Then Century of Concrete

The Development of Concrete Technology in Modern European Prefabricated Housing

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Abstract

This article traces the development and social impact of prefabricated concrete housing technology in Europe since the 20th century, dividing it into three main periods.

Early Period (1905–c. 1923): Prefabricated concrete housing technology first appeared in Britain, exemplified by John Brodie's workers' housing project, aiming to improve living conditions at low cost. Later, inspired by Ford's assembly line production, American architect Grosvenor Atterbury first proposed standardized prefabricated concrete components, implementing a factory prefabrication and on-site hoisting process in the Forest Hills project in New York. His "Bron system" was subsequently introduced to Europe and validated in the Betondorp project in Amsterdam, laying the technological foundation for subsequent development.

Development Period (1924–1930s): Under the pressure of post-World War I reconstruction and urbanization, Germany became a center of technological innovation. Martin Wagner, Ernst May, and Walter Gropius, among others, improved the Bron system, solving problems related to transportation, connection, and insulation, and promoting component standardization and construction process optimization. These achievements not only influenced large-scale housing construction in Germany but were also introduced to the Soviet Union to adapt to its industrialization needs. The concept of prefabrication has also profoundly influenced CIAM's modularization discussions and the idea of "functional cities."

Maturity Period (1948-Present): Post-World War II housing shortages spurred the widespread application of prefabrication technology. French engineer Raymond Camus invented a prefabricated large-panel system, enabling industrialized production and its adoption both in Eastern Europe and many Western European countries. Consequently, prefabricated concrete housing became a major tool for post-war urban expansion, shaping the urban landscape and residential patterns throughout Europe.

Simultaneously, these architectural practices influenced architects such as Moshe Safdie and Kisho Kurokawa, who used prefabricated concrete buildings as a tool to respond to social issues, exploring new directions such as modularity and variability.

In terms of social impact, prefabricated concrete housing gradually evolved from initial technological experiments into a major means of urban shaping, becoming a symbol of "a better life" after the war. However, since the 1970s, it has faced widespread criticism due to issues such as quality, monotony, and social isolation, becoming an object of reflection on modernity in artistic works.

Looking to the future, prefabricated concrete technology is developing towards sustainability, intelligence, and digitalization. The application of new technologies such as material improvement, component replaceability, 3D printing and digital construction makes it still of great potential in addressing urbanization and housing pressures in the 21st century.

Key words: Prefabricated concrete housing, 20 century Europe, Big slab technology, Urbanism, Modernist architecture

Chapter 1: Introduction

For many ordinary Chinese people like myself, prefabricated concrete housing carries very complex emotional connotations. On the one hand, this product of the planned economy era is often known for its poor lighting conditions, small rooms, and lack of semi-communal spaces, making it a low-priority option for many young homebuyers. On the other hand, these so-called "family dormitory" buildings, situated in urban environments where factories once served as community units, also embodied the free housing of the older generation (and some younger generations in their childhood), close neighborly relations, and a diminished sense of social status. In today's real-estate trading, these silent concrete "monuments" quietly observe social changes and family gatherings and separations, as if waiting for their glorious era that will never return. This inevitably makes me wonder: What kind of experiences have those European prefabricated concrete housings, the distant cousins of Chinese "family dormitory" buildings, had?

In the last century, Europe experienced a surge in housing demand and economic development, leading to the growth of prefabricated housing. Concrete prefabrication technology, with its high plasticity and ease of production (Thomas Bock, 2015), became a hallmark of this era, transcending national and cultural boundaries, and even shaping the collective memory of a generation to some extent (Pedro Ignacio Alonso, 2019). The development of prefabricated concrete technology thus largely reflects the transformation of standardized housing in Europe. In this paper, I think that the development of prefabricated concrete housing in Europe can be divided into three main periods.

