions.

> Half of the Hungarian population lives in rooms with floors of tamped earth and drinks impure water… 78% of the houses in the country are still constructed of mud and adobe… The population of Budapest is 980,000 and there are only 70,000 bathrooms in the city resulting in 75% of the people living in dwelling units without bathrooms.[2]

Despite these illuminating words from Fischer, the Hungarian CIAM within their philosophy and stated goal of *Tér és Forma* (Space and Form) organized only three exhibitions: *Kolha'* (Collective House) 1931 and 1932; *Dwelling City and Society*, late 1932. As a prelude to these developments Farkas Molnár, under the guidance of Fred Forbat, set up the *KURI* (new town) group who proposed that a new town need not have a definitive centre – in contrast to Le Corbusier's *Ville Contemporaine* (Contemporary City) of 1922. From the first participation of a Hungarian delegate Marcel Breuer, CIAM 1929 in Basel, the conflict between Western and Central European ideas became more polarised.

The CIAM Frankfurt Congress of 1929 addressed *Neues Bauen* (New Building) and the ideological differences presented by living cells in Central Europe contrasted by spacious, middle-class apartments in Western Europe were made abundantly clear.

These differences were being pursued by Farkas Molnár who found voice in the 1933 CIAM Fourth Congress, 'The Functional City', in Athens:

> As a result, the fundamental functions of a city–dwelling, work, recreation and traffic – were set out in these plans, two on a scale of 1:10,000 and one on a scale of 1:50,000.[3]

Despite the photographs, cartographies and written reports on thirty three cities including Prague, Budapest and Zagreb, no final report was published.

Le Corbusier published his own analysis as *Charte D'Athenes* (Athens Charter) in 1943. The intervening years had allowed the Western Europeans to virtually ignore the force of Central European arguments when they [the Central Europeans] were promoting the concept of urban and rural landscape in opposition to that of the city/metropolis which was Le Corbusier's metier. This unity of town and country as a garden city model inherited from Ebenezer Howard and Raymond Unwin was anathema to many in the West, especially Le Corbusier.

These clear ideological and sociological differences between the two groups led Molnár to establish CIAM-Ost (CIAM East). Giedion, clearly mislaying his knowledge of geography, referred to these countries as 'Balkan States' – that is, Hungary, Czechoslovakia [Czechoslovak Republic], Poland, Yugoslavia and Greece with Molnár adding Austria and Romania as essential. In 1934 when the Czechoslovak Republic was producing Modern Movement, Functionalist architecture the Czechs were then to have contact severed by CIAM because of 'ideological differences'. This act was also paralleled by the withdrawal of the German delegation. Was it coincidental that the two nations which were clearly instrumental in establishing Modernism and the Modern Movement were not now part of CIAM? An organisation where, since the departure of the Czechs and Germans, the ideas of Le Corbusier, Giedion and their circle were beginning to dominate. Even so, this denial of the Czechoslovak Republic and Germany was countered by the newly arrived Polish group with Szymon Syrkus and Jan Chmielewski presenting *Warzawa Funkcjonalism* (Functional Warsaw) which offered another view of towns and cities.

Unfortunately the conviction of CIAM-Ost in generating a sense of multi-national identity did not fit with the expansion of the Fatherland, and the annexation of much of Central Europe by the Nazis stopped development. However in the brief life of CIAM-Ost sufficient doubt was created to question the suitability of the urban metropolis as drawn by Sant'Elia and proposed by Le Corbusier. This type of expansive city planning in

Hungary could not gain much purchase, because of a poverty of materials and means. Perhaps this was a blessing in disguise as the Hungarians produced high quality buildings from 1919 to 1943.

None of this development was accidental as the Hungarians defined clearly what modernism was for them, or more importantly, what it was not. Nor does the modernism here incorporate the transitional phases between eclectic and modern or between romantic and modern. This implies no value judgment, since these transitional phases did produce some excellent work that attempted to improve upon the rigidity and dogmatism of the Fuctionalist Modern Movement. The buildings from many architects within and without CIAM are all testimony to this fact. From the very start Dénes Györgyi, with what was the first modern apartment house in Budapest, The Electric Company Building, 1926, showed elements of Parisian architecture with projecting bay windows at first floor level teamed with an Art Deco-influenced corner tower (6.1).

Unlike most European countries [except Sweden and other parts of Scandinavia] Hungarians were still able to engage in modern architecture up to 1943, which allowed a further four years of development beyond other national styles in Central Europe. Although Hungary was willing to adopt new and modern ideas, there remained a healthy scepticism and enormous reservation with regard to all [foreign] avant-garde excesses. In looking at CIAM and CIAM-Ost it is apparent that:

> A common misbelief is that modern principles were introduced in Hungarian architecture by radicals of the CIAM. The first modern works had actually been built by others long before the group was formed in 1929.[4]

Proof of this misconception is found in the architectural works of Fred Forbat, as in the Szego House, Budapest 1924, which demonstrates very advanced forms and construction methods. Although much that is written about Fred Forbat describes him as the student at the hand of the master Walter Gropius in 1920's Weimar, as with the relationship between Wagner and Fabiani, this is an oversimplification.

> Recent research has shown that Forbat played an important role in the design of the 'Building blocks of large-scale' house systems previously attributed to Gropius in the 1923 Bauhaus 'am Horn Strasse' exhibition layout, and in projects for standard houses.[5]

In some ways this set up a dialogue between Forbat and Molnár. Molnár's 'invention', the 'Red Cube', within the Bauhaus exhibition of 1923 was a visual representation of left-wing socialism against right-wing capitalism. In his sketches Molnár shows the handing

6.1 Dénes Györgyi, Apartment Building Honvéd St. Budapest 1926

Rizzoli/Lésnikowski 1996

over of ‘Red Cubes’ as a metaphor for standardized building units to a union of consumer users, contrasted by the productive chain of capital, ownership and private wealth generation. Molnár himself stressed the radical difference of his project from possible precedents; according to Fred Forbat, his colleague at the Bauhaus, Molnár was very proud of this project because he thought that the pure cube as architecture was his invention.

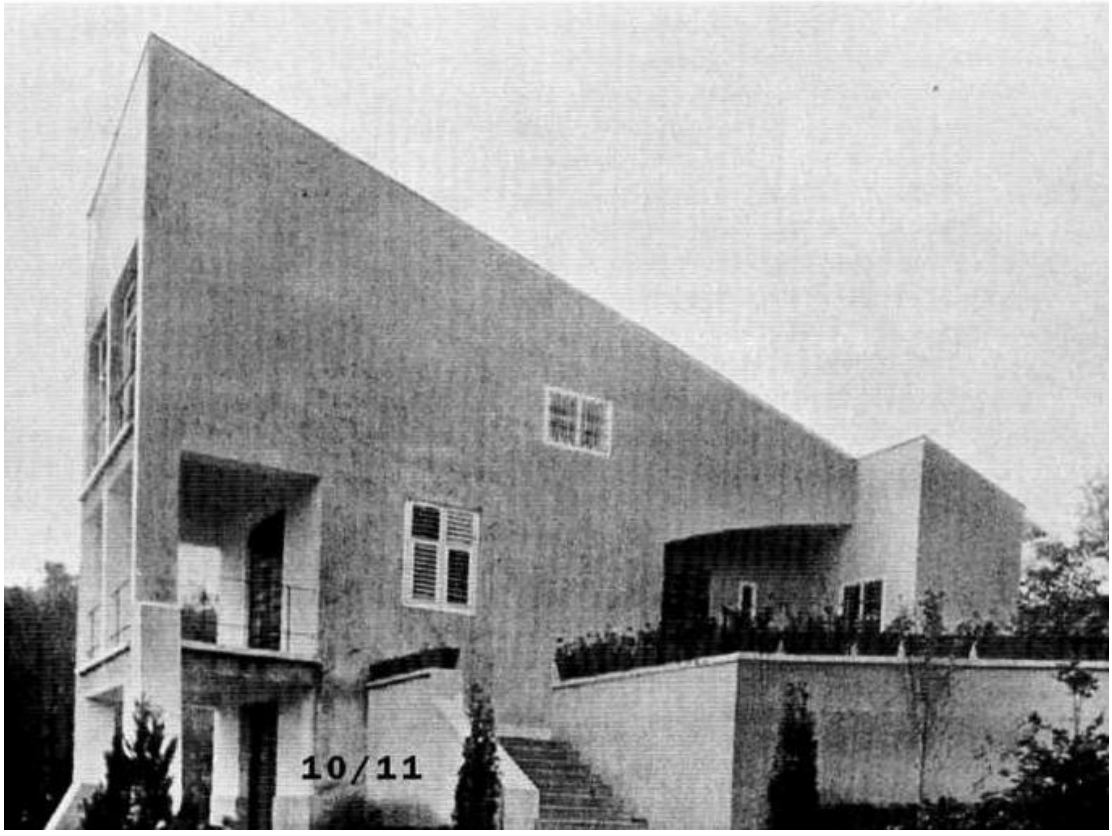
This of course, like all definitive statements, was subject to all manner of question. For example, it is known that Johannes Itten produced a lithograph, ‘The House of the White Man’ which pre-empted the intention of Molnár’s ‘Red Cube’; although once having returned to Hungary Molnár was able to put his view of social housing into practice in the *Napra forgó utca* housing estate, Budapest 1931, as part of a development for the Hungarian branch of CIAM. Unfortunately there was a contradiction in the idea of these homes representing CIAM alone. The twenty-four single family houses built on the Buda Hills represented many strands of architectural expression from the conservative to the functional, but in no way embracing avant-garde excess, while clearly remaining modern in every respect.

Molnár’s overestimation of his own importance has eclipsed the work of Mano Lessner, 1884–1944, the architect of the first cubic house on the Buda hillside in 1928. Although it might be considered that the shutters, picket fence and classical arrangement of the side porch are detractions from modernism proper, they are merely an acceptance of how far one might push the boundaries without causing an over reaction. By contrast if we doubt how far Lessner would go in his pursuit of modernism we need only look at *Tiskárna, Egerszeghegy,* 1934 (6.2). This building is a tour-de-force from its three-storey wedge shape with terraces and its stepped approach, to the double height ‘transparency’ of the classically-inspired entrance porch and the arced recess over the side door. In truth, nothing like this had been seen before. In contrasting the house with the machine, Lessner, like others who would come later, saw that:

> The machine is a standard product, the house hardly is. The same task needs to be done in another way when one builds on the plain or on a hill, in the shadow or in the sunshine. We have sympathies for spaces, volumes and proportions. The interrelation and sequence of spaces depends on thousands of accidental causes and finally is the result of individual consideration.[6]

Clearly Lessner was not enamoured of the supposed ‘new architecture’ of reinforced concrete skeleton, strip windows and glass block. As with all canonical vocabularies, Lessner thought this way laid stagnation, especially when dealing with architecture. The sense of adult playfulness Lessner uses in *Tiskárna* from the niches, projections,

6.2 Mano Lessner, Tiskárna, Press House, Egerszeghegy 1934



cantilevers and porches give voice to his use of calculated ‘happy accident’ to imbue his buildings with personality.

As Molnár was to discover later, rather than following the ideas of CIAM and Le Corbusier, far more was gained from looking at Dudok, Mendelsohn, Asplund and Salvisberg. In rejecting the idea of architecture as a scientific exploration of the future within a holistic straight jacket, Lessner and others created a catalogue of flat roofed, cubic villas with an emotional, colourful context that was life enhancing. This life enhancement is often best seen in places of leisure and relaxation. Lajos Kozma’s Villa, Budapest 1931, and the recently restored villa by Kozma of the same date with its round windows, terraces and roof overhangs with unusual internal reveals and transparent spaces, have few contemporaries. Similarly the Summer Bungalow, Batsányi Street, Mecsek Mountain, Pécs 1936, perched on the hill and cantilevered out in imitation of ‘*çikma* construction’ was Fred Forbat’s foray into a less formal view of architecture as it was resolved in face brick and local stone as a ‘holiday home’.

