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# DESIGN AS COMMUNICATION

*An Architectural History of Christian  
Universities in China*

YINRUI XIE



# Design as Communication

This book explores the architectural history of Christian universities in China, revealing how quasi-colonial power interaction and cross-cultural communication of meaning were channelled through religious and educational architecture in modern China.

The Christian universities in China witnessed an experimental representation of Chinese architectural identity, as the country – subject to an informal version of colonialism – struggled to become a modern nation-state and to rethink its identity. This book offers new knowledge to the prospering postcolonial studies of the architectural history of Asian countries, deepening our understanding of the scope and content of the nuanced colonial encounters between the East and the West, and the relationship between architecture and power. Borrowing ideas from architectural semiotics, this book explores how architectural meaning has been interpreted and sometimes modified by its audience(s), whose voice has been largely ignored in traditional architectural historical studies. It provides a unique scope to further understand the communicative function of architecture, throwing light upon the broader socio-cultural dialogue between China and the Western world in the twentieth century.

*Design as Communication* will be an enriching reference for those interested in the architectural dialogue between China and the West, architecture and postcolonialism and the localisation of Christianity in the world.

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**Yinrui Xie**

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*To my wife Shuang*



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# Foreword

The establishment of Christian universities in China coincided with the weakening of the Qing empire in the late nineteenth and early twentieth centuries and the establishment of a republic in 1911. The development of universities and colleges by American, British and Canadian Christian missionary organisations was an aspect of the informal colonisation and Western cultural imperialism to which a declining Chinese empire was exposed in its last decades. These universities proliferated and reached their peak in the interwar period, during which they had to contend with China's increasing politicised terrain. They were either abolished in the communist period or absorbed into new university institutions.

Yinrui Xie's book *Design as Communication: An Architectural History of Christian Universities in China* examines the architecture and planning of four of these institutions: St. John's University, Shanghai (founded 1879); West China Union University, Chengdu (1910); Yenching University, Beijing (1916); and Lingnan University, Guangzhou (founded in 1904 as Canton Christian College, becoming Lingnan in 1925). These examples and several other of the Christian campuses built in China feature buildings designed by Western architects – mostly American – in a manner that they thought was Chinese. This was based on different levels of observation and kinds of learning. Thus, while the architect Henry K. Murphy, who worked at both Yenching and Lingnan, pursued an architectural manner based on the Forbidden City – believing this to be a canonically “correct” Chinese building complex – the British architect Fred Rowntree instead based his buildings at WCUU on his observations of local edifices in Chengdu, and James R. Edmunds Jr., who preceded Murphy at Lingnan, learned rather from a local vernacular that had already integrated elements of European “colonial” influence. While the architecture in each of the four cases that Xie discusses was based on some apprehension of Chinese building design (sometimes of local construction practice as well), the campus planning instead approximated the Beaux-Arts layouts of contemporaneous universities in North America. The brothers Charles and Arthur Stoughton, for example – the first architects to work at Lingnan – had previously designed a grandly axial campus for the University of Manitoba. Plans for the Christian campuses in China were frequently compromised: by difficulties in acquiring property, protests by local populations, and – in the case of Yenching – by advocacy within the university itself that remnants of the historical

gardens that formed its site should be respected. Such things could be read as cases of local reaction to incursions of Western culture.

While Xie discusses such ad hoc changes to the university designs in relation to local pressures, he goes much further than this and considers how these places were understood and interpreted by their clients, successive generations of students, local communities and incidental visitors in what can be seen as an ongoing development of indigenisation. He thereby produces a dynamic architectural history that emphasises the multiple kinds of agency that make and remake places, physically and psychologically, regardless of what their architects intended. At St. John's, while the designers and the university administration emphasised the Chinese aspects of the campus buildings, its students instead read them as Western. In relation to WCUU, Xie traces a process he calls "sinicisation," whereby locations on campus were interpreted by Chinese students in the 1930s as "Eight Famous Scenes," as if they were parts of a Chinese landscape. One of these, "The Clock Tower in Moonlight," referred to a romantic locale adjacent to a clock tower which – as built – had departed somewhat from Rowntree's design. When the tower was renovated in 1954, the architect Gu Pingnan changed its proportions, making it more fitting with the other buildings on campus to local eyes. The interpretative work of sinicisation became architectonic. Its quasi-colonial origins now disregarded, the building evolved into an architectural icon that, much more recently, stood for Chengdu in a China Central Television weather programme.