The starting period began in the early 20th century. Pioneers from this period, such as John Brodie's workers' housing in England in 1905, the "Concrete Settlement" in Amsterdam, Netherlands in 1919, and Le Corbusier's Citroën house in 1921 were all inspired by the production experience of the automobile industry (Sandra Hofmeister, 2018). In the mid-to-late 1920s, Martin Wagner, Ernst May, and Walter Gropius, made technological improvements to sealing, transportation, and load-bearing systems in Germany. Their achievements directly influenced the development of prefabricated construction in the Soviet Union and other regions during the same period (Regine Hess, 2024). Subsequently, in the post-war maturing stage, Raymond Camus's prefabricated large-panel system in 1948 and Hans Schmidt's theories in the 1950s gradually led to the replacement of block systems with large slab systems, promoting

large scale production (Philipp Meuser, 2019). Simultaneously, prefabricated concrete components were also used by some architects to respond to social issues (Allison Arieff, 2002), such as Moshe Safdie's Habitat 67 and Kisho Kurokawa's Nakagin Tower. These projects absorbed European technological achievements and, in turn, influenced European academia. In this section, I will mainly present and summarize historical facts.

Following this, I will briefly discuss how these three periods shaped the society we know today. In short, prefabricated concrete housing was initially just an emerging technology. Later on, inter-war reconstruction needs spurred its technological development, but at this time, large-scale replication of prefabricated concrete housing was not feasible. However, in the post-war mature period, the large scale construction of prefabricated concrete housing began to reshape the urban landscape. Initially, both sides of the iron curtain saw it as a path to a new life. But after the reconstruction work in Europe was largely completed, the society's views gradually associated it with a repressive and monotonous life—like all widely adopted new technologies, prefabricated concrete housing experienced a cycle of rise and fall (Pedro Ignacio Alonso, 2019). In this section, I will briefly summarize the historical facts listed in the previous chapter and explore the relationship between changing societal perceptions of prefabricated concrete housing and social development, incorporating some literature and artistic creations.

Finally, I will offer a brief prediction of future development models for prefabricated concrete housings. For example, I believe optimizing the design of prefabricated concrete components to make them easily replaceable will be a major focus. Simultaneously, improvements in concrete manufacturing processes and their integration with A.I. technologies will also be key trends of interest. This section will be built upon the development trends mentioned above.

In conclusion, I hope that through this content, we can learn and understand the role of concrete in the prefabricated housing process, and thereby help us find the appropriate place for prefabricated concrete housing in today's productive relations.

Chapter 2: Development Process

Prefabricated construction is not a new concept in the construction industry. As early as the 19th century, countries such as Britain and the United States were already selling prefabricated modular buildings to the world (colonies) (Cody, 2002). Since the invention of reinforced concrete in the mid-19th century, the technological foundation for prefabricated concrete housing has been largely laid. However, a review of its development history reveals that each substantial breakthrough in prefabricated concrete construction technology has relied on strong socio-economic impetus. Therefore, based on this characteristic, the author believes that the development of modern prefabricated concrete housing technology can be roughly divided into three stages: the initial stage, the development stage, and the mature stage.

2.1 Early Period (1905 – c. 1923)

Currently, architects generally believe that the use of prefabricated concrete in residential construction first appeared in Britain. In 1905, John Brodie designed and built prefabricated concrete workers' housing in Letchworth Garden City, Liverpool. This project made Brodie a pioneer in prefabricated concrete. Through this technology, he hoped to provide workers with relatively inexpensive and high-quality living conditions, thereby solving Liverpool's slum problem. (Alan Powers, 2007)

Furthermore, the success of Ford's Model T automobile in 1908 demonstrated the potential of modern large-scale factory production. It proved that assembly lines, besides producing simple, repetitive products, could also produce complex machinery like automobiles if properly planned. (Sandra Hofmeister, 2018) This factor further spurred architects to consider the intensive production of building materials.

Inspired by Brodie's Liverpool project, American Grosvenor Atterbury was the first to propose standardizing prefabricated concrete components. In 1909, the Russell Sage Foundation pledged funding for a residential area on Long Island, New York, aiming to provide affordable housing for working-class families. (Jara, 1997) To realize this semi-charitable project, Atterbury designed approximately 170 standardized concrete components. These components were manufactured in a factory and installed on-site by crane. (Thomas Bock, 2015) His concept laid the foundation for the initial process of prefabricated concrete construction as we know it today. Following the success of the Forest Hill project, in 1918, Atterbury took his experimental prefabricated reinforced

concrete technology to Europe and registered a patent in the Netherlands under the name Bron. (Meuser, 2018) With this, in 1922, the "Betondorp" project in Amsterdam became the first pilot project in Europe to systematically adopt prefabricated reinforced concrete technology. As an experimental project, it successfully fulfilled its mission of improving workers' quality of life while testing the feasibility of new construction technologies. (Searing, 1987)

The successful application of the Bron system in the Betondorp project marked the readiness of prefabricated concrete housing technology for larger-scale use in Europe. Thus, we can see that, like the development of many new technologies throughout history, the construction industry's exploration of prefabricated concrete housing stemmed from the pursuit of cost and efficiency. In the approximately 15 years from the birth of prefabricated concrete technology to its initial formation, architects primarily addressed the question of whether prefabricated concrete technology even existed, laying the foundation for subsequent development. Therefore, I consider this period to be the early stage of prefabricated concrete development.