However one of the most relaxed and relaxing examples of this architecture was the House on the Danube, 1935, by Kozma. The situation on Lupa Island meant the land was often submerged by floods; as a consequence the house was raised on piles (pilotis) to combat this, thereby commanding the surrounding land (6.3). This form of construction would allow all to stay dry as enormous concrete cantilevered supports allowed the main terrace to over-fly the water. The interior space of 19 feet by 16 feet was entirely open plan with a kitchen and shower room to one end. When the sun was too high everyone could retire to a sun terrace formed in the shade under the concrete supports and screened by the open concrete stairs to first floor level. The architect who most identified with Lessner’s brand of enjoyable ethnographic modernism was Paĺ Virágh. In his Villa Szendy, Budapest 1934 we see that from the pitched roof and round window down through the balconies, niches and arches all is modern yet firmly rooted in its own history and that of the land on which it is built.

Despite Molnár being more aligned with CIAM in his style of architecture than his colleagues, he demonstrated a new freedom of approach from 1931 in Villas on Cserje Street and Letjö Street in Budapest; the Weekend House, Febögöd 1933; Mano Schwartz House, Szeged 1932; House on Hankóczy Jenö Street, Budapest 1933 (as singular works) and with József Fischer, the Hoffman villa, Budapest, 1933 (6.4). These buildings all demonstrate variations of architecture created not as dogmatic or formulaic resolutions but by free will. Fischer worked in the same manner in the Hoffmann Villa, Budapest, 1933, with this creatively free architecture of the private villa reaching a peak

6.3 Lajos Kozma House on the Danube, Lupa Island, Budapest 1935

Architectural Press/Yorke 1934

6.4 József Fischer, Hoffman Villa, Budapest 1933

with Fischer's Jaritz Villa, Budapest 1941-42. Other architects of these private villas were Károly David, Villa on Solinoi Avenue, Budapest 1933; Matte Major, Villa on Sasfiók Street, Budapest 1934; and Gyula Rimanóczy, House on Pasaréti Avenue, Budapest 1934.

Although there was very clear evidence of a prosperous middle class investing in the latest works of modernism, this was not the case for all. The reconstruction of the Hungarian world in between the wars had to accommodate 220,000 citizens who had been displaced from all parts of the former kingdom, especially Transylvania. It was not unusual for the poor to construct shelters of wood and fabric or for families to become cave dwellers, as in Budafok. These poor were not the historical poor of centuries of neglect. These were the 'new poor' as identified in *Budapest Története* Vol. 5 by H. Miklós. Included in their number were high court judges, army officers, government officials and even a high-born land steward.[7]

As the terms of the Treaty of Versailles impacted on Hungarian society their close trading nation and ethnic partners, the Germans, were trying to deal with a complete collapse of the German mark. At the point of no return the Hungarians were baled out by the Americans (in the guise of the League of Nations) with a $20 million loan over 35 years. The Jewish Magyars, who had always controlled the capital investment and financial institutions in Budapest, added from Rothschild and Son, merchant bankers, a further 250 million gold crowns to improve health care from 1923 onwards.

Unlike most other countries the Hungarian Jews,

> were not treated as an ethnic minority but rather as a religious group and they were to contribute to the development of Hungarian capitalism and through their dominance in key professions, to the modernization of the country. [8]

With this background many of the middle class poor who had taken to living in freight cars in the railway stations and sidings now began to develop a co-operative plan for a model garden city. Through supreme pressure and persistence this articulate and highly numerate group were able to secure a plot of 170 acres on which to build 300 to 400 dwellings as the St Imre Garden Suburb, Pestorline, Budapest between 1930 and 1936. Although the historical poor were not included in this development there was an impetus created to stabilize the currency which allowed a large public housing programme to take place from 1920 to 1944,

> 96,000 new flats were built which increased the whole building substance of the city by one-third.[9]

One of the largest housing developments of 1934 was for *Orszagos Társadalombiztositó Intezet* (National Health Insurance Company) (6.5). In the apartment complex at *Köztarsaságtér*, (Tizman Kálmán Square 14-16), Budapest, Bertalan Árkay, Sándor Faragó, József Fischer, Károly Heysa, Pál Ligeti, Farkas Molnár, Moric Pogány, Gábor Preisich and Mihály Vadász built three seven-storey blocks with interconnected courtyards of open spaces and greenery. This development was one of many of a particular type seen throughout Hungary. The luxury apartment block with residential and business premises containing the Unapark Café, Pozsonyi Avenue, Budapest 1936, was another facet of a rich tapestry of building. Béla Hofstätter and Ferenc Domány in their apartment building on Margit Boulevard, Budapest 1937, illustrate how 'dumb' block architecture was being replaced by something far more sculptural (6.6). The rhythm of the floors and balconies are anchored by the undulation of the windows downwards to a central stairway spine that connects two parallel blocks. All is resolved on a steeply sloping site and meets the demands of modern living in a spacious well resolved environment.

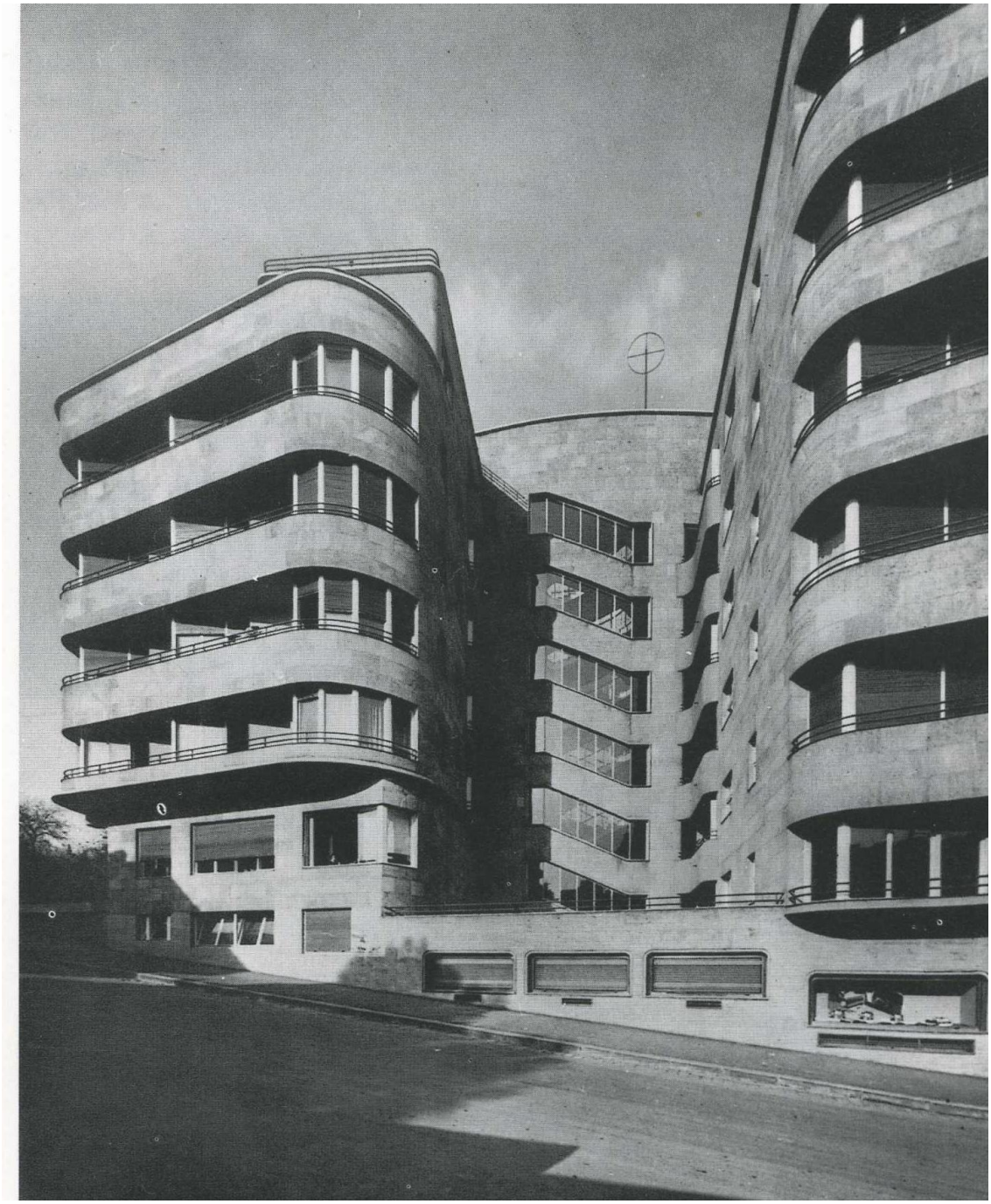
This understanding of people's needs are also ably demonstrated in the work of Virgil Birbauer's and László Králik's Airport Terminal, Köerbereki ut 36, Budaörs 1935 (6.7). The stepped cylinder of the passenger hall is flanked by two administration wings. Light pours in from an enormous roof light above the central hall. Protruding above the top circuit of the building is an observation platform with control room employing signalling apparatus and high powered lights. The ingenious design divides the passengers in arrivals from those in departures on two separate floors. This configuration allows progress without confusion while providing a safe viewing gallery through the multiple French-doors, so that every one might witness air transport – the 'marvel of the new age'.

One can only speculate as to how far Hungarian modernism would have progressed but for the German army who destroyed one third of the city in their retreat of 1944. During the war the Magdolna Hospital, Budapest 1939, by Geden Gerlóczy and Nándor Körmendy is one of the last examples of Hungarian modernism. A simple block constructed from an internal steel skeleton and green-coloured, pre-cast stone panel infills were utilised to reduce costs through pre-fabrication. Five medical floors (6.8) are identified by continuous balconies with a glazed rail forming a perfect place for patients to sit out.

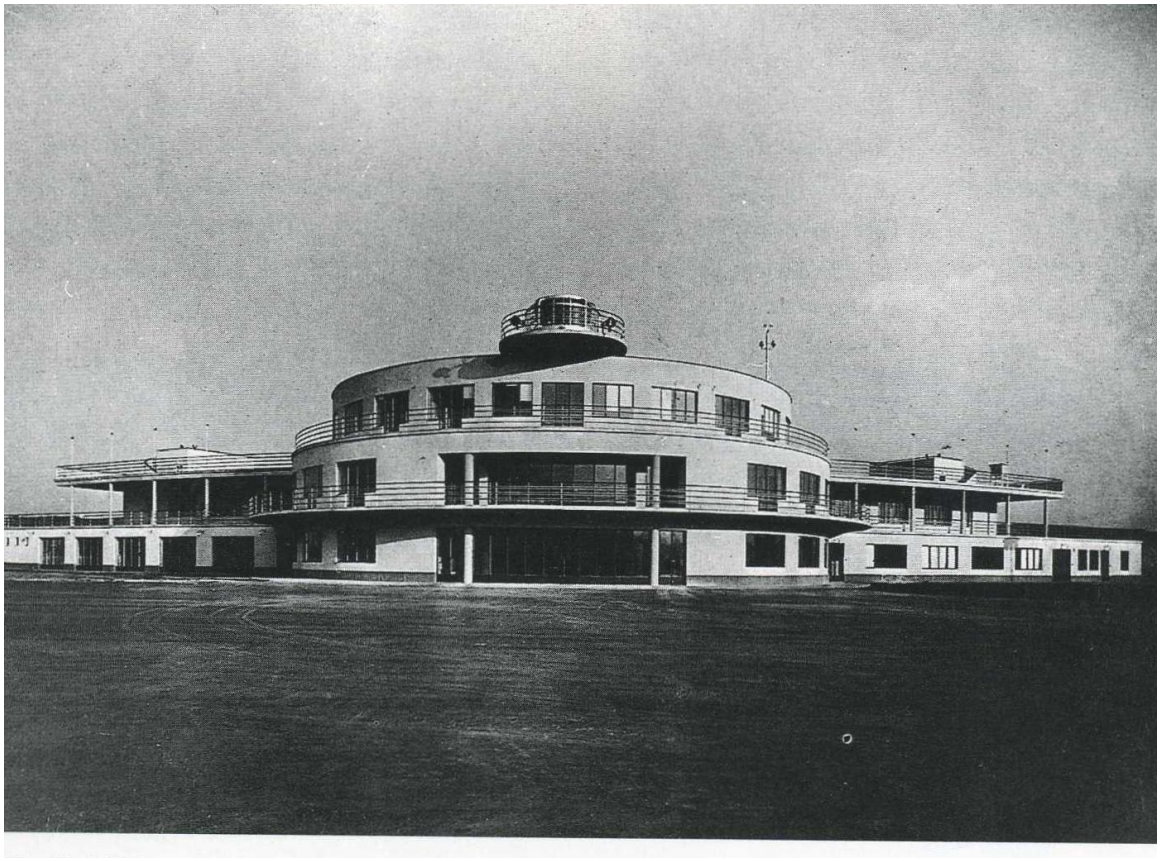
This embracing of advanced technologies at a time when most of Europe was fighting