This aspect of Xie's project that emphasises the responses of clients, inhabitants, visitors and incidental viewers to the architecture of the Christian universities, and how these responses change over time, is not treated as incidental but rather as something central to the evolution of these institutions. Xie thus connects the work of those who created the Christian universities and those who then read and interpreted them in a single theoretical frame. This reduces focus on the intent of the architect (or client), and considers which readings conformed with or departed from those anticipated by the makers, and whether such readings were antagonistic or complicit.

Xie adopts semiotics as his theoretical frame. In particular, he adapts key elements of Umberto Eco's *A Theory of Semiotics* (Bloomington: Indiana University Press, 1976). In architecture, Eco's essay "Function and Sign: Semiotics of Architecture" is much more widely read than *A Theory*: it has been published at least four times in the relevant English-language literature.<sup>1</sup> However, in its original Italian, "Function and Sign" was the chapter on architecture in Eco's *La struttura assente* (Milan: Bompiani, 1968). *A Theory of Semiotics* was written in English by Eco after "two unsatisfactory attempts at translation and many unsuccessful revisions" of *La struttura assente*.<sup>2</sup> I surmise that "Function and Sign" has been a popular text in architecture as it places conceptual emphasis on a term long familiar in the discipline: function. This is so even as "function" is now a superseded or at least subordinate idea, and one which is problematised by Eco even as he focuses on it. Rather than in the familiar terms of function, *A Theory of Semiotics* by Eco emphasises architecture's signficative rather than pragmatic sense. Architecture, Eco contends, should always be thought of as text rather than as an ensemble of

discrete signs. This is not to say that individual architectural signs cannot be distinguished, but that these signs can be discerned or disambiguated only through a framing that is provisional or, as Xie puts it, heuristic. In reality, ambiguity always reigns.

*A Theory of Semiotics* is devised in two parts: a theory of codes and a theory of sign production. One is an examination of conventions – or codes – such as those used by architects when they design, or that enable the apprehension of designs by others; the second is an account of how these conventions are used both conservatively and inventively by designers and interpreters. Innovations in sign production when widely accepted lead to changes in codes – that is, expectations – such that a temporal dimension is introduced, making Eco’s distinct from semiotic theories based narrowly on structural linguistics.

In *A Theory of Semiotics*, Eco posits sign production as entailing various modes of labour. In the architectural cases which are the focus of this book, Xie identifies five labours entailed in the production and interpretation of the built world: the learning of codes (as architects and clients tried to understand “Chinese architecture”); the weaving of architectural texts (as they made their buildings, landscapes and urban forms); programmed interpretation (where the codes of makers and interpreters coincide); productive interpretation (where they do not); and manipulation of interpretation (where interpreters resolve or at least find an accommodation for conflicting interpretations, even when this itself is unstable). Xie sees this model as offering a significant way forward in understanding architecture as cross-cultural communication, and therefore of interest in other, more overtly colonial contexts. But it has wider implications than this. The more or less agonistic coincidence of multiple cultures in most locations now means that cross-cultural communication is everywhere our current architectural norm.

Paul Walker, The University of Melbourne

## Notes

- 1 *Via* 1: 131–53 (Philadelphia: University of Pennsylvania Press, 1973). Versions also appear in Geoffrey Broadbent, Richard Bunt, and Charles Jencks, eds., *Signs, Symbols, and Architecture* (Chichester: Wiley, 1980), M. Gottdiener and Alexandros Lagopoulos, eds., *The City and the Sign: An Introduction to Urban Semiotics* (New York: Columbia University Press, 1986), and Neil Leach, ed., *Rethinking Architecture: A Reader in Cultural Theory* (London: Routledge, 1997).
- 2 Umberto Eco, *A Theory of Semiotics* (Bloomington: Indiana University Press, 1976), vii.



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# 1 Introduction

## Architecture of China's Christian Universities

Constructed in the late nineteenth and early twentieth centuries, China's Christian universities witnessed the country's most turbulent moments. The political environment of China changed greatly in this period, which marked the collapse of the Qing dynasty, the foundation of the Republic of China, and successive warlordism and revolutions. Parallel to internal power shifts, the country was simultaneously controlled by a group of imperialist forces in various aspects. Unlike "typical" colonies often dominated by one colonial force, China, as a semi-colony or "quasi-colony" in the words of Edward Denison, fell into an ambiguous and unsettled status featuring nominal sovereignty, implicit foreign control, the presence of multiple imperialist countries (including European countries, the United States and Japan) and a rapid shift of power structures among these countries as they cooperated or competed for more interest from China.<sup>1</sup> In this period, sixteen Christian universities were established in China by British and American missionaries, as a result of political, economic and cultural interaction among multiple social groups from both China and the Western world.<sup>2</sup> These universities pioneered bringing Christianity-based tertiary education to China, and their campuses and architecture materialised the drastic power interaction between the Western countries and a modernising China.

