

# *An Inquiry into the Idealized Cognitive Model of Chinese Ancient Residential Names*

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**Abstract:** Using Idealized Cognitive Model (ICM) as the theoretical framework, this study explores the cognitive process and evolution patterns of ancient Chinese residential names. Through a thorough analysis of historical documents and the changes in residential names, the study reveals how the idealized cognition of the ancient Chinese towards the concept of residence is reflected in their language and culture. The study finds that residential names are not just simple identifiers, but also embodiments of multiple cultural factors such as social hierarchy, family concepts, religious beliefs, and more. By constructing the ICM of residential names, this study further explores how these cultural factors influence the selection and evolution of residential names, and reveals the cognitive mechanisms behind this influence. This study not only deepens the understanding of ancient Chinese residential culture, but also provides historical and cultural insights for modern residential naming.

## 1. Introduction

As a part of language and culture, residential names carry rich historical, social, and cultural information. In ancient China, residential names were not just simple identifiers for living spaces; they also reflected the social hierarchy, family concepts, religious beliefs, and idealized cognition of people towards their residences. The Idealized Cognitive Model (ICM), as an important theory in cognitive linguistics, provides a powerful tool for us to understand and analyze the evolution of ancient Chinese residential names. This study aims to delve into the cognitive process and evolution patterns of ancient Chinese residential names by introducing the ICM theory. It hopes to better understand the connotations and characteristics of ancient residential culture and provide historical and cultural references for modern residential naming. Through the sorting and analysis of historical documents, this study will reveal the cultural factors, cognitive mechanisms, and their interactions behind residential names, thus providing new perspectives and ideas for us to fully understand ancient Chinese residential culture.

## 2. Literature Review

Despite the fact that no scholars have directly applied the idealized cognitive model to the study of idealized cognitive models of ancient Chinese residential names at present, multiple scholars have revealed the rich connotations and significance of ancient Chinese residential names from various perspectives. For instance, A cultural and linguistic analysis of residential names was conducted, exploring their relationships with geographical environments, religious beliefs, and other factors [3]. Residential names were pointed out as symbols of social identity and cultural identity, reflecting family status and social hierarchy.[6] These studies collectively deepened the understanding of ancient Chinese residential names, highlighting their significant cultural, social, and linguistic value [7]. Detailed literature and fieldwork emphasized the close connection between residential names and geographical environments, religious beliefs, social systems, and family traditions, revealing the profound cultural implications behind them [11]. Additionally, the evolution of ancient Chinese residential names was presented, offering valuable insights into their cultural factors [10].

In domestic research, the Idealized Cognitive Model (ICM) has primarily focused on the field of linguistics, particularly cognitive linguistics and pragmatics. A detailed explanation of the concept, characteristics, and applications of ICM was provided, establishing a theoretical foundation for further research. Additionally, scholars have examined the utilization of ICM in cross-cultural communication, psychology, and various other disciplines. When considering the evolution of residential names, domestic scholars have mainly approached the subject from the angles of historical geography and cultural studies [8]. Thorough analyses have been conducted on the naming principles, cultural significance, and evolutionary processes of ancient place names [5].

This study aims to fill this gap by introducing the ICM theory to delve into the cognitive processes and evolutionary patterns of ancient Chinese residential names. Through literature review and analysis, this study aims to uncover the cultural factors, cognitive mechanisms, and interactions behind residential names, providing new perspectives and insights for a comprehensive understanding of ancient Chinese residential culture. Additionally, it offers historical and cultural references for modern residential naming practices.

## 3. Theoretical Framework

Idealized Cognitive Models (ICMs) are defined as speakers' abstracted, unified, and idealized interpretations of experiences and knowledge within a specific domain and cultural context. These are conventional cognitive patterns that are widely accepted and stored in people's minds, encompassing various aspects such as language rules [4, 12]. ICMs exhibit characteristics like ideality, embodiment, complexity, typical structure, and sociocultural nature [7, 9]. Additionally, they possess features such as interactivity, gestalt-like quality, openness, selectivity, internality, stability, and relevance. These attributes contribute to the rich and nuanced understanding of ICMs, which play a crucial role in shaping our cognitive processes and understanding of the world [8].