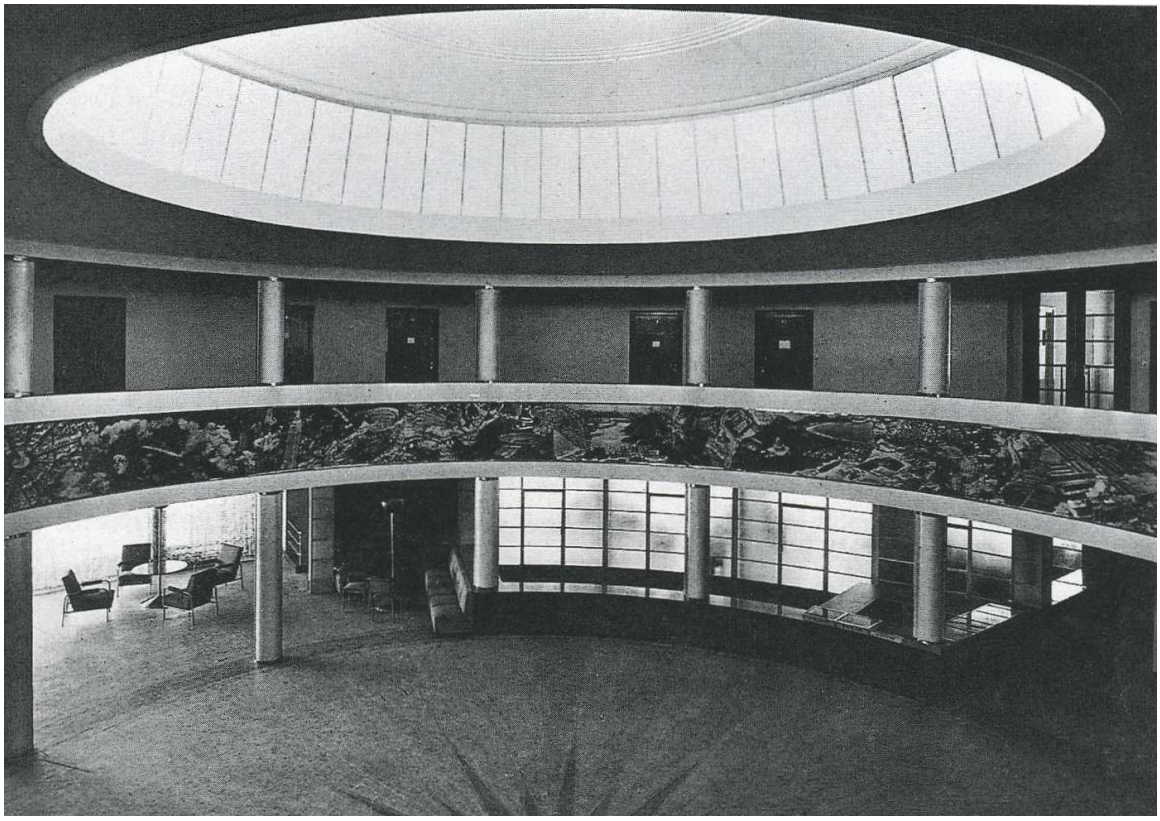
6.5 National Health Insurance Company, Budapest 1934

6.6 Béla Hofstätter and Ferenc Domány, Margit Boulevard 1937



6.7 Virgil Birbauer and László Králik, Airport Terminal, Budaörs 1935





Rizzoli/Lésnikowski 1996

6.8 Gedeon Gerlóczy and Nándor Körmendy, Magdolna Hospital, Budapest 1939

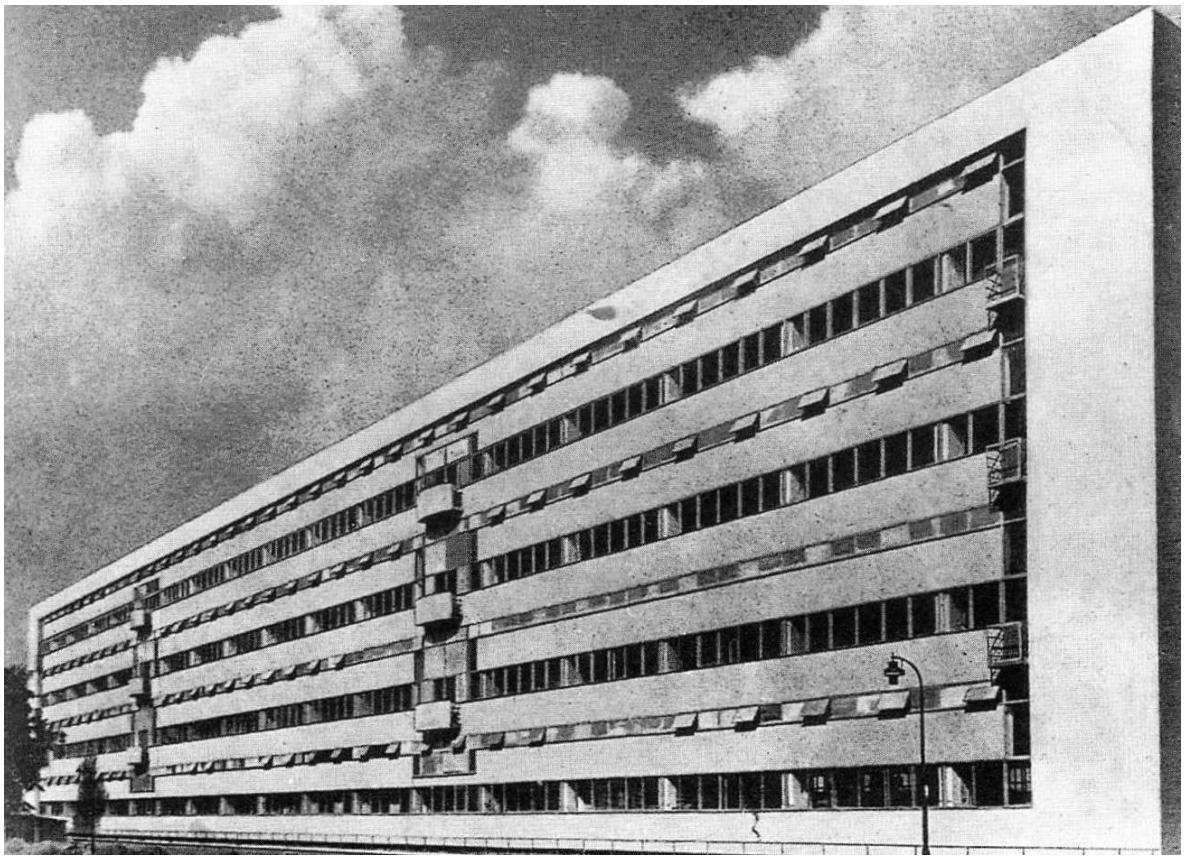
for survival allowed the Hungarians to catch up to the developments in all other Central European countries. Moreover, a rather uncertain peace allowed Hungary to stage International Trade Exhibitions, which although poorly attended resulted in revolutionary pavilion designs in glass and steel. At the National Fair, Budapest 1938, Virgil Birbauer designed a space for steel companies, railroad cars and a machine factory to display the re-emerging capacity of Hungarian industry.

This confidence in the future is seen in the Stühmer Chocolate Factory, Budapest 1941 by Aladár and Viktor Olgyay (6.9). The elegance of the surrounding exterior box is punctuated by an endless ribbon of windows. Two sets of vertical balconies are employed to interrupt the linearity avoiding any appearance of a machine-like structure. This de-humanizing effect, which is found in many Western European works of this period, is avoided by the tri-partite banding of uniform windows above and below, which creates a 'breathing space' interspersed by bands of smooth rendered cement.

The four bands containing this tri-partite arrangement are further enhanced by the linear flow of smaller window vents, giving the whole an ability to be seen differently along the entire length. This difference is brought about through the actions of seemingly powerless men and women in opening windows for more light and air, in other words the building does not dominate, it enhances productive life. Another inspired part of the design is that as the floors reach the containing edge of the elegant box, a vertical band of windows and balconies anchor the inner space and exterior solid. It is fascinating to study the lamp post, a relic of a bygone era contrasted by this beacon of modernism.

There were also banks, cinemas, retail stores, market halls, trade union offices, hotels and post offices being built in Hungary as modernist works until 1946 when *Új Épitészek Köre* (New Architect Circle) and *Új Épitészek* (New Architect) joined *Tér És Forma* (Space and Form) in forwarding views on workers' housing, although the political cutting edge of the latter publication had been somewhat blunted. Many modernist architects including Farkas Molnár and Bella Hofstätter had fallen, casualties of the Germans, while the Olgyay brothers, with the advance of the 'liberating' Soviet troops, had fled to the west. This meant that by 1950 Hungarian modernism had stalled and in 1951 the Stalinist Communist Party required that socialist realism be adopted in all the arts. For the Hungarian modernist this act sounded the death knell of freedom. Although the Hungarians tried to re-assert their freedoms again in the 1956 Uprising, after crushing the revolt the Soviets made sure from then onwards the 'wedding cake' architecture of the Communist State was the only tolerated style.

6.9 Aladár and Victor Olgay, Stühmer Chocolate Factory, Budapest 1941



Polish Constructivism 1923-1939

Many of the strands of modernism throughout Europe in the 1910s and 1920s became amalgamated in the term 'Constructivism in Poland'. In truth, Poland's artistic and architectural innovators were making flesh the pronouncement of Tadeusz Peiper:

> Let us create art [and architecture] on the freshest layers of life. Let us build it on the latest achievements. This may lead to a unique, original Polish art.[10]

As with all of Europe, Poland had progressed through Cubism, Expressionism, Futurism, Dada and Surrealism. Now that the First World War and most of the deprivations of the people were being addressed a socially determined approach to rebuilding Poland began with the *Wstawynonej Sztuki* (Exhibition of New Art), Vilna, May 1923. The importance of this event was not the works on exhibit; it was the statements contained in the *Katalog* (Catalogue). These were not only revolutionary in their concepts but also very dynamic and challenging in layout and typography in the hands of Władysław Strzemiński and Witold Karjruksztis.

To understand how the Polish perceived the modern era it is useful to look at the views of Teresa Zarnower and others:

> Changing the field of vision, technology has changed the means of expression by introducing new material and it has broadened the scope of unexpected possibilities.[11]

> Władysław Strzemiński: The application of what has already been won – is the task of applied art [including architecture]. I sincerely wish the art of strict form the greatest possible success in creating the style of our epoch.

> Witold Kajruksztis: Construction unfailingly brings about a deformation of the realistic form, and thereby a bankruptcy of the 'classical' principles. A contemporary artist [architect] ought to abandon the way of Compromise (pseudo-neo-classicism) and shift to creating pure form.[12]

Many of the ideas of Polish Modernism had first been seen in the publication *Zwrotnica* (Railway, Points) from 1922. However the founding of a new group, Blok, in 1924 heralded a new, more modern arrival; the Vilna Exhibition 1923 was its first unofficial action, but as can be seen the direction of the group was always in question.

> Polish innovators [who] jointly professed absolute construction, but [who] represented distinct and at times even contradictory artistic groupings.[13]

There was to be much debate about direction and purpose. This expression of a common goal was further expressed in the second issue of the Blok magazine in 1924

> Blok represents people united into a combat group by the slogan of absolute construction.[14]

Although it was thought and hoped that these 'contradictory groupings' could be bound together the splits within Blok began to reveal themselves in 1925 when Władysław Strzemiński and Mieczysław Szczuka put forward two very different views of how Polish modernism could be achieved. Put simply, Szczuka required art and architecture to be dictated by social needs whereas Strzemiński, under the term Unism, envisaged an art including architecture which was autonomous in arriving at a social order that the populace would embrace. With these diametrically opposed views the unity of Blok would have to dissolve and by February 1926 the International Exhibition of Architecture held in Warsaw had seen all of the fine artists and sculptors depart to leave behind industrial designers, stage designers, film makers and architects.