The Christian universities in China shared the same purpose: the "advancement of the Kingdom of God, by means of higher education."<sup>3</sup> However, in response to the tension between the Western missionaries and Chinese society, instead of proselytising overtly, Christian universities in China were discreet about the gestures they made to the local Chinese people. This discretion also extended to the architecture of these universities. Combining Western and Chinese architectural characteristics, the so-called "Sino-Christian style" of these buildings was expected to express multiple meanings: that they were not colonisers; that the university authorities respected Chinese culture; and that the universities intended to preserve "all that was valuable in China's cultural heritage" and to combine it with modern education.<sup>4</sup> The campus planning and architectural design of these universities thus performed as concrete instruments staging dialogues between two sides: the "authors," referring to the designer and the client who send the message; and the "audiences," such as the Chinese students and local villagers who receive the message.

## 2 *Design as Communication*

This book aims to provide a systematic study of the architectural history of China's Christian universities. It explores two issues that lingered over the architectural history of modern China: the quasi-colonial power structures and their impact on architecture in China, and the communication of meaning through architecture in cross-cultural contexts. The Christian universities pioneered a new representation of Chinese architecture as the country struggled to become a modern nation-state and to rethink its identity. The production of this architecture was fostered by the delicate and shifting power interaction between the missionaries and the diverse groups from Chinese society subject to an informal version of colonialism. From a historical perspective, this book seeks to contribute to the prospering postcolonial studies of the architectural history of Asian countries, deepening our understanding of the scope and content of informal colonial encounters between the East and the West.

Meanwhile, borrowing ideas from architectural semiotics – the study of the meaning of architecture once popular in the 1960s and being revived again in the twenty-first century in art and architectural history – this book not only discusses the work of the architects, but also explores how architectural meaning has been interpreted and modified by its audience(s), whose voice has been largely ignored in traditional architectural historical studies. From a theoretical perspective, this book aims to provide a unique scope to understand the communicative function of architecture and the relationship between architecture and power, which may throw light upon the broader socio-cultural dialogue between China and the Western world in the twentieth century.

### **China's Christian Universities: A Review of Current Scholarship**

China's Christian universities are an indispensable part of the Sino-Western political and cultural interaction during the late nineteenth and early twentieth centuries. A number of studies have been conducted on this topic, including general discussions of Christian architecture in the architectural history of modern China, comprehensive studies of the architecture of China's Christian universities, and case studies of individual universities. Among the English-language literature, studies on Christian universities in China often mention little about architecture or lack a detailed analysis of the buildings. For example, historical studies of the Christian universities in China, including *China and the Christian Colleges, 1850–1950* by Jessie G. Lutz and *China's Christian Colleges: Cross-Cultural Connections, 1900–1950* edited by Daniel H. Bays and Ellen Widmer, mainly focus on the general history and educational policy of these universities.<sup>5</sup> *Hallowed Halls: Protestant Colleges in Old China*, edited by Deke Erh and Tess Johnston, is another documentation of the historical information of these universities. It provides abundant images of the Christian universities in China, while these images are only accompanied by a short textual introduction of the history of each university.<sup>6</sup> There are also studies on the history (not architectural history) of individual Christian universities by Western scholars, including Charles Hodge Corbett's *Lingnan University: A Short History Based Primarily on the Records of the University's American*

Trustees, Lewis C. Walmsley's *West China Union University*, Mary Lamberton's *St. John's University Shanghai, 1879–1951* and Dwight W. Edwards's *Yenching University*.<sup>7</sup> While these historical studies have limited discussion on architecture, they shed light on the historical context in which the campuses and the buildings were designed and constructed.