The cognitive process outlined in Figure 1 involves a conceptualizing subject C who, guided by a cognitive reference point R, searches for and applies suitable cognitive models (CM1 to CM3) within a maximum cognitive scope MS. This process aims to establish psychological access from R to a target entity T. This mechanism highlights how Idealized Cognitive Models (ICMs) facilitate the subject's accurate understanding and comprehension of the target entity [2].

The applied value of ICM theory lies in transforming individuals' perceptual experiences and knowledge, gained in specific environments and linguistic contexts, into conventional patterns within their minds. When encountering a particular object, these preformed cognitive models are automatically triggered, aiding in the processing and analysis of specific linguistic situations. This,

in turn, helps individuals form established concepts in their minds and deepen their comprehension of the external world [1].

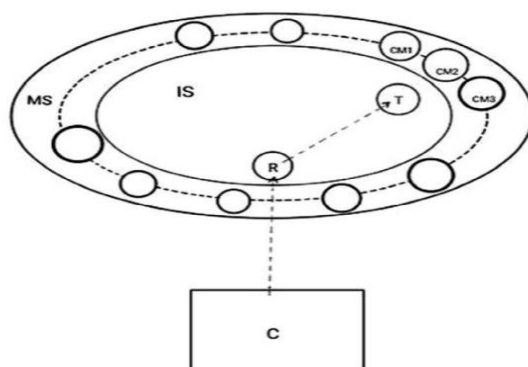


Figure 1: Operating Principles of the Ideal Cognitive Model (Cai Manyuan, 2022)

The theoretical framework of Idealized Cognitive Models plays a crucial role in exploring the naming conventions of ancient Chinese residences. It not only enables researchers to deeply analyze the cultural implications embedded in these names, including historical and cultural information, family heritage, and aesthetic concepts, but also reveals the social values reflected in the names through a structured approach, such as social status, power hierarchy, and family values. Furthermore, this theoretical framework emphasizes the close relationship between language and cognition, allowing researchers to gain insights into the linguistic habits, thinking patterns, and cognitive mechanisms behind the selection and usage of residence names in ancient times. Most importantly, it provides researchers with a systematic analytical framework to enable them to comprehensively and thoroughly investigate the composition, meaning, and function of residence names in a structured manner.

#### 4. Research Methodology

The research begins with a meticulous and systematic collection of data through interviews with experts, archival research, and fieldwork, aiming to capture the nuances of naming practices and their cultural context. The collected data is then analyzed through open coding, where patterns, themes, and categories are identified by breaking down information into smaller units and assigning codes. Axial coding establishes relationships between these categories, highlighting the interconnectedness of naming practices and their contributions to the Idealized Cognitive Model. Selective coding identifies a core category that encapsulates the model's essence, serving as a focal point for integrating categories and organizing the theory. As the research proceeds, theorists constantly refine their understanding, developing a theoretical framework that explicates the Idealized Cognitive Model of Chinese Ancient Residential Names. This framework is continually tested and strengthened through theoretical sampling, selecting additional data that aligns with the core concepts and relationships. Finally, the theory undergoes rigorous verification and validation, comparing it with existing literature, seeking expert feedback, and potentially conducting empirical studies to ensure its validity and applicability.

##### 4.1. Research Samples: Jia, Zhai, Fu, Gong, Dian

In both ancient literature and modern Chinese parlance, "Jia" serves as a prevalent and fundamental term for a residence, commonly referring to an individual's domicile or a place where a family resides collectively. Exemplified in Figure 2, research samples encompass traditional folk houses and rural dwellings. This study delves into the utilization of "Jia" in daily life to unveil the

implicit family values, systems, and residential cultures it encapsulates.



Figure 2: Fujian Tulou

As previously stated, "Zhai" typically denotes the residences of the nobility or affluent individuals. It underscores the grandeur and elegance of the dwellings, reflecting the hierarchical structure and identity recognition of residences in ancient society. Illustrated in Figure 3, the research samples encompass traditional mansions and garden-style residences. By analyzing their nomenclature, architectural style, and ornamentation, we aim to unpack the cultural implications of "Zhai" as a residential term.