By 1926 these new ideas had formed themselves in the Praesens group, 1926–39, who because of their radical architectural ideas attracted a number of eloquent professionals who wished for a wider international platform. The spokesman of the group, Szymon Syrkus, recently returned from Paris and the influence of Le Corbusier was able to put the intention of Praesens in a very thoughtfully worded address on 'Budget Estimates of Architecture'.

> In the way of experiments, the architectonization [sic] creates not only new artistic possibilities but also new social possibilities. Architecture can change the structure of society just as society can change the structure of architecture.[15]

In 1927 the group were an organizing force in the Machine Age Exposition where as before Syrkus identified a close relationship to the ideas of Le Corbusier.

> Modern technique gives the architect the power to put in motion the elements creating amass: it even allows him to remove them partially. In this way the cuboid building cease to exist .The planes of the exterior walls and window openings become modifiable elements and therefore secondary. The only permanent elements will be the construction columns, into which one can build all sorts of conduits.[16]

The ideas of Syrkus echo parts of Le Corbusier's *Les 5 Points* (1926) and prepared the way for social demands leading quickly to the construction of apartment blocks of pre-fabricated construction within which were multiple flats which could be let at minimal

rates. Due to the world-wide emphasis on health and decent living conditions which had occupied many countries since the end of the First World War, these blocks would be built in open space with significant green areas as parks and gardens. Internally and externally the ambience of the buildings would be enhanced by considered use of colour, texture, fixtures and fittings combined with, in some cases, using the large expanse of wall as a canvas and its recesses as niches for sculptural work.

An absolute condition of these apartment blocks was the elimination of internal 'closed in', often unsanitary, yards. One of the first designs of this type was from Teresa Zarnower, Mieczysław Szczuka and Szymon Syrkus, 1926. These ideas were taken further by Mieczysław Szczuka, Piotr Koziński and Antoni Karczewski in their competition project for eight- and ten-storey blocks as part of the 1st International Exhibition of Modern Architecture, Warsaw 1926. In the same year Bohdan Lachert and Józef Szanajca designed a row of houses and new types of wooden houses. This they followed immediately with a twin house project and, in partnership with Lech Niemejboski, they designed four-storey blocks for the Eastern Fair in L'viv. The degree of innovation in the different types of buildings within the exhibition is far sighted, involving and empowering; it is large scale, personal, small scale and individual at one and the same time.

One of the architects of the small scale row houses was Jan Bieńkowski with developments in Makoszowy and Piekary-Szarlei in 1927 (6.10). The houses are arranged on a set-back chevron arrangement along the street; every house having its own individuality confirmed, by the array of small porches which have been added. These are contrasted by the workers row-houses (6.10) in *Jerusalem* by Piekary-Szarkej, 1927, as other than the trees obscuring parts of the building, they are all identical. A unique aspect of Polish modern architecture is the number of husband and wife teams: Barbara and Stanisław Brukalski; Helena and Szymon Syrkus; Jadwiga Dobrzyńska and Zygmunt Łoboda and finally Teresa Zarnower and Mieczysław Szczuka who, although not married, had a very close professional relationship.

This investment in family required that, rather than building soulless blocks, apartment building throughout Poland had to be of the highest order. Equally, the town houses, row houses and villas built between 1924 and 1943 to meet an ever increasing demand for both quality housing and commercial premises required a number of prestigious planning co-operatives as well as regulation and development projects in the towns and cities of Poland: Kazimierz Saski 1924, Radon 1925, Gdynia 1926 (GSM), Warsaw –

6.10 Bogdan Pniewski, Żoliborz Warsaw, Row House (1), 1931 and Jan Bieńkowski, Row Houses, Jerusalem, Makoszowy 1927 (2, 3 & 4).

1.

2.

3

4

Żoliborz 1927, Warsaw – Bielany 1928, Poznan 1929, National Exhibition Plan, Warsaw – Rakowiec 1930-32, Gdynia – Maly Kack 1930, Poznan 1931, Warsaw – Żoliborz 1930-34, Katowice 1935, Ciechanów 1936, Gdynia 1936, Vilna 1937, Warsaw – Zankowy Square 1937, Kraków – Wawel 1939 and even throughout the war: Nazi Pabst Plan 1942, Warsaw – Kolo 1943, Warsaw – Rakowiec 1942.

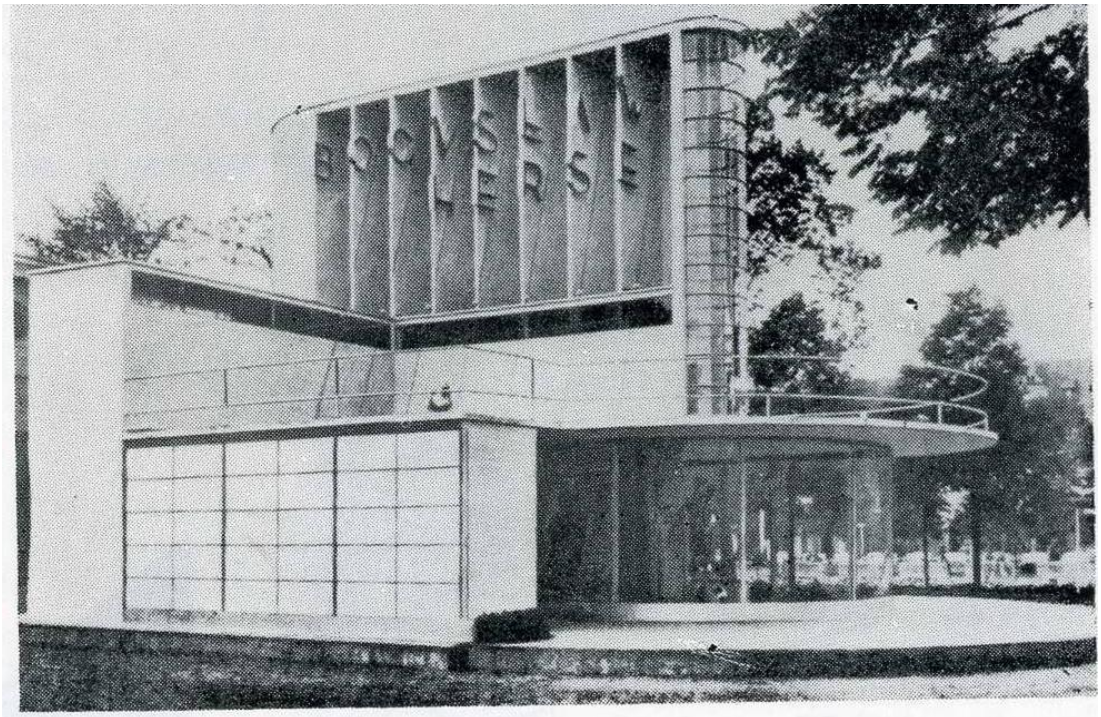
Much of this planning and building was undertaken by Warzawskiej Spóldzielni Mieszkaniowej (Warsaw Housing Co-operative, W.S.M.), Strzecha Urzednicza Co-operative, and Zacisze (Quietness/Cul-de-sac) Housing Co-operative. Some of the techniques seen in the construction and planning of the new centres were first displayed at a number of international expositions/exhibitions. The General National Exhibition, Poznan 1929, saw a number of pavilions constructed which would help revolutionize Polish architecture.

The Centro-Cement Pavilion by Bohdan Lachert and Josef Szanajca (6.11b.) echoes the silo architecture of the USA although greatly reduced in scale, where a cylinder is symmetrically dissected with open niches to give transparency in alleviating heaviness. The cranes in the background speak of a forward-looking industrial country able to compete on a world stage. The Women's Workers Pavilion by Anatolia-Hryniewiecka-Piotrowska (6.12a.) has a far less industrial feel despite the rectangular form. From the dwarf walls with their flowers and shrubs to the obvious front entrance, all is calm and directed – the only note of speed or force is demonstrated by the spiral staircase to one end.

On the other hand, the Fertilizer Pavilion by Szymon Syrkus (6.12b.) demonstrates a masculine form of steel and glass which with clever lighting at night becomes almost transparent. Leaving aside any Freudian references, the dominance of the central tower, particularly as part of a strong vertical L shape, is contrasted by the lightness and simplicity of the adjoining flat-roofed porch through which one progressed to other events and pavilions.

The gold medal-winning Hertze Fashion Pavilion by Bogdan Pwiewski (6.11a.), as the name suggests, represents a less aggressive form. The open glass frontage, which was in fact an enclosed fashion display, welcomed in the visitor. The massing of a top storey with 'prow-head', semi-circular column married to a deck-like structure complete with ships rail are redolent of the liners and first-class travel that was so much a part of the fashion of the 1920s. These pavilions in their respective forms and use of materials with

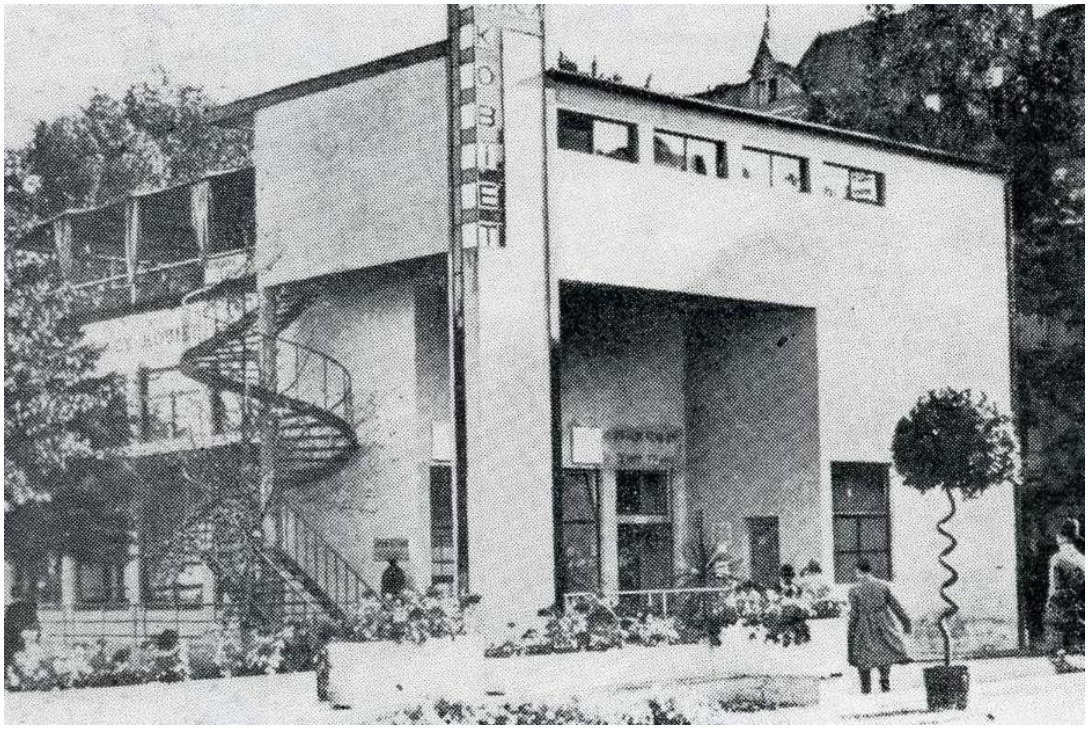
6.11a. Poznan National Exhibition 1929, Bodan Pniewski, Pavilion of Boguslaw, Herse & Co.