2.2 Development Period (1924 – 1930)

Although the technology had been proven, large-scale application of prefabricated concrete housing in Europe did not occur until the mid-to-late 1920s. In Germany, after witnessing the success of the Bron system in New York and Amsterdam, Martin Wagner, then the construction director, introduced it to the German construction industry in 1924 under the registered name "Occident," and implemented it in a project of 138 housing units in Berlin. Addressing the difficulty of transporting and installing the large prefabricated concrete slabs in the Bron system, Wagner and his team shifted the production of these components to the construction site, employing special methods to reinforce them during hoisting. However, this approach proved to prolong the construction cycle, and due to the small scale of the project, the cost remained prohibitively high.

At this time, pressured by Germany's post-war economic recovery and population growth, the government needed to find fast and inexpensive housing solutions to fulfill its political promises—leading the German construction industry to place particular emphasis on technological innovation in prefabricated concrete housing.

In Frankfurt, from 1925 to 1930, Ernst May oversaw the design of six residential projects, totaling over 15,000 homes, based on the Occident system. In these projects, May adopted the production approach of combining standardized specifications with minor variations from the Bron system, but he broke down components into smaller parts for easier transport and assembly. Simultaneously, to address wall connectivity issues, May improved component design to allow for greater tolerances and introduced caulking, plastering, and insulation layer application processes. (Seelow, 2018) However, while this construction method employed industrialized production, a significant amount of manual labor remained on-site, and the numerous modules required longer construction periods, all of which increased the project's time cost.

In contrast, Walter Gropius's residential design in Dessau that same year was more radical. In this project, Gropius used slag concrete partition walls combined with a load-bearing structure of prefabricated reinforced concrete beams. This layout allowed for greater freedom in the design of the non-load-bearing exterior wall modules, and the lighter construction materials also meant lower costs. (Philipp Meuser, 2019) Shortly after, in 1928, due to the unprecedented population pressure on major cities and industrial centers brought about by the implementation of the First Five-Year Plan, the Soviet Union also introduced Ernst May's prefabricated concrete block structure, naming it the "Frankfurt Standard Panel," for production. In practice, some Soviet prefabricated components were smaller than May's original, and due to material costs, the pump stone in the German concrete formula was replaced with slag—but the structural performance of the two was not significantly different (Regine Hess, 2024). Later, although the construction of these prefabricated concrete houses had to compromise with the prevailing Neoclassical style in the 1930s, Soviet designers, in their attempt to assemble Neoclassical facades using prefabricated concrete components, inadvertently laid the foundation for later explorations of personalization in prefabricated architecture in the Soviet Union and throughout Eastern Europe—larger exterior wall panels, replaceable facade components, etc.

In short, Wagner, May, and Gropius primarily improved upon the Bron system in the 1920s, proposing new developments. Martin Wagner proposed solutions for construction logistics to address the excessive weight of large prefabricated components; Ernst May proposed construction methods that met insulation requirements for connecting different concrete components; and Walter Gropius proposed new construction strategies for facade morphology and construction costs (Philipp Meuser, 2019). Their innovations also inspired prefabrication explorations in

countries like the Soviet Union with similar needs for large-scale housing construction, paving the way for the mature application of prefabricated concrete housing in Europe later on.

It is worth mentioning that the industrialized production model of prefabricated housing also had a significant impact on the CIAM (Construction of Advanced Housing) philosophy at the end of the 20th century. In the CIAM 2 discussions on minimum living, German architects such as Ernst May, with their mature experience in prefabricated concrete housing, directly influenced the modular construction ideas of the conference (Mumford, 2019). This, along with the CIAM 3 conference's idea that "housing estates were not seen in isolation from their urban context," directly led to the now widely recognized "functional city" bearing the marks of prefabrication and modularity (Gold, 1998).