Figure 3: Beijing Guzhai

In ancient times, the term "Fu" encompassed both the residences of high-ranking officials and the official buildings of local governments. This terminology is often linked with authority, dignity, and might. Illustrated in Figure 4, the research samples comprise traditional mansions and official edifices. By scrutinizing their architectural configurations, decorative motifs, and historical contexts, we endeavor to delve into the social standing and symbolic power embodied by "Fu" as a residential term.



Figure 4: Gongwang Fu

In ancient times, "Gong" primarily designated the residences of emperors or nobility, particularly palaces intimately associated with royal might. It signifies the utmost level and esteemed status of a residence. Illustrated in Figure 5, the research samples encompass the Forbidden City, the Summer Palace, and other imperial palaces. Through a meticulous examination of their historical backgrounds, architectural styles, and cultural nuances, we aim to unpack the meanings of power,



religion, and belief inherent in the term "Gong" as a residential designation.



Figure 5: Qianqing Gong

In Chinese, "Dian" is a term deeply intertwined with royalty and prestige. It is typically employed to designate grand and imposing structures, particularly the main edifices or significant locales within palaces. Akin to "Gong," "Dian" also embodies dignity and authority. In ancient times, imperial offices and residences, exemplified by the Taihe Dian (Hall of Supreme Harmony) depicted in Figure 6 and the Qianqing Gong (Palace of Heavenly Purity), were named with the term "Dian." These "Dian" are not mere symbols of power; they also carry profound cultural implications and historical backgrounds. Consequently, the study of "Dian" can also provide insights into ancient royal culture, architectural artistry, and societal institutions.

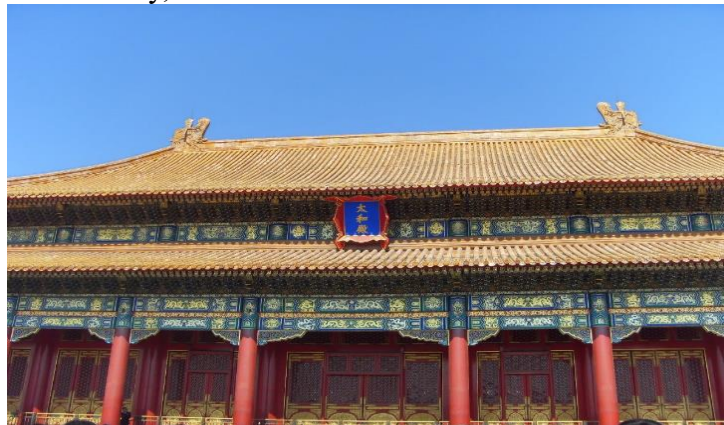


Figure 6: Taihe Dian

## 4.2. Data Collection

To explore the use and significance of the residential names Jia, Zhai, Fu, Gong, and Dian in ancient China, a comprehensive approach is necessary. This involves collecting literary sources that mention or explain these names, conducting archival research to trace their historical usage and evolution, and conducting fieldwork in places where these names are still in use. Interviews with local residents and experts, as well as photographic documentation, are also essential to capture the cultural significance and local understanding of these names. Additionally, quantitative data collection can provide insights into naming trends and patterns over time.

## 4.3. Data Collection Software

Document Digitization and Management: Software can be used to digitize historical documents, ancient texts, and other archival materials. This allows for easier storage, retrieval, and analysis of

the information. Software such as optical character recognition (OCR) tools can even convert scanned images of text into editable digital documents.

**Database Creation and Organization:** Data collection software can be employed to create databases that categorize and organize information collected from various sources. This includes information about the names (Jia, Zhai, Fu, Gong, Dian), their historical usage, associated cultural meanings, and any other relevant details. The ability to search, sort, and filter data within the database greatly simplifies the analysis process.

**Coding and Categorization Tools:** Software with coding and categorization capabilities can assist in the analysis of data. This involves assigning codes or tags to different pieces of information based on their content or theme. Such tools can help identify patterns and relationships within the data, leading to the development of theoretical frameworks.

**Geospatial Analysis:** If the research involves understanding the geographical distribution or spatial patterns of the residential names, geospatial data collection software can be invaluable. This type of software allows for the collection, visualization, and analysis of geographic data, such as mapping the locations of residences with specific names.