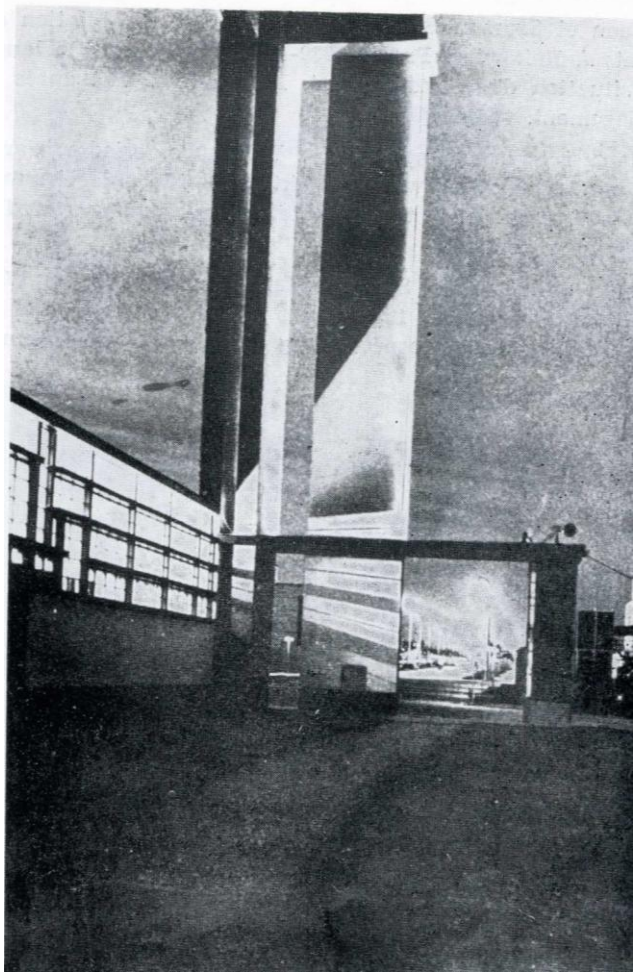
6.11b.Bohdan Lachert and Josef Szanajca, Centro Cement Pavilion

6.12a. Poznan National Exhibition 1929

Anatolia Hryniewcka-Piotrowska, Pavilion of Women's' Work



6.12b.Contrasted with the masculine forms of the Fertiliser Pavilion, Szymon Syrkus.



both masculine and feminine characteristics were indicators of an affluent and emancipated populace.

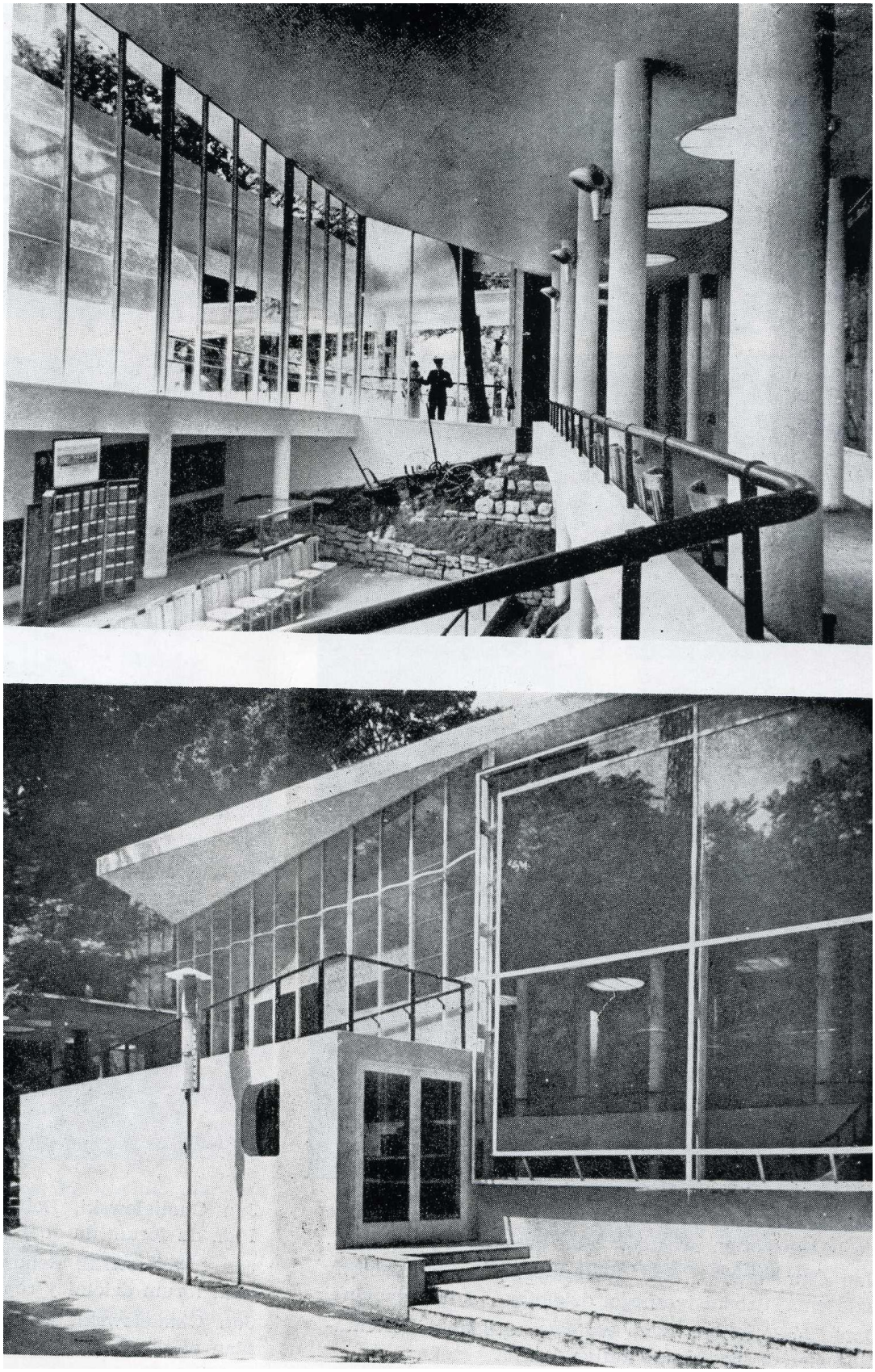
One pavilion combined both feminine and masculine forms; this was the earlier work by Bohdan Lachert and Jozef Szanajca, the Polish National Pavilion 'Art and Technology', International Exposition, Paris 1937, where the sweeping lines of the glazed façade are held in check by a procession of round, plain rendered columns which are echoed in size and shape by large round roof lights. Although the glazed sweep of panes (6.13) appears to be the dominant feature, the huge adjoining panes of glass, at least seven to eight times the area of the previous expanse, allows light to flood through the pavilion. An entry below this first set of windows emerges through a rectangular block house with minimal lighting and so one was transported from a dimly-lit arena of human scale to a cathedral of light where one felt empowered to grow and prosper.

In contrast to this Constructivist Modernism, another official pavilion from Bohdan Pniewski and Stansiław Brukalski was carried out in a modern neo-classical style with a tall rotunda formed as a rolled column of paper set within a terraced landscape (6.14). The patronage of two official pavilions shows to what extent the Polish authorities, even as late as 1937, were able to hold a balanced view on the cosmopolitan nature of Polish architecture and continued development.

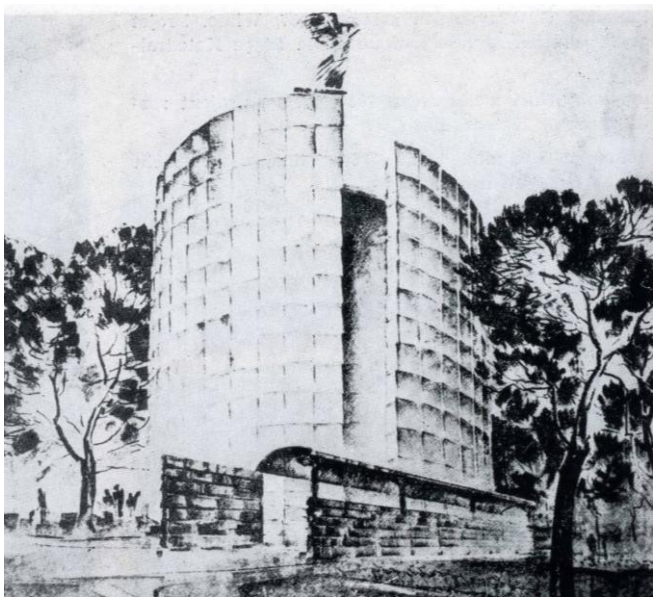
Beyond the rarified air of International Pavilions this development was aided by the number of women, especially architects and planners, who were part of a concerted drive to create the new future. From 1925 the long-established *Architeckt* (Architect), published in Krakow since 1900, was joined by the publication of *Architektura i Budonictno* (Architecture and Construction) in Warsaw. This magazine represented a moderate view of architectural development with articles on both national and international imperatives. Much of the balanced view expressed between the covers was due to the editorial style of Lech Niemkowski, an architectural visionary in the view of Sant'Elia, who later became a key figure of Polish architectural education as Professor at the Warsaw School alongside Stanisław Bryła who had studied skyscraper design in America.

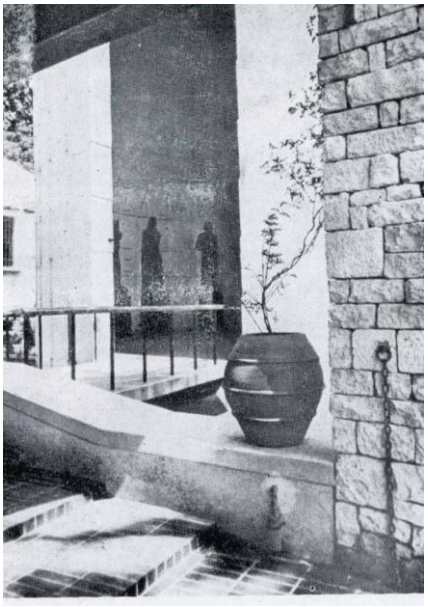
He installed an experimental building department in Warsaw that tested both materials and construction methods with all ancillaries, heating, lighting, ventilation and sanitation. The School was also at the cutting edge of applying all of the latest advancements in engineering, construction and city planning. Parallel to this was architectural study at the L'viv Polytechnic, with the third such department established at the Krakow.

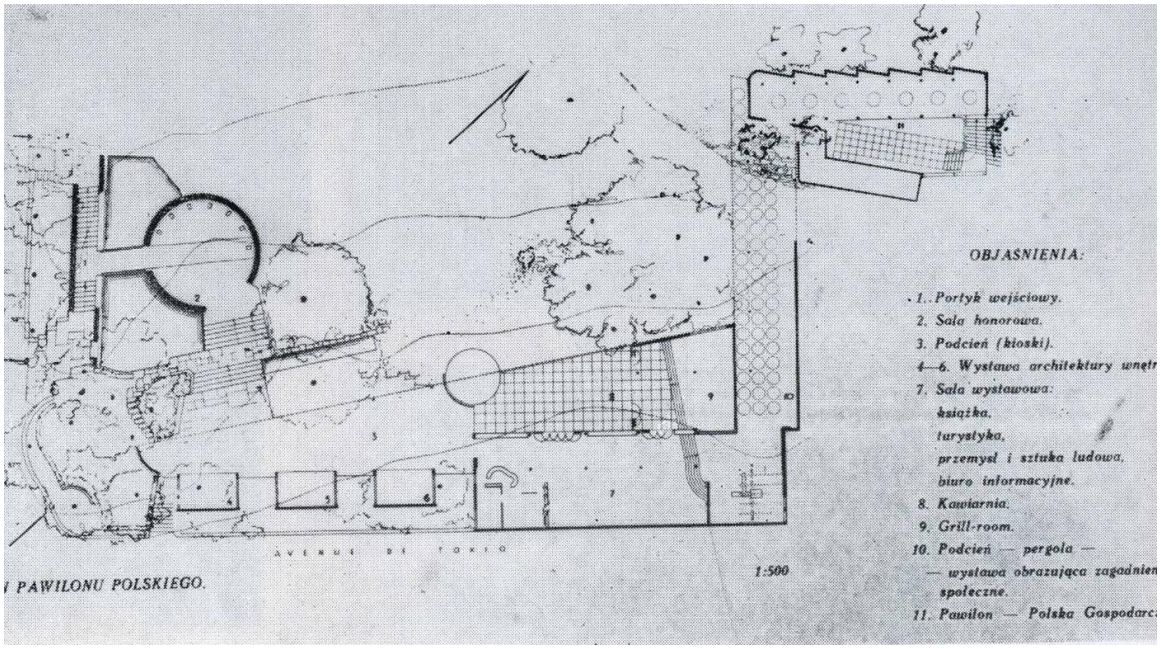
6.13 Bohdan Lachert and Josef Szanajca, Paris, Economic Pavilion, Art and Technology Exposition 1937



6.14 Stanisław Brukalski and Bohdan Pniewski, Polish Pavilion at the Art and Technology Exposition, Paris 1937







Entrance to the Rotunda, Project and Site Plan

Academy of Fine Arts. In both of these establishments a form of Modern Regionalism was practiced. The final architectural training was available in Vilno but this more than anywhere was still embroiled in the search for a national style and as a consequence of this moribund obsession the financing of the Vilno School collapsed in 1929.