As an important exception, American scholar Jeffrey W. Cody contributes one monograph (*Building in China: Henry K. Murphy's "Adaptive Architecture," 1914–1935*) and several book chapters and journal articles (including "American Geometries and the Architecture of Christian Campuses in China" and "American Planning in Republican China, 1911–1937") to the discussion of the architecture of the Christian universities in China.<sup>8</sup> Cody's work discusses the creation of an adaptive architecture through the efforts of American architect Henry K. Murphy through his encounter with Chinese architecture, and how his American background influenced the campus planning and architectural design of these universities. However, these studies focus either on the career of an individual architect or on the limited scope of "American planning tradition." No systematic study on the architectural history of China's Christian universities can be found in existing Western scholarship.<sup>9</sup>

Chinese-language literature on this topic is more abundant but of varying quality. General discussion on Christian architecture often appears as chapters in books about modern Chinese architectural history. In *Zhongguo Jindai Zhongxi Jianzhu Wenhua Jiaorong Shi* [The Combination History of Sino-West Architectural Culture in Modern Times of China], Yang Bingde dedicated a section in a chapter to the discussion of Christian campuses in China.<sup>10</sup> The architectural characteristics of six Christian universities are analysed in terms of how Chinese features were combined with Western ones. In *Zhongguo Jindai Jianzhu Shi* [Architectural History of Modern China], another influential book on the architectural history of modern China, the chapter on the architecture of Christian universities focuses on Western architects' exploration of Chinese-ness and its influence on the practice of later Chinese architects.<sup>11</sup> These publications contribute to the contextualisation of Christian universities within China's architectural history in the modern era.

In addition, there has been a continuous interest in discussing the architecture of individual universities in Chinese-language scholarship. Representative works include Tang Keyang's book *Cong Feiyuan Dao Yanyuan* [From Ruined Gardens to Yan Yuan] on the architecture of Yenching University, Luo Zhaotian's book *Dongfang De Xifang: Huaxi Daxue Lao Jianzhu* [West in East: Quaker Buildings in West China Union University] on West China Union University, Ren Jing and Lin Guangsi's article "Lingnan Daxue Xiaoyuan Guihua Suyuan 1904–1938" [The Origin of Campus Planning of Lingnan University, 1904–1938] on the campus planning of Lingnan University, and Leng Tian's "Jinling Daxue Xiaoyuan Kongjian Xingtai Ji Lishi Jianzhu Jiexi" [Analysis of the Campus Spatial Form and Historic Building Style of the University of Nanking] on the architectural styles of the University of Nanking.<sup>12</sup> Some of them, such as the books by Tang and Luo, offer detailed studies of specific buildings in terms of how they reflect the interweaving historical realities behind architecture. Others are generally descriptive.

#### 4 *Design as Communication*

In Tang's book, there is an attempt to analyse how the Chinese students interpreted the meanings embedded in the campus of Yenching, but otherwise there is a lack of effort in unfolding the architecture of Christian universities through the perspective of meaning communication.

Notable comprehensive studies on the architectural history of China's Christian universities include Dong Li's book *Zhongguo Jindai Jiaohui Daxue Jianzhushi Yanjiu* [Architectural History of Christian Universities in Modern China] and Xie Wenbo's master's dissertation "Zhongguo Jindai Jiaohui Daxue Xiaoyuan Ji Jianzhu Yichan Yanjiu" [A Study on the Campus and Architecture Legacy of the Baptist Universities in the 1890s–1930s China].<sup>13</sup> First published in 1998, Dong's book examines the architecture of four Christian campuses – West China Union University, Lingnan University, Yenching University and Ginling College – and analyses their architectural characteristics based on a discussion of styles.<sup>14</sup> This book is the first attempt among Chinese scholars to establish a systematic architectural history of China's Christian universities. It earned Dong a reputation as a pioneer and key figure in the study of China's Christian universities. As the 1980s witnessed a boom of research on the architectural history of modern China, Dong's research echoed Chinese scholars' growing interest in this field at that moment.<sup>15</sup> Xie's dissertation, completed in 2008, demonstrates a similar ambition. Xie briefly discusses the campus planning and architectural styles of eight Christian universities, covering more than half of the total sixteen universities.<sup>16</sup> However, despite Dong's and Xie's attempts to establish a systematic study of the architecture of China's Christian universities, the insufficient investigation of empirical data and their unclear analytical framework mark the major weaknesses of the two studies. They rely almost exclusively on secondary sources in the Chinese language; the official documents of these universities written in English and stored in American libraries – much more abundant than Chinese-language documents – are left untouched in both studies. This may explain the existence of notable misapprehensions about the empirical materials used in these studies.<sup>17</sup> Their analysis of the campuses and buildings centres on stylistic issues; neither Dong nor Xie has tried to examine the quasi-colonial power interaction or the architectural communication at the Christian campuses.