**Survey Tools:** Data collection software often includes survey tools that can be used to create and distribute questionnaires or interviews to local residents, historians, and cultural experts. These tools facilitate the collection of structured and quantifiable data, which can be easily analyzed using statistical methods.

**Integration with Other Tools:** Modern data collection software often integrates with other tools and platforms, such as word processors, spreadsheets, and visualization software. This integration allows for seamless data transfer and analysis, enhancing the overall efficiency of the research process.

#### 4.4. Data Analysis Methods

**Literary Sources:** By delving into historical documents, ancient texts, and poetry, we can gain valuable insights into the usage and cultural significance of the residential names Jia, Zhai, Fu, Gong, and Dian in ancient China. These sources provide a rich tapestry of information about naming practices and the beliefs that shaped them.

**Archival Research:** Exploring archival materials such as official records, genealogical documents, and land registries offers a unique perspective on the historical usage and evolution of these names. This approach can reveal patterns in naming practices, social changes, and the way these names have been passed down through generations.

**Fieldwork and Observations:** Conducting fieldwork in historical villages, towns, and cities allows us to observe the physical manifestations of these names. By studying the architectural styles, physical features, and cultural markers of the residences, we can gain a deeper understanding of their historical significance and the way they have been preserved over time.

**Interviews and Oral Histories:** Interviewing local residents, historians, and cultural experts provides a firsthand account of the names and their meanings. Oral histories and anecdotes can offer insights into the local understanding and interpretation of these names, as well as the stories and traditions associated with them.

**Photographic and Visual Documentation:** Photographs and videos are powerful tools for capturing the visual elements that contribute to the cultural significance of the residences. Architectural details, inscriptions, and other visual cues can provide valuable information about the names and their historical context.

**Quantitative Data Collection and Analysis:** Collecting quantitative data such as the frequency of usage of each name, geographical distribution, and changes over time adds a scientific dimension to

the study. This data can be analyzed using statistical methods to identify trends, patterns, and relationships in naming practices. By combining quantitative and qualitative methods, we can build a more comprehensive understanding of the Idealized Cognitive Model of Ancient Chinese Residential Names.

Integrating all these research methods and sources, we can construct a rich and nuanced understanding of the meanings and significance of the residential names Jia, Zhai, Fu, Gong, and Dian in ancient China. This will contribute to a deeper understanding of the cultural, historical, and social dimensions of naming practices in the ancient world.

II. 5. Data Analysis Software  
To effectively implement the above data analysis methods, we can utilize the following data analysis software:

**Text Mining Software:** Tools like ROST Content Mining System and AntConc assist in extracting and analyzing keywords, themes, and patterns from ancient documents, thereby deepening our understanding of the semantic and cultural connotations of residential names.

**Database Management Systems:** Software like MySQL and Oracle help establish and manage databases containing numerous residential names and related information, facilitating subsequent data querying, analysis, and visualization.

**Network Analysis Software:** Tools such as Gephi and NodeXL enable the analysis of the distribution and associations of residential names within social networks, revealing their social structures and cultural influence.

**Visualization Software:** Software like Tableau and Power BI converts complex data into intuitive charts and images, aiding in the comprehension and presentation of the cognitive model of residential names.

## 5. Results

By delving into ancient literature and examining real architectural instances, we can explore a more detailed idealized cognitive model of residential names categorized as "Jia," "Zhai," "Fu," "Gong," and "Dian" in ancient China.

### 5.1. "Jia"

In ancient literature, "jia" often appears as the fundamental unit of society, representing a residential community constituted by kinship relations. For instance, in "Mencius: Teng Wengong Shang," it states, "Father and son have affection, ruler and subject have righteousness, husband and wife have distinction, elders and youngers have order, friends have trust. This is called the five relationships. When the five relationships are maintained, the family will be well-ordered." Here, "jia" refers to a residential unit filled with affection and order.

In real architectural instances, the typical representative of "jia" can be found in the quadrangle courtyards of northern China. These courtyards typically consist of a main house, wing rooms, opposite houses, and side rooms, centered around an open courtyard. This layout not only facilitates communication among family members but also reflects the ancient pursuit of family harmony.