Much of what was built from that time forward was the result of architectural competitions – over a hundred during the years of Polish independence. These competitions were part of a progressive agenda to revitalise Poland. A consequence of this was that more and more women took leading roles in reshaping the future. Barbara and Stanisław Brukalski designed a fairly low-rise block in 1938-39 at Warsaw Żoliborz (6.15). Row houses by Helena and Szymon Syrkus at Lodz-Marysin, where contemporary photographs reveal the unresolved space of the frontages which over years have become a mishmash of picket fence, wire mesh, garden gate in situ, gate removed, etc., all evidence of the fact that in 1935-36 the idea of Space and Form were not fully resolved.

In two plans for *Towarzystwa Osiedli Robotniczych* (TOR – Workers Estates Society) the rather brutal linear conception for a competition of 1936 by Barbara Brukalska contrasts with the first prize winner from the drawing board of Janina Rumlowna for the Warsaw-Okecie *Paluch*, where a well modelled, integrated neighbourhood is shown.

A number of Polish housing blocks have echoes of the Narkomfin flats, Moscow 1929, the Osiedle WSM Estate, Colony VII 1934, which reveals an endless arc of gray, regimented low-rise flats. One could argue that even these crescents of boredom and uniformity were preferable to Housing Colony IV, Warsaw, Żoliborz 1929-31, where a brutal male approach to the same solution in the office workers' housing 1930-31 had an architecturally poor stair tower which cut out much needed daylight. The windows were not arranged as a functional ribbon, they were poorly resolved, punched-through apertures which dominate the façade. (6.16).

By way of contrast, the solution for the Warsaw Housing Co-operative by Helena and Szymon Syrkus, Rakowiec 1930-32, where staggered link, medium-rise blocks were set within a tree-screened plot allowing the ribbon windows to let in a good deal of light and give the residents the chance to enjoy the views front and back. Where there was a blank end wall a large single window provided both light and outlook. A further example is again by Barbara and Stanisław Brukalski in Warsaw Żoliborz, IV Colony, WSM 1927. Even where the project had two- and three-room flats this architectural partnership produced a living environment of windows and balconies which empowered the

6.15 Barbara and Stanisław Brukalski, Warsaw Żoliborz, Housing Colony 1938-39

Front and rear elevations

6.16 Stanisław and Josef Szanajca, Office Workers Housing, Warsaw 1930-31

residents in enjoying their situation. This enjoyment can be seen in the Brukalskis' own villa, 1927-28 (6.17). Here a relatively small space is cleverly tailored to individual needs, from the spacing of the fenestration to the balconies, overhangs and step-backs. The house was situated in Warsaw Żoliborz which meant that the architects of thousands of apartments in Żoliborz had their sternest potential critics on their own doorsteps.

One final group of architectural works that must be considered are in Katowice, Janów, Ruda, Rybrik, Cieszyn, Siemianowice and Bielsko-Biała, all in Silesia. Much of this work was carried out by Tadeusz Michejda who had perfected an industrial form of steel-framed construction, within his whole cannon of fifty projects including town halls, schools, Protestant churches, old folks' home, office buildings, airport, mines, bathhouse, reservoir and a mountain shelter along with many houses and villas. There were a number of variations in the steel-framed houses*:* one-family, row and free standing houses and a villa.

With the Town Hall in Janów 1930, Michejda's solution is reminiscent of Dudok's Hilversum Town Hall; nevertheless if one looks deeper the building reveals itself. Far from being a large brick 'shed', however elegant, Janów Town Hall (6.18) has many more layers, heights and interconnections. A central, stepped tower has a clock and a belfry-type tower, complete with harmonic aperture. The repeat of tiles provides a unifying harmony, apparently laid edge-on-edge descending through the tower to the lower, less elaborate wing where the tile ornamentation is used between the large, white-framed windows. The other wing is far more complex with entry by a staircase from the lower terrace over which sits a double-height, roofed, square-columned colonnade. Above this level are a band of rectangular windows and, still higher up the wall, round windows which are split vertically complete the scheme. The building is L-shaped; the individual heights of the wings and blocks have a counterbalancing weight providing harmony.

This harmonic approach is taken further a year later by Michejda in the Apartment House, Katowice 1931, where a flowing dynamic treatment of the frontage has glass-fronted, curving balconies on six floors, the ground being removed to accommodate the entrance steps. The fully-glazed balconied floors curve into a flat-fronted central portion flanked by side wings that step forward to establish the front line of the building. Equally the top storey is plain with only small windows to relieve the flat render. The degree of comfort and ventilation this design afforded provided good quality living conditions for the tenants.

6.17 Barbara and Stanisław Brukalski, Own Villa, Warsaw 1927-28

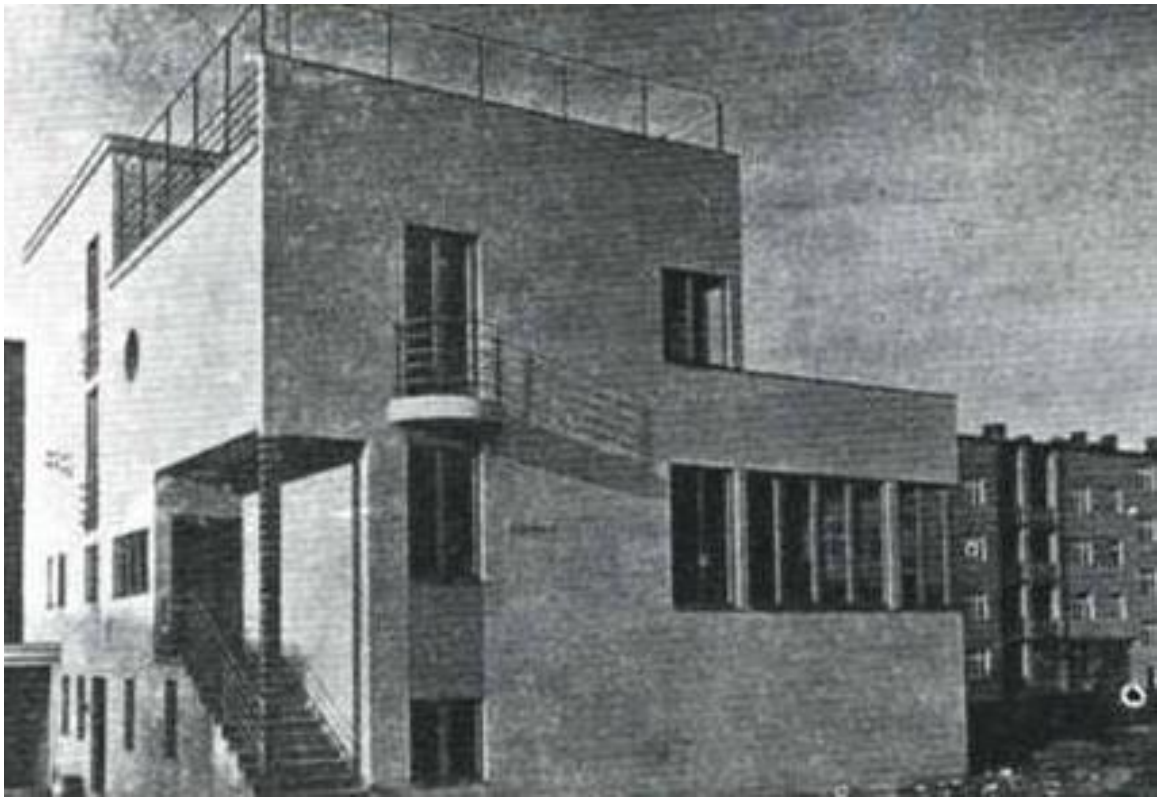
6.18 Tadeusz Michejda, Janów Town Hall, Janów Silesia 1930

The House for Dr. Kazimierczak, Katowice 1930 (6.19), by Michejda was a similarly advanced building. Although Lésnikowski describes this house as being

> in a mature Bauhaus style.[17]

Quite which Bauhaus architecture, as a built work, influenced this house is not indicated. Perhaps this observation is in regard to the Single House, Dessau or the Double Houses, Dessau of 1926, but in these designs there is little similarity. It seems reasonable to suggest that intellectually and stylistically, (as with the Czechs embracing Mart Stam in the Baba Werkbund of 1932), Polish Modernism of 1930-31 was looking at Czech models and Dutch models such as Rietveld and his Schroder House, while also being influenced by the ideas of Syrkus and Le Corbusier. One visible indicator of this fact is that the window arrangements in neither of the Bauhaus houses turn through 45 degrees – this type of corner window being a staple of the Modern Movement but not of the German Bauhaus vocabulary at this time. In looking for matters of reference, influence and cross-pollination the longitudinal nature of the Bauhaus houses could be said to represented in a number of later houses: the Weissenhofsiedlung 1927, J. J. P. Oud; Kiefhoek Housing Estate, Rotterdam 1928; Theo Van Doesburg; Studio House, Meudon-val-Fleury, Paris 1929 and L. H. de Koninck Canneel Cottage, Andergehm. As has already been demonstrated, tying a building into a particular context exclusively can be a futile exercise which raises more questions than it answers.

6.19 Tadeusz Michejda, The House of Dr.Kazimierczak, Katowice 1930



Notes to Chapter 6

[1] Op.cit., Lésnikowski W. (ed.), Bonta J., p.155
[2] Ibid., Bonta, q., József Fischer, *Internationalis uj Épitészek*,(International New Architecture), *Munka*, (Labor), 1930
[3] Op.cit., Blau and Platzer (ed.), Platzer M., p.229
[4] Ferkai A., *Zlaty rez (Golden Section)*, No.18, Winter, 1988, 'Away From Extremes, Remarks on Hungarian Modernism', p.14
[5] Ibid, p.15, see also, Isaacs R., 1991, p.76-79
[6] Ibid, p.15, q. Mano Lessner,
[7] Op.cit., Meller H., 2001, p.106-111
[8] Ibid., p.107
[9] Ibid., p.109
[10] Gresty H., (ed.), *Constructivism in Poland 1923-1936*, Kettles Yard Gallery, Cambridge, 1984, J. Zadgroski, 'The Origin of the Avant Garde in Poland', p.7
[11] Ibid., p.27, 'Documents Catalogue of the New Art Exhibition'
[12] Ibid., p.26
[13] Ibid., p.17, 'Groups of the Constructivist Avant Garde'
[14] Ibid., p.17
[15] Czerner O. and Litowski H. (eds.), *The Polish Avant Garde Architecture and Town Planning 1918-1939*, In Search of a New Content and Form, p.79. The information within this work, a 306-page catalogue about avant-garde movements in Poland published in 1981 under Soviet control, is richly illustrated; with *exact* translations of what was said and intended.
[16] Ibid., p.82
[17] Op.cit., Lésnikowski, 1996, p.259

CHAPTER 7

REFLECTIONS ON THE THEMES

Nation Building

A return to National Styles

Safeguarding the old while engaging with modernism

The development of the Modern Movement and the influences from Non-Objective Art

Contribution to Knowledge

Further Research

CHAPTER 7

Nation Building

From 1895-1939 the architectural history of Central Europe was one of geopolitical, social and ideological experiment. As defined in Chapter 1, *Mitteleuropa*/Central Europe had a history of shared values and traditions through extended trade and political interests and it is these that drove modernism forward. Otto Wagner as Professor of Architecture at the Academy in Vienna in 1894 began this process by calling for a new approach to architecture independent of the past, forward looking and capable of taking towns and cities into a new century. What was needed, beyond Vienna, was a unifying principal that would appeal equally to all of the non-Germanic nations that did not rely on ideas of national identity but embraced the concept of nation building one with another as in the perception of *Gemeinschaft* [p.4].

This modernisation did not progress at the same speed or with the same intensity in all of the nations. There is a very clear difference in architectural advancement between Poland and the Czech lands and latterly Hungary as one grouping, with Croatia and Slovenia as a second group. These splits were mirrored in ethnic divisions, Poland and the Czech lands – Northern Slav; Croatia and Slovenia – Southern Slav and Hungary – Magyar. As the idea of national identity resurfaced in the early 1900s, Hungary, Poland and the Czech lands reinvested in the imagined safety of ethnic traditions.