As the review of existing scholarship suggests, there are significant knowledge gaps in the study of the architecture of China's Christian universities. English-language studies on this topic are occasional and unsystematic, focusing on individual cases or specific architects rather than the whole picture. The quality of existing comprehensive research conducted by Chinese scholars is far from satisfactory, especially considering their limited exploration of empirical data and undeveloped analytical frameworks. As no previous study has offered a systematic and in-depth exploration of the architectural history of China's Christian universities, this book aims to bridge this gap by digging into primary sources through archival search in both China and the United States, site investigation at main Christian campuses and interviews of relevant personnel; to unveil how the campuses and buildings were shaped by the intertwining quasi-colonial power relations and the complicated meaning-making process, it aims to develop a proper theoretical framework by critically combining postcolonial theories and architectural semiotics.

### Questioning Orientalism and Postcolonial Theories

Among the existing architectural studies of China's Christian universities, most of them lack a sound theoretical framework. As mentioned earlier, Dong's book offers case studies of four Christian universities in China. While each case study consists of an exploration of the historical context and analysis of architectural styles, Dong fails to establish a strong connection between history and architecture, making his discussion no more than a juxtaposition of historical facts and stylistic analysis. In the chapter discussing West China Union University, for example, Dong mentioned various conflicts between the missionaries and the local Chinese people as significant historical contexts, which could have been integrated into the discussion of the formation of the campus and the architecture of the university. However, architectural analysis in this case is unfolded mainly through a comparison between the university buildings and the so-called English Tudor style, with the complexity of history and its impact on architecture left untouched.<sup>18</sup> Xie's dissertation covers eight universities, but shares a similar lack of analytical framework, only trying to summarise and compare the formal characteristics of the buildings.<sup>19</sup>

Informed by postcolonial studies in the architectural history of other parts of Asia, one possible theoretical framework to unfold the underlying power structure behind the Christian universities may come from Edward Said's theory of Orientalism. The basic assumption of Orientalism is that European representation of "the Orient" – or more properly "the Eastern world" – was based on European civilisation's hegemony over European colonial possessions in different parts of Asia and Africa.<sup>20</sup> It emphasises the exploration of the underlying relationship of power and knowledge between the West and the East, and is widely adopted by studies of the colonial built environment in India, Indochina and the Dutch East Indies. For example, in Thomas R. Metcalf's book *An Imperial Vision: Indian Architecture and Britain's Raj*, the invention and development of the so-called Indo-Saracenic architecture are unfolded through the exploration of power relations between the British Empire, the British Raj and the local Indian society. This embraces a model of Western political and cultural hegemony similar to what has been described by Said.<sup>21</sup> In *The Politics of Design in French Colonial Urbanism*, Gwendolyn Wright analyses the production of colonial architecture in French Morocco and Indochina in terms of politics and knowledge, revealing "the relation between culture and politics, specifically efforts to use architecture and urban design... as part of a political agenda."<sup>22</sup> Postcolonial studies adopting this framework usually emphasise the mutual influence of politics and knowledge and how they shape colonial architecture, regarding architecture as a manifestation and result of interweaving power relations of the colonial society.

Despite the contribution of the theory of Orientalism to postcolonial architectural studies, its limitation has been pointed out by several scholars. Mark Crinson argues that the Orientalism framework sometimes neglects to deal with the situations which he calls "informal imperialism," in which colonial control was established by means of implicit economic and cultural exchanges instead of overt political dominance.<sup>23</sup> For colonial architecture in these situations, cultural

difference, rather than cultural hegemony, is often highlighted, and architecture performs rather as a medium of communication involving intertwining social, economic and cultural forces, rather than merely indicating political dominance.

A further problem of applying Orientalism to postcolonial architectural research, as pointed out by Crinson and Stephen Cairns, lies in the difference in research objects examined by Said and by architectural historians. Crinson points out that while Said's theory of Orientalism deals primarily with textual materials consumed by European audiences, architecture – unlike literature – is rather “involved in direct and complex bonds and ties with local cultures on a range of institutional, practical and symbolic levels,” and different problems are entailed from Said's field of enquiry.<sup>24</sup> Parallel to the argument of Crinson, Cairns points out two dilemmas in the application of Said's Orientalism to the discipline of architecture.<sup>25</sup> Works on Orientalism and architecture, Cairns claims, regard architecture as either a “representation in which its indeterminate relation to the material world enables it to function as a mute medium that channels the imperatives of colonialist power,” or “radical realism whose self-evident materiality embodies historical empirical data that temper the theoretical claims of orientalism.”<sup>26</sup> The former, exemplified by the works of Zeynep Çelik and Timothy Mitchell, shows a primary loyalty to Said's conceptual framework, at the expense of undermining the specific artificial qualities of architecture; the latter, represented by the works of Crinson and Metcalf, emphasises the discussion of history itself while leaving the theoretical force of Orientalism diluted. This shows the limit of the application of Orientalism to postcolonial architectural studies concerned with architecture in colonial and quasi-colonial contexts.