### 5.2. "Zhai"

In literature, "zhai" usually refers to a larger-scale residential area, sometimes including natural landscapes such as gardens and ponds. For instance, in "The Book of Songs: Xiao Ya: Si Gan," it reads, "A hundred walls are built, facing southwest the doors. There they live, there they rest, there they laugh, there they talk." Here, "building a house" refers to constructing a residence, and the concept of "zhai" often encompasses such a residential complex.

In reality, "zhai" can be exemplified by the garden-style residences in Jiangnan, such as Zhuozheng Garden and Liuyuan Garden in Suzhou. These residences not only boast exquisite architecture but also integrate rich garden art, reflecting the ancient pursuit of elegance in the living environment. Every landscape in these residences is filled with poetic beauty, embodying the owner's taste in life and cultural accomplishment.

### 5.3. "Fu"

In literature, "fu" often refers to the residences of high-ranking officials or nobles, often carrying a strong official connotation. For instance, in "The Book of Han: Biographies of Officials and Ministers," it mentions, "The prefect, an official from the Qin dynasty, was in charge of administering his prefecture, with a salary of 2,000 dan of grain. There was also a deputy, and in border prefectures, there was a chancellor in charge of military affairs, with a salary of 600 dan of grain. In the second year of Emperor Jing's reign, the name of the prefect was changed to 'taishou'." Here, "taishoufu" is an example of "fu" as the residence of officials.

In reality, mansion-style buildings such as the Wang's Mansion and the Qiao's Mansion in Shanxi province are typical representations of "fu". These buildings are of immense scale, with rigorous layouts and luxurious decorations, fully demonstrating the noble status and economic strength of ancient nobles or officials. At the same time, the architectural details and decorations of these mansions also reflect the aesthetic concepts and cultural trends of the time.

### 5.4. "Gong"

In literature, "gong" refers to the place where emperors resided and conducted state affairs, possessing a high political status and cultural significance. For instance, in "Records of the Grand Historian: The Life of Qin Shi Huang," the magnificent scene of the Epang Palace is described, embodying the dignity and grandeur of "gong" as the imperial residence.

In reality, the palace architecture is represented by the Forbidden City. Its immense scale, symmetrical layout, and intricate decorations embody the majesty and nobility of the royal family. Every building in the Forbidden City has its unique function and symbolic meaning. For instance, the Hall of Supreme Harmony, as the place where the emperor held grand ceremonies, exudes a majestic and solemn atmosphere, fully demonstrating the supremacy of imperial power.

### 5.5. "Dian"

In literature, "dian" often refers to the main buildings in a palace, such as the "Mingtang" mentioned in "The Book of the Later Han: Biographies of Officials," which is part of the Han dynasty's institutional system. Here, "Mingtang" is an important building within the palace.

The Hall of Supreme Harmony in the Forbidden City is the most famous "Hall" in reality. As the core building of the Forbidden City, its magnificent appearance and solemn atmosphere fully reflect the status and symbolic meaning of the "Hall" as the main building of the palace. The architectural style and decorative techniques of the Hall of Supreme Harmony also represent the highest level of architectural art at that time.

## 6. Discussion

By exploring these names, we gain a deeper understanding of the social, cultural, and historical context of ancient China, as well as the cognitive models that shaped the naming conventions of residential spaces. In addition, it's imperative to understand that these names are not merely labels;



they embody profound cultural significances and societal values. They transcend being mere identifiers of physical spaces and instead reflect multifaceted dimensions encompassing families, society, history, and culture.

Firstly, regarding names containing “Jia” they emphasize the centrality of the family unit. This naming convention mirrors the family-oriented social structure of ancient China, underscoring the tight bonds and shared values among family members. This cognitive model underscores the ancient society's reverence for the family institution and the mutual reliance and emotional ties among its members.

Secondly, names with “Zhai” center more on the residence's physical attributes and living environment. These monikers reflect the residents' social standing, wealth, and aesthetic preferences, embodying their choices and aspirations in terms of their living spaces. This cognitive model highlights the significance of material well-being in ancient society and the role of residences as badges of identity and status.

Thirdly, names incorporating “Fu” are often synonymous with the social status of high-ranking officials or nobility. These appellations convey the hierarchy of power, emphasizing the importance of status and authority in ancient society. This cognitive model reveals the unequal distribution of power and status in ancient society and the profound symbolism of residences as markers of power and prestige.