A return to National Styles

In Hungary, where people had long searched for the origins of the Magyar race a national style was seen. This national style was driven by the idea that in being the first country to distance itself from Vienna, Hungary would be able to establish political and economic independence. How this was to be accomplished was unclear. One of the major problems to be overcome was that Magyar (a Finno-Ugric language) is difficult to understand and as the language of business, government and exchange was still German this separation from Vienna would be very difficult to achieve. The Godollo Studios were the visible evidence of this attempted separation where all those disparate strands of the Magyar style as expressed by Jozsef Huszka were present in a range of decorative and applied arts produced within the artists' colony. These decorative elements of Transylvanian, i.e. Szeke and Kalotaszeg origin, were amalgamated as an 'architectural appliqué' by Odon Lechner in the Post Office Savings Bank, 1899-1901.This pursuit of national style ran not only through the architecture of Odon Lechner

and Istvan Medgyaszay but also in the music of Franz Liszt, the Hungarian Rhapsodies from 1846 to 1895. This upsurge of national identity was also evident in the Zakopane district of Poland and in Bohemia and Moravia where it was seen as a very necessary cathartic solution to the previous dominance.

It was inevitable that with greater moves to allow the towns and cities of the (former) empire to modernise that any national style would be short-lived.

The next question to be answered was how this expansion would be controlled. Could the fabric of the old towns and cities be safeguarded in pursuit of these economic goals?

Safeguarding the old while engaging with modernism

This thesis demonstrates that the expansion was accommodated by very clear planning and building throughout the cities of Central Europe, although each town or city had different needs. The material below demonstrates some examples drawn from the core lines of enquiry of the thesis.

Development in Zagreb was very much dictated by a repositioning of part of the city below the railway line as *Novi Zagreb* (New Zagreb) where a new commercial district was arranged complete with commercial fair grounds and a new port on the river to aid exports.

Ljubljana was re-planned and buildings restored by Maks Fabiani following the earthquake of 1895 though very little new building or commercial development took place from that date onwards until the later phase of modernisation by Jože Plecnik from 1928.

Brno, as the commercial and industrial hub of the Czech lands, grew at an astonishing rate with an emphasis on heavy engineering, brewing, textiles and steel produced by a workforce of 31,000.

Zlin was planned from the ground up as an uncompromisingly modern city. What confounded the critics was that this was a Modern Functionalist solution to the problems of an urban environment employing all of the latest materials and techniques of construction, yet located within a garden city setting. This is explained by the fact that the only knowledge Tomas Bat'a had of the garden city was from English sources.

Zlin was able by the employment of standardised building methods to progress from a rural village to a self contained commercial metropolis without compromising the inhabitants' quality of life. Although Zlin, like Zagreb and Ljubljana, arose as a modernist expression of the garden city of the future unlike them it later became an expression of the aims of the Modern Movement.

None of these cities had to rely on an urban plan as large and involved as Wagner's *GrossStadt* for their development. All was achieved within established practices of urban planning.

The other representative of the Modern Movement that was to have a considerable resonance throughout Czech and Polish architectural thinking was the birth of non-objective art. These ideas progressed from statements of subject-object relationships, as with the writings of Pavel Janak c.1910, to be expanded by Szymon Syrkus c.1924 to insist on links between architecture and industry and the challenge of a mechanised world that had to respond with great adaptability to rapid social changes.

The development of the Modern Movement and the influences from Non-Objective Art

As Central European architecture progressed from the 19th to the 20th century the impact of French Cubism was being seen firstly as cubo-expressionist, then as Rondo-Cubist works through the architecture of Josef Gocar, Josef Chocol, Pavel Janak and Vlastislav Hofman in Prague. Although these works are seen as an architecturally-resolved national style they are no part of the earlier period as discussed in a 'Return to National Styles'. All of the exponents, particularly Pavel Janak, had read widely on the nature of the Gothic from German text and it is argued that this source as distinct from others provided him with his 'cubist' vocabulary.

As recently discussed by Murray (The Burden of Cubism, Blau and Troy [ed.]), making definitive statements about the connection between French Cubism and Czech architecture was more problematic than first imagined when approached on the basis of stylistic or intellectual convergence. The truth of this relationship is best represented by the 'off-centre' theory where it is recognised that experimentation with Cubist ideas by Czech architects was a response to the shock of major changes i.e. the dissolution of Austria-Hungary and the First World War. Theoretical papers were written where the effects of matter being acted upon by abstract, unseen energies were capable of revealing the internal content of a building from viewing the exterior form as if in a

transposed three-dimensional overlay. This understanding of structure would allow Czech architecture to progress through co-operation and syncretisation to the establishment of Functionalism.

The architectural position in Poland was very similar, developing from the national style as the Zakopane vernacular, through a number of transitional phases. A group formed as the Polish Constructivists, 1923-1936, gave voice to social demands – architects and planners should work as one to develop large urban conurbations that would meet the needs of the entire population. This vision of cities in the 1920s was taken from a variety of sources but particularly in this case from the writings of Le Corbusier. The major proponent of these ideas in Poland was Szymon Syrkus. He followed Le Corbusier's view that the relationship between residential areas and greenery was to be well considered even when the demands of constructing large numbers of small, inexpensive flats from prefabricated parts seemed to deny this possibility.

This social approach to the construction of apartments was first presented in 1926 with the collaboration of Szymon Syrkus and Teresa Zarnower for the First International Exhibition of Modern Architecture, Warsaw. The other major part of their architectural work was in building exhibition pavilions to promote the newly found commercial independence of Poland. The modern neo-classical style used by Bohdan Pniewski and Stanislaw Brukalski for the Polish Pavilion at the 1937, Paris Exhibition, is contrasted by the Functionalist, Polish National Pavilion, 'Art and Technology' of Bohdan Lachert and Joszef Szanajca at the same event. In writing in *l'Illustration,* in 1937, Louis Richard Monet wrote about the Polish exhibition halls of the Paris World Fair of 1937 in glowing terms. 'What a splendid assertion of its finally liberated personality is afforded the visitor by resurrected Poland'. He did not know the fate that was about to befall her.

Although much was promised from this group and their incarnations in Zwrotnica 1922, Blok 1924-1926, and Prasens 1926-1939, the advent of the Second World War ensured their high-minded ideals were subjected to over simplification and distortion, producing tightly packed housing where people were living in cramped conditions. Despite great difficulties the group continued their works and social ideas through Helena Syrkus, the architect wife of Szymon, who progressed through the Polish CIAM to become a Vice President of the CIAM Council alongside Le Corbusier and Walter Gropius in 1947.

Comparatively little was happening in Zagreb at this time, having recovered from the earthquake of 1880 and investing the city with the Green Horseshoe which had subsequently been expanded and developed. The city now had to adapt to an influx of

people coming to the new capital of the Croatians. The growth in population Zagreb had seen 1900-10 was as nothing compared to the influx of people post-1918 at the end of the Austro-Hungarian Monarchy. The inter-war years were marked also with a considerable number of foreign architects from France, Italy and Germany visiting the city. Peter Behrens, a pioneer of modernism, recognised within Zagreb a unique blend of architectural styles that echoed Adolf Loos' work – most notable in the Stock Exchange Building, 1923-1927.

The further observation of architectural production in Zagreb during this period reveals a large amount of new construction carried out in a modern style that broke away from the historicism of the past. The architecture was recognised as international, but not necessarily of the International Style. This position was to change with the return of many architects who had trained with Le Corbusier such as Ernest Weismann and with Hans Poelzig: Drago Ibler and Zdenko Strizic. The new regulatory plan for Zagreb 1931 showed the influences of Le Corbusier's 'City of Tomorrow'. But like much in Central Europe that was progressive the Second World War halted development; however the plan was in part realised through Soviet Socialist Realism and more than any other Central European country the architecture of 1920s and 1930s Zagreb acted as a reference point for future architects working in Croatia.

Hungary by 1930 had adopted many of the concepts of the Modern Movement as expressed in Poland. These ideas were not used initially in building for the majority of the population but in the building of private houses for a middle class receptive to progressive ideas. These houses from the drawing board of Farkas Molnar and Josef Fisher were constructed 1930-1936. However, as in the Polish experience, there became a necessity to build large apartment blocks. Great thought was given to these blocks so as to avoid the routine or dull. Bela Hofstatter and Ferenc Domany produced a number of well-appointed apartments that enjoyed a panoramic view across parklands and over the Danube. Much of this work was influenced by CIAM. This consideration of location and space was also present in numerous industrial and governmental buildings where a linear balance of horizontal windows with little clear indication of interruption from vertical features became a staple of the architects working in Budapest.

One of the finest examples of this type of building is Gedeon Gerloczy and Nandor Kormendy, Magdolna Hospital, Fiumel Avenue, Budapest, 1939. The Stuhmer Chocolate Factory, Budapest, 1941, reveals how far this application of Functionalism might have progressed. Of note is the improvement in the disposition of the elements of the frontage in the understanding of Functionalism developed in the three years

between the buildings without the advent of the Second World War. Unfortunately all of the advances made by Central European planners and architects were lost from memory for a considerable number of years.

Contribution to Knowledge

This thesis, in common with a number of the major works cited in the Literature Review, can be seen as a platform for further discussion exploring historical issues around the development of modernism and the Modern Movement in relation to architectural developments and town planning in Central Europe.

By reviewing the extant literature in discussion with Central European authorities and by drawing upon a little known range of sources, this thesis brings into focus the role of key individuals such as Plečnik, Fabiani and Kotěra and it explores the significance of developments in town planning in places like Zagreb and Ljubliana.

In restoring missing detail and revisiting some of the key sites, the thesis reveals how Central European individuals made early and significant contributions to the development of architectural modernism and the Modern Movement that have hitherto received little critical acknowledgement. For example, Maks Fabiani is revealed by the thesis as a significant contributor to Otto Wagner's seminal volume, *Moderne Architektur*. Similarly, the thesis points up the significance of a number of architectural and domestic partnerships in which both the male and female view of the function of architecture (as developed in social housing) was to be found expressed within both Hungarian Functionalism and Polish Constructivism.

Finally, what this thesis reveals is how these figures developed what can be seen as local solutions, rooted in the context and culture of individual towns and cities and their unique histories. More significantly, this thesis demonstrates that these independent initiatives were formed with an understanding of - and in response to - wider national and international developments in the field of architectural modernism. In this connection, the thesis can be regarded as part of an emerging academic effort to redress the history of the Modern Movement (following the lead of Norman Davies) and an attempt to set in motion a raft of suggestion for further research into this rich field of cultural endeavour.

Further Research

Research in the future might usefully concentrate on some themes highlighted in the thesis. For example, more detailed prosopographic analysis of the interconnections between major actors in particular countries, especially those husband and wife teams that have been identified in Poland and Hungary.

The relationship between Maks Fabiani and Otto Wagner would benefit from an examination of its nature, duration and extent, drawing wherever possible on primary materials.

Another area that might benefit from more extended analysis is the early influences on Le Corbusier from Turkey and Central Europe.

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APPENDIX 1

SITE NOTES AND OBSERVATIONS – JOŽE PLECNIK'S HOUSE
4-6 KARUNOVA STREET, TRNOVO, LJUBLJANA

For: Mr Bernard Davies

bdlg02948@blueyonder.co.uk

Date : 25th September 2001

Subject: VISIT TO LJUBLJANA

Dear Mr Davies,

I got your message. From two or three senteces I realised that you should be very well informed about the architectural and town plannig situation in Central Europe. Of course the presentation of Plečnik's Ljubljana in AA-School in London two years ago by Mel Gooding and his book on Plečnik's National and University library is probably just the beginning of the great and very necessary dicsussion which should be opened as soon as possible. It is very hard to take position who was more succesful: western modernists or Plečnik, Loos, and people of their kind. Plečnik and his Ljubljana town planning was discovered in a certain moment when the rigid modern paterns of designing the city were not sufficiant any more. Of course this is worth to be discused.

Please, do define your visit to Ljubljana in October and I shall find some time to talk to you.

Warmest wishes.

Yours Sincerely,

Peter Krečič

21/10/01

J.T. 11/10/01 ? IVAN MEŠTROVIĆ FEDERICO ZUCCARI Who he?

KEY ISSUES SLOVENSKA MODERNA

ZALE FUNERARY COMPLEX Where? How far from centre

BARJE CHURCH OF ST. MICHAEL Where? How far from centre Trad forms from Slovene sources mixed with concrete columns & modern techniques

SPECIAL MEANING for SLOVENES in J.P.'s WORK!