2.3 Maturity Period (1948 – present)

In the 1940s, the development of prefabricated concrete housing in Europe stagnated due to World War II. However, the housing pressure following the end of the war quickly led to a surge in the application of prefabricated concrete technology. In 1948, facing the dual pressures of urgent reconstruction and a shortage of human resources in France, Raymond Camus invented a complete industrialized manufacturing system for prefabricated reinforced concrete slabs (Solopova, 2025) and established the first prefabricated component factory in 1954. Thanks to Camus's improvements, prefabricated concrete housing became more economical and of better quality (Meuser, 2018) and was exported to many countries, indirectly shaping the common form of prefabricated concrete housing after the war.

In 1954, marked by Khrushchev's speech at the All-Union Congress of Architects and the publication of the memorandum "On elimination on excesses in design and construction" the following year, the Soviet Union began large-scale adoption of prefabricated concrete housing blocks to achieve a balance between comfort, convenience, and economy in new residential areas (Engel, 2024). This directly led to the Soviet Union, French African countries, Germany, Austria, and other nations fully adopting Camus's large-panel concrete production line around 1960, and beginning large-scale design and construction of prefabricated concrete apartments.

Meanwhile, CIAM, a group advocating prefabrication, dissolved in 1959, but its influence gave rise to several architectural groups, including the British Archigram and the Japanese Metabolism movement (Piqueras Blasco, 2024). These groups, regardless of whether they fully agreed with CIAM's concepts, were profoundly influenced by its modular and prefabricated ideas (Mumford, 2000). With the rise of human rights and environmental issues in the 1960s and 70s (Arieff, 2002), they used prefabricated concrete housing as a tool to reflect on the ills of modern cities and proposed their own visions for the future city.

For example, Kisho Kurokawa, a member of the Japanese Metabolism movement, used more than 140 prefabricated concrete housing modules in his 1972 design for the Nakagin Capsule Tower in Tokyo, aiming to adapt to the dynamic changes in housing needs in a modern, technologically advanced society. (Ishida, 2017) He also envisioned future cities composed of these modular structures, but due to technological limitations, actual use did not develop as he envisioned.

Furthermore, in 1967, Moshe Safdie designed Habitat 67 in Montreal, Canada, to combine relatively inexpensive urban housing with suburban gardens. This building utilized 70-ton concrete modules directly hoisted and stacked. In 1975, Israeli architect Zvi Hecker designed a honeycomb-shaped concrete housing complex in Jerusalem; for aesthetic appeal and the possibility of additions, Hecker designed the housing modules in a dodecahedral shape (Meuser, 2018).

In short, compared to pre-war prefabricated concrete housing projects that focused on optimizing technical details, these post-war projects placed more emphasis on exploring the social potential of prefabricated concrete housing. This indicates that at this stage, prefabricated concrete technology had matured to the point where it could be widely replicated or tested, and there seem to have been no major changes since. Therefore, the author believes that the period from Camus's invention of the large concrete slab process to the present can be considered the mature stage of prefabricated concrete housing. Here, through careful analysis, we can easily see that two key advancements in the practice of prefabricated concrete housing in Europe at the beginning of the 20th century correspond precisely to the two most important historical events in 20th-century Europe—World War I and World War II. Therefore, based on this century-long iteration of prefabricated concrete technology, I believe the 20th century can truly be called the century of concrete.

Chapter 3: Influence

As can be concluded from above, the impact of prefabricated concrete housing on society is a process from indirect to direct.

Initially (Early Period), its impact was mainly ideological. At this time, the development of prefabricated concrete housing was driven by architects' concern for workers' rights. Therefore, the impact of various architectural practices in this stage mainly successfully demonstrated the potential of prefabricated concrete technology in cost reduction and efficiency improvement (Piqueras Blasco, 2024), thus laying the ideological groundwork for the promotion of prefabricated concrete housing.