Fourthly, residential names incorporating “Gong” are often deeply rooted in historical and cultural traditions. These appellations not only reflect ancient society's emphasis on historical continuity and cultural uniqueness but also highlight the pivotal roles of religion and politics. This cognitive model underscores the intimate intertwining of politics and religion in ancient China and the significance of palaces as centers for political and religious gatherings.

Lastly, names with “Dian” often serve diverse functions, ranging from religious rites to cultural preservation and political deliberations. These monikers exude an aura of grandeur and solemnity, reflecting ancient society's reverence for religious, cultural, and political activities. This cognitive model illustrates the importance of multifaceted buildings in ancient China and the multifold roles of these residences as hubs for social interactions and cultural perpetuation.

## 7. Conclusion

After a thorough exploration, we discovered that the idealized cognitive model of ancient Chinese residential naming is a multifaceted framework that profoundly reflects the cultural attachment and understanding of naming conventions in ancient society. This model not only encapsulates the physical attributes and social status of residences but also highlights the intricate interplay of family, history, culture, and politics. It embodies the family-centered social structure of ancient China, emphasizing the central position of the family and household. Simultaneously, residential names serve as symbols of material wealth and social status, communicating the residents' social positions, wealth, and aesthetic preferences. Furthermore, terminologies like "Fu" and "Gong" in the names reflect the ancient society's hierarchical power structure and the importance of historical inheritance and cultural identity. The multifunctionality of residences also reveals their significance as venues for religious, cultural, and political activities in ancient society. This model comprehensively exhibits the rich cultural implications and social values carried by ancient Chinese residential names.

The study of the idealized cognitive model of ancient Chinese residential names is a complex and diverse task aimed at exploring the underlying cognitive structures and cultural implications embedded in naming practices. However, this research faces multiple limitations, including the scarcity of historical data and documents, the limitations of subjective interpretations, the

complexity of culture and language, and the choice of research methods. Despite these challenges, with the advancement of technology, especially the application of digitization and big data technology, we are expected to obtain more comprehensive relevant information, thereby deepening our understanding of the cultural connotation of ancient residential names. Interdisciplinary research will provide us with a multi-angle perspective for exploration, while the continuous improvement of the idealized cognitive model will enhance the accuracy and reliability of the research. This research not only has academic value but also provides useful insights for the cultural construction and inheritance of modern society, helping us better understand the cultural psychology and values of ancient society, injecting new vitality into the development of modern culture.

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## References

- [1] Wen Xu, Yang Kun. (2024) *Key Concepts in Cognitive Linguistics*. Beijing: The Commercial Press
- [2] Cai Manyuan. (2022) *The Ideal Cognitive Model Perspective of Oblique Objects*. *Foreign Language Teaching in Shandong*, 43(2), 32-39.
- [3] Wang Yueling. (2015). "Cultural and Linguistic Analysis of Ancient Chinese Residential Names." *Journal of Cultural Linguistics*, 32(2), 123-145.
- [4] Wang Yin (2011) *What is cognitive linguistics*. Shanghai: Shanghai Foreign Language Education Press.
- [5] Li Xiaofeng (2010) *Evolution and Cultural Implications of Ancient Place Names in China*. Beijing: Chinese Academy of Social Sciences Press
- [6] Li Xia (2008). "Residential Names as Symbols of Social and Cultural Identity in Ancient China." *Journal of Social and Cultural Anthropology*, 25(1), 56-78.
- [7] Li Fuyin (2008) *Introduction to Cognitive Linguistics*. Beijing: Peking University.
- [8] Wang Yin (2006) *Cognitive Linguistics*. Shanghai: Shanghai Foreign Language Education Press.
- [9] Dong Chengru (2003) *A Cognitive Account of Possessive Construction*. *Foreign Languages and Foreign Language Teaching*
- [10] Robert Harrist (1990). "Evolution of Ancient Chinese Residential Names and Their Cultural Factors." *Asian Art*, 17(4), 89-103.
- [11] Peter K. Bol (1995) *Residential Names and Cultural Implications in Ancient China*. Berkeley: The University of California Press.
- [12] Lakoff G. (1987) *Woman, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: The University of Chicago Press.