(*) Catalogue J.P. Architectural Museum Ljubljana / Pompidou (*) Centre Paris 1986

AUGUST CERNIGOJ → WEIMAR BAUHAUS → LJUBLJANA

& form SLOVENE MODERNIST MOVEMENT (ALSO) →

VLADIMIR SUBIC Arch. Dept German Tech School Prague

first SLOVENE SKY SCRAPER 1933 NEBOTICNIK

tripartite division a' la LOUIS SULLIVAN

Functionalist / Rationalist mixed with classical & deco.

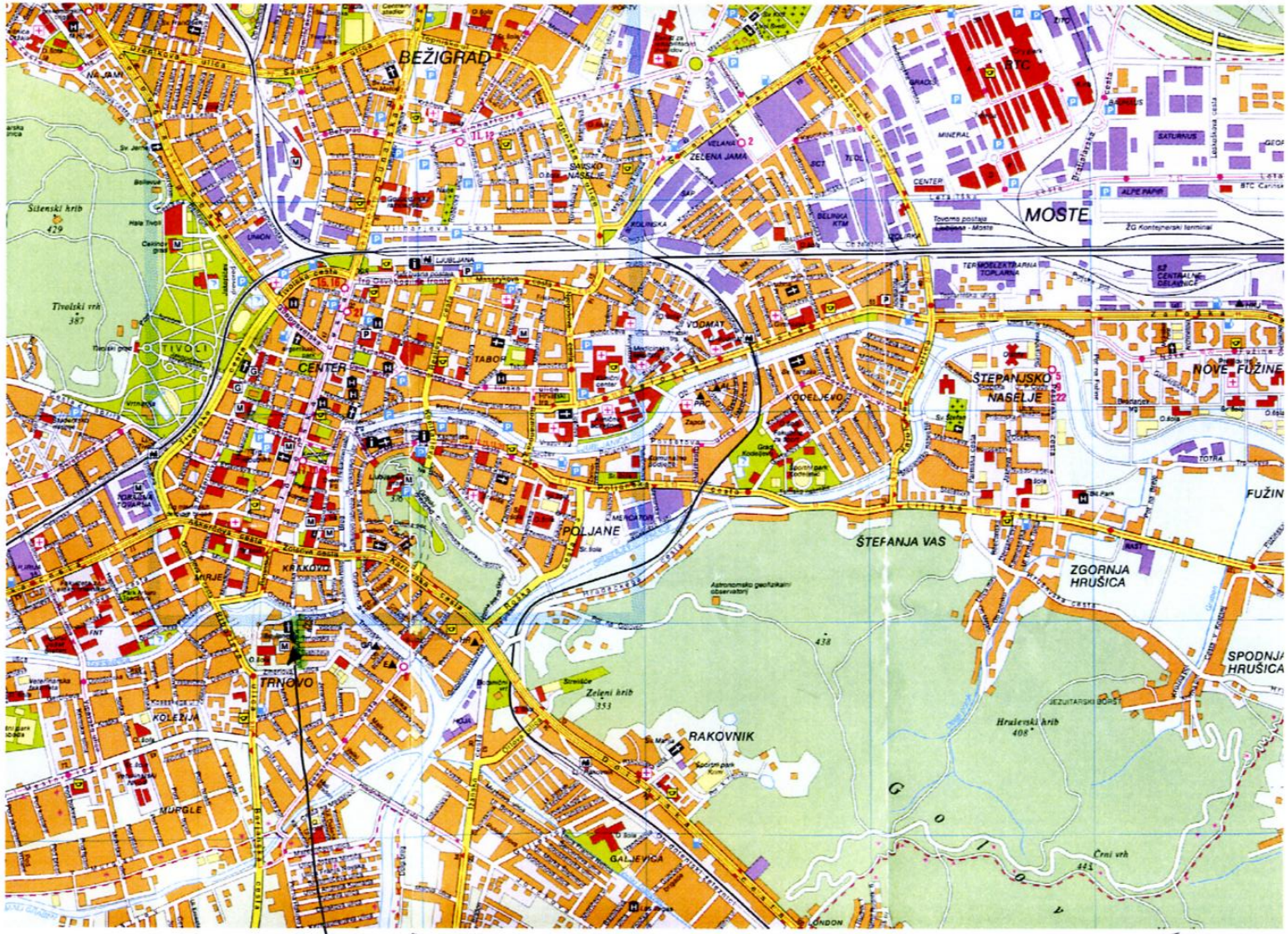
Many students → VIENNA study under Peter Behrens until Professor VURNIK appt. & adopted functionalist principles after visiting L'Exh. Arts Decoratif in Paris 1925 → used functionalism as replacement for nationalistic trends, realized these would not meet needs of population concerned with HOUSING PROBLEMS "i.e. HOW TO SECURE THE MEANS AVAILABLE TODAY CONSTRUCTION-WISE, TO COMPLETELY OUTFIT A DWELLING WHICH EVERY DILIGENT WORKER COULD AFFORD, THAT IS TO REPAY THE INVESTED CAPITAL & INTEREST." (*) Vurnik pursued these ideals WORKERS HOUSING SETTLEMENT MARIBOR 1927 (One of the first, parallel Dates with KAREL TEIGE, BABA & WEISENHOF) exh. Berlin 1931!

Also of importance are FRANCE TOMAZIC (Plecnik's assistant until 1931 rejecting JP's integration of

classical & nationalist forms, in favour of an NEW MODERN ARCH. FOR A DEVELOPING MODERN COUNTRY eg. VILLA OBLAK LJUBLJANA 1931-33 RAKOVNIK place

Used reinforced concrete construction (AUGUSTE PERRET) COMBINED Glass strip walling & concrete arch to produce max sunlight & heat, dining room over greenhouse connecting int. & ext. spaces.

Two other imp. arch. FERI NOVAK } (I know FERI MORVAT) nothing of him!!) who worked primarily in MURSKA SOBOTA? Where is this!! Studied in Vienna at Technical University at Peter Behrens studio → LE CORBUSIERS atelier in 1938 (FOR A FEW MONTHS ONLY!!) SERBEC FAMILY VILLA in MURSKA SOBOTA where he strictly followed LC's five principles pilotis, roof garden, flexible ground plan, ribbon window & flexible facade. Never completed due to WW II & later political changes.



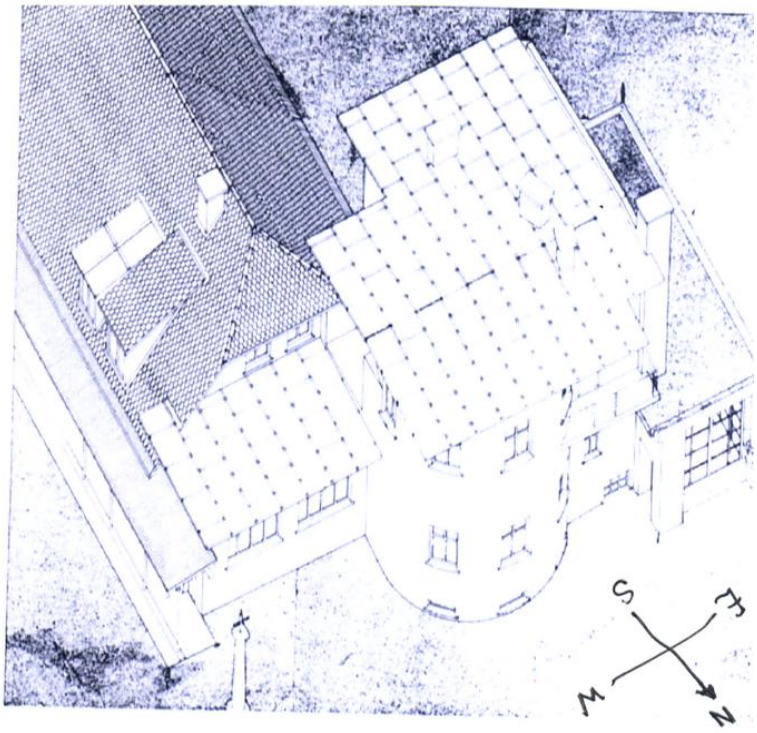
Plečnik's House relative to other works.

Page from Oxford Poly Cat. (P.K.)

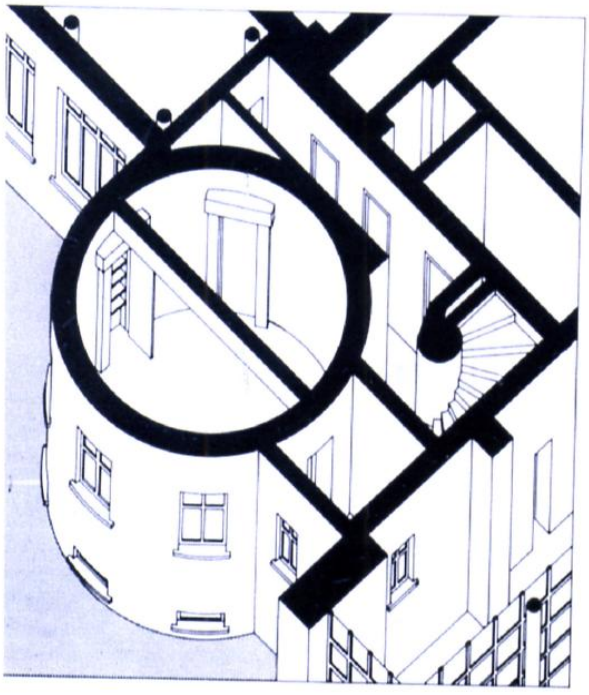
Trnovo today: Plečnik's house on the right

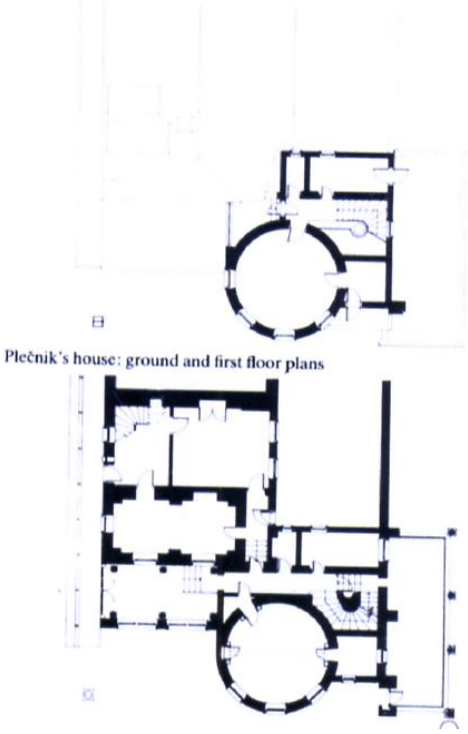
Plečnik's house: entrance area (1924)

Plečnik's house: east elevation



Plečnik's house: bedroom (axonometric of spatial structure)





Plečnik's house: ground and first floor plans

24/10/01

Plečnik The House, 1921 - 29

Kamenova Street 4-6, Trnovo Suburb, S ⟷ N

Two storey extension, column left over from Shoemakers Bridge, conservatory extension blends into original house. Most unusual arrangement, extension after extension.

More classical - architectural detail N.S. Conservatory

Another shot cited 24/10/01 column & vase.

Plčinik The Conservatory

Viewed East To West, left over column with vase, across Roman paved courtyard To parish Church of Thnove. From Sekeški Finžgar Parish Priest, Great Friend. (P.K.)

Indicator of faith.

Favourite arrangement Column that supports, or does it? Is it a column? No it's re-used Roman sewer pipes from Emona. (P.K.)

Christ & angles almost front.

Marble
Brick
Terracotta

Funerary Wreath

24/10/01

Plečnik, Entrance Hall

Wow! What a space, an architectural reclaimer with a fine eye.

Tiled stove with copper kettle in built.

Spinning Wheel

Glass Panelled Screen

24/10/01

Pleěnik, Small Reception Room

Tiny space same colour range, reminds of apothecaires shop, a touch of the alchemist as well. Textures in different woods throughout.

24/10/01

Plečnik, The Studio

Like all the other main rooms - burnt umber, yellow ochre, burnt sienna. Work tables, plan chest, drawing instruments.

Austere, like living in a Zurbarán, same religiosity

PLEČNIK

THE COMPLETE WORKS

PETER KREČIČ

to a very good fellow
Bernard Davies with
compliments

24th Oct 2007

Peter Krečič

AD ACADEMY EDITIONS • ERNST & SOHN

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