Later (Development Period), as its advantages began to become apparent, the impact of prefabricated concrete housing expanded to specific architectural forms. Based on the technical characteristics of prefabricated concrete buildings, architects began to test the best design strategies for prefabricated concrete housing. For example, when Ernst May designed the New Frankfurt housing project in 1926, he and his colleagues designed a standardized "Frankfurt kitchen" based on the dimensions of prefabricated concrete components, making him one of the recognized inventors of the modern integrated kitchen (Meuser, 2018). Another example is in the Soviet Union. With the invention of the M=50 standard module in 1935, the same module was used for the exterior wall thickness, window sill height, and other aspects of prefabricated concrete apartment buildings designed throughout Moscow during this period. (Regine Hess, 2024) These architects brought design experience of prefabricated concrete housing to CIAM in the late 1920s, thus promoting CIAM's later discussions on the Existenzminimum (minimum of subsistence housing) and the urban functional zoning in the Athens Charter. (Gold, 1998) Of course, there were also urban practices in the field during this period, such as Ernst May's New Frankfurt plan and the "superblock" of the Soviet Union during the Stalin era. However, these examples, like the Bron system used in Betondorp in the Netherlands in the early 20th century, were more experimental and could not yet be considered large-scale applications of prefabricated housing.

In the later period (Maturity Period), the impact was more directly reflected in the urban landscape. At this time, prefabricated concrete housing was truly used as a tool for shaping new cities. In the post-war era, the extensive use of prefabricated concrete

technology in European urban expansion led to prefabricated concrete apartments becoming a hallmark of modern cities.

In former socialist countries, construction technology exerted an unprecedented influence on urban planning, primarily manifested in the planning concept of "micro districts." A micro district is a residential block enclosed by prefabricated concrete apartments, containing its own schools, shops, and other service facilities. Furthermore, there are requirements for green space within residential areas. These align with the guiding principles of urban functional zoning in the Athens Charter. (Engel, 2024) However, in practice, rapid expansion of residential areas often occurs on the city's outskirts, accompanied by the simultaneous construction of infrastructure such as roads and bridges. This puts greater pressure on urban traffic and encroaches on existing natural landscapes and agricultural land. (Engel, 2024) In each micro district, the maximum distance between apartment buildings is determined by the length of the crane boom, and residential construction dynamically adapts to population growth. This is why many micro districts often retain tower cranes. (Meuser, 2018) On a smaller scale, due to the span limitations of prefabricated concrete technology, many service functions such as shops, classrooms, and offices cannot be directly housed in prefabricated concrete residential buildings. This results in a separation between service functions and residential functions due to technological limitations. (Engel, 2022)

In Western Europe, although the application of prefabricated concrete construction is not as iconic as in Eastern Europe, it is still considered an important component of post-war reconstruction and urbanization. For example, before his large concrete panels became known worldwide, from 1950 to 1956, Raymond Camus used his prefabricated concrete technology to oversee thousands of housing projects in Le Harvey and Paris, France; (Solopova, 2025) Also in France, Le Corbusier considered his Unité d'habitation as the basic residential unit in his future urban plan. His design extensively utilized prefabricated concrete technology and the "unit" concept from prefabricated housing ideas, and he planned to extend it to urban areas. (Gans, 1987) In the 1960s, Sweden launched the Million Programme to promote urbanization, extensively using prefabricated concrete technology to construct housing, office buildings, and service facilities. Ultimately, although the project was halted after only about 50% completion due to housing oversupply, it still contributed hundreds of thousands of homes and large new urban areas to Sweden. (Turkington, 2004)

Another crucial aspect of this phase was the shaping effect of prefabricated concrete construction on postwar European urban culture. European countries unanimously viewed prefabricated concrete housing as a path to a better life. The most prominent example is the numerous propaganda posters in the Soviet Union during the 1950s and 60s depicting the construction of prefabricated concrete housing. These posters showed strong young men and female workers directing cranes to lift large concrete slabs, representing the anticipated prosperity of the Soviet Union—talent and development. (Alonso, 2019) Similar events were unfolding in capitalist countries. In Britain, companies and the government collaborated on ambitious slogans, aiming to use prefabricated concrete housing to "crusade against the slums." (Lewis, 2021) The 'Dura-Coignet' prefabricated concrete system, under the Dutch government's "neighborhood concept" initiative, brought 31,000 housing units to the Netherlands between 1959 and 1975. Compared to the traditional urban landscape, these five-story apartment buildings were promoted by the government as housing for all, symbolizing progress. (Sen, 2024) With the end of the war, the progress of reconstruction, and rapid technological advancements, European societies exhibited an optimistic sentiment. Regarding prefabricated concrete housing, the Polish saying "Cramped but mine" (Czepczyński, 2025) aptly summarizes people's attitudes.