Orientalism and postcolonial theories can be critically adopted in this research, acknowledging their capacity and limitations. The interrelation between power and architecture, particularly how architecture is formed and influenced through a dynamic and continuous negotiation between various interest groups in China and overseas, can be referred to in the analysis of the architectural design process of the Christian universities in China. Nevertheless, the presumption of Orientalism regarding Western political and cultural domination over colonies will be carefully replaced by acknowledging the more nuanced quasi-colonial power relations among the British and American missionaries, the American philanthropists as funders of the universities, the Chinese political and commercial elites, the Chinese students and their families, the changing Chinese governments, and the general public.

Moreover, to understand the cross-cultural architectural communication at China's Christian universities, a supplementary theoretical framework may be semiotics – the theory of sign and meaning. During the third quarter of the twentieth century, semiotics was widely discussed among architectural theorists and semioticians from outside the discipline who sought to explore the communicative function of architecture.<sup>27</sup> The basic assumptions of semiotics in architecture include: architecture is meaningful; architecture entails a process of conscious communication between the designer and the reader of architecture; the meanings, or messages, are communicated through architectural signs and codes.<sup>28</sup> Fruitful

works in this field, with key figures such as Charles Jencks, Umberto Eco and Juan Pablo Bonta, provide various theoretical models to deal with the significative and communicative function of architecture.<sup>29</sup> It tried to reconcile the materiality of architecture and its social function for studies in both architectural design and architectural history. Semiotics in architecture faded away in the 1990s; however, art historians like Mieke Bal and Norman Bryson began to explore the new possibilities of semiotics in the studies of art history.<sup>30</sup>

The potential of applying semiotics to the study of Christian universities in China has been indicated by earlier scholars in this field, but this possibility has not been fully explored. Cody argues that the missionaries and architects dealt with meanings during the design process of China's Christian universities, and points out that the architects faced a challenge in transplanting ancient architectural signs into the modern context, during which architectural meaning may be changed and misread.<sup>31</sup> In the conclusion chapter of his book, Dong also mentions the semiotic concepts of American semiotician Charles Sanders Peirce and the possibility of understanding the architectural signs at the Christian campuses.<sup>32</sup> Tang Keyang, in his case study of the campus of Yenching University, also discusses the interpretations of Yenching's architecture and how these changed over time.<sup>33</sup> Their application of semiotics, nevertheless, was a slight touch and, most importantly, limited by a lack of systematic understanding of semiotic theories. A critical review of the development, key concepts and limitations of semiotic theories in architecture and their value for architectural historical research today are thus necessary.

### **Semiotics and the Meaning-Making of Architecture**

To address the issue of homogeneity and the "crisis of meaning" of post-war modern architecture, and inspired by the theories of Ferdinand de Saussure and Charles Sanders Peirce, a tendency to apply semiotics to architectural studies emerged in the 1960s.<sup>34</sup> The next two decades witnessed the development of diverse, sometimes conflicting theories or models to understand the meaning-making of architecture.<sup>35</sup> Among the various theories and arguments, two main approaches can be observed. The continental approach, conducted by scholars mainly from France and Italy, aimed at a structural model for architectural analysis and criticism following the tradition of rationalism; the Anglo-Saxon approach, following the tradition of empirical pragmatism, focused on the application of semiotic theories to the process of architectural design.<sup>36</sup>

The continental approach characterises the works of French and Italian scholars, including semioticians from other humanities subjects who were interested in architecture, such as Roland Barthes, Gillo Dorfles and Umberto Eco.<sup>37</sup> They were mainly influenced by French Structuralism and Saussurean linguistics, intending to explain the mechanism of architectural signification and communication through semiotic models. Renato de Fusco, Emilio Garroni and Maria Luisa Scalvini each proposed their own models of architectural communication based on the notion of the "signified" and the "signifier."<sup>38</sup> As an influential figure, Eco develops a conceptual model of architectural communication with the notion of denotation/