However, starting in the 1970s, a reflection on prefabricated concrete housing occurred almost simultaneously on both sides of the Cold War Iron Curtain. For the Western world, which viewed housing as a commodity, these large-scale housing projects, primarily targeting low- and middle-income groups, were often associated with social discrimination and marginalization, as the relatively inexpensive modernist concrete housing was primarily intended for them. Meanwhile, the rapid urbanization brought about by large-scale housing development has led to frequent criticisms of prefabricated concrete apartments, including issues such as cold neighborly relations and a lack of semi-public spaces. In Eastern Europe, criticism of prefabricated concrete housing persisted from the mid-1970s to the 1990s. Among the most frequently cited problems were low-quality construction, monotonous appearance, and illogical spatial layout. (Czepczyński, 2025) These reflections on prefabricated concrete housing are so widespread that a considerable number of artistic works have drawn inspiration from them, as portrayed in a number of films such as Stone Face (1973) by Jan Halldoff in Sweden, Strange Adults (1974) by Ayan Shakhmaliyeva in the USSR, Věra Chytilová's Prefab Story (Panel story aneb Jak se rodí sídliste) in Czechoslovakia (1979), or Béla Tarr's The Prefab People (Panelkapcsolat) in Hungary (1982). (Alonso, 2019)

Beyond societal concerns, the growing environmental awareness that emerged around the 1970s further fueled the rejection of prefabricated concrete buildings. The most widely used cement in prefabricated concrete technology is Portland cement, and we now know that almost every step in its production generates environmental pollution, including wastewater, smoke, harmful gases, and noise. Cement production also produces some of the highest greenhouse gas emissions among various building materials (Barbulescu, 2025). While the cement industry wasn't studied as meticulously in the latter half of the 20th century as it is today, it was already recognized in the 1970s that economic growth cannot be endless, especially given the large-scale prefabricated concrete housing construction of the 1960s, which consumed vast amounts of non-renewable resources like limestone (Mohamad, 2021). Therefore, under the combined influence of environmental and social factors, the European craze for prefabricated concrete housing gradually faded into history.

In short, like many things in the 20th century, prefabricated concrete construction, after fulfilling its historical mission, inevitably fell from the widespread praise of its heyday to the tragic state of being criticized and despised. However, regardless of one's attitude towards this type of building, it is important to note that prefabricated concrete buildings provided approximately 5 billion square meters of housing space globally within a short period of 40 years after the war (Alonso, 2019). This construction technology transcends national borders, crosses continents, and ignores political conflicts, thus shaping a shared memory for a generation worldwide and becoming a unique label belonging to the 20th century.

Chapter 4: Outlook

Urbanization continues at a rapid pace in the 21st century. The United Nations estimates that by 2070, 58% of the global population will live in cities, placing immense pressure on global housing systems. Against this backdrop, the topic of affordable housing has frequently resurfaced in the minds of architects and governments worldwide, and prefabricated concrete housing—a pioneer of 20th-century urbanization—is naturally being re-examined. On one hand, more architects are using mature prefabricated concrete technology to build housing, but in a more sustainable way. For example, traditional concrete formulas are being modified to reduce heavy metal content, thereby lowering environmental pollution. More prefabricated processes are also being developed to enhance the various properties of concrete slabs, reducing reliance on later insulation and soundproofing materials (Muhammed, 2025). On the other hand, some cutting-edge projects are beginning to incorporate emerging technologies. For instance, ETH Zurich's DFAB House project innovatively employs digital design and planning, and utilizes digital processes for construction. The project uses 3D-printed concrete formwork, enabling components to fit seamlessly with other prefabricated wooden parts. This project, and similar attempts, are exploring the possibilities for large-scale automated production applications in the future. (Sandra Hofmeister, 2018) Coincidentally, in China, as mentioned at the beginning, a consumer-driven trend of renovating prefabricated concrete homes is also quietly emerging. Compared to expensive and luxurious newly built apartments, many environmentally conscious young people are choosing to purchase homes in those "family dormitory" buildings at relatively lower prices and renovate their interiors using a simple but environmentally friendly approach. After all, what kind of housing is more environmentally friendly than reusing existing buildings? In summary, despite the skepticism and prejudice against prefabricated concrete housing that began in the 1970s, this technology is experiencing a strong resurgence today, much like it did 100 years ago, driven by societal demand. Furthermore, I believe that prefabricated concrete housing will undergo another iteration in the foreseeable future.

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