

## Review

# Central–Local Relations in Land Planning Governance in Contemporary China: A Review from the Structural, Process, and Cultural Perspectives

Tianxiao Zhou

Business School, Shaoxing University, Shaoxing 312000, China; ztx236819@163.com; Tel.: +86-150-6880-0489

**Abstract:** Land planning plays an important role in the economic and social development of a developing country, such as China. Studies have started to focus on the topic of central and local relations in land planning systems; however, the picture of central–local relations presented by different studies has not been classified and distinguished. From the perspectives of structure, process, and culture, this paper reviews recent studies on the relationship between central and local governments in land planning governance and summarizes the existing research status and shortcomings, aiming to point out directions for future research. The results indicate that (1) existing studies provide a simple sketch of central–local relations, focusing on the structural and process perspectives and paying less attention to the cultural perspective; (2) the points of view among these studies conflict, leading to a lack of systematic theory and consensus regarding central–local relations in land planning; and (3) the process perspective is currently a hot topic that involves issues of central and local behavior, such as land planning execution, planning policy innovation, and public goods provision, but studies do not adopt an in-depth methodology. Therefore, we suggest that future research should be developed in four dimensions, namely the construction of a conceptual model, the expansion of existing theories, the application of new methods, and the integration of research perspectives.

**Keywords:** land planning governance; central–local relations; knowledge mapping; literature review; China



**Citation:** Zhou, T. Central–Local Relations in Land Planning Governance in Contemporary China: A Review from the Structural, Process, and Cultural Perspectives. *Land* **2022**, *11*, 1669. <https://doi.org/10.3390/land11101669>

Academic Editors: Wenzhe Yue, Yang Chen and Yang Zhang

Received: 7 September 2022

Accepted: 25 September 2022

Published: 27 September 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Land planning is an important tool enabling the government to carry out macrocontrol over the territory and allocate land resources rationally [1]. In China, the rapid economic development since the reform and opening up brought about a massive reduction in arable land and inefficient land use, leading to an urgent need for a land planning system by the Chinese government. To control the loss of arable land and the disorderly expansion of construction land, China has gradually explored and formed a land-use planning system with Chinese characteristics since the first round of land-use planning implemented in 1987. The governance characteristics of this system are centered on land quota control and land-use regulation. It is reflected in the central government establishing five levels of land-use general plans, forming a hierarchical land quota system; and through the implementation of strict zoning control of land use, the planned use and use conditions of land are restricted to implement strict hierarchical examination and approval of agricultural land conversion. Theoretically, a piece of agricultural land in any space can be converted into construction land only if it conforms to the land-use general plan, consumes land quotas, and satisfies the control permit in land-use regulation [2]. Land planning affairs under this system mainly consist of two aspects: first, using a land quota system to control the stock and increase in construction land, which aims to limit disorderly urban expansion; and second, supplying arable land through land reclamation and consolidation projects to

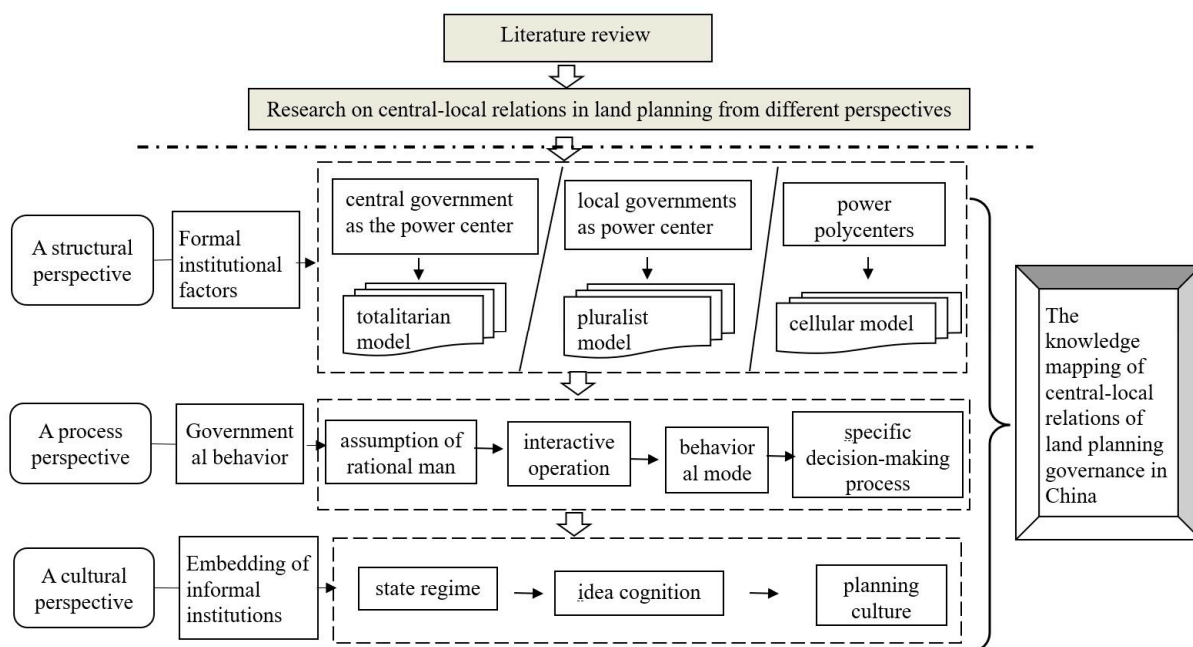
accomplish the farmland balancing policy. As a public power, the land planning system cannot operate without the central and local governments <sup>1</sup>.

With social and economic development, handling the central–local relationship in the land planning field has become key for a country to improve land governance. This is particularly urgent in the transformation of planning governance in China’s new era. In 2015, China’s State Council proposed to build a unified, interconnected, and hierarchical spatial planning system with spatial governance and spatial structure optimization as its main elements. In 2018, according to the State Council’s institutional reform program, the newly formed Ministry of Natural Resources was given the responsibility of establishing and supervising the implementation of the spatial planning system. In 2019, the State Council adopted *the Suggestions on Establishing a Territorial Spatial Planning System and Supervising its Implementation*, calling for the establishment of a unified territorial spatial planning system that is scientific and efficient, with clear responsibilities and powers. The reconstruction of the spatial planning system is closely linked to the relationship between the central and local governments. By examining the current studies of the relationship between the central and local government, we can open the black box regarding the government’s public power in the operation of the planning system and offer guidelines for the smooth exploration of spatial planning reconstruction, which is of great significance to the modernization of China’s territorial spatial governance system and governance capacity. The new territorial spatial planning is an integration of the original land use planning, urban and rural planning, and major function-oriented zoning. In practice, this planning system reform does not abandon the land quota system but continues it and upgrades the land-use regulation in land planning to territorial spatial regulation [3]. This means that the new land spatial planning system basically inherits the core content of land-use planning. Considering that the establishment of the territorial spatial planning system is based on original planning, such as land planning, from the view of theory and practice, it is necessary to review the evolution of the central–local relationship regarding the land planning system in China.

However, studies on this topic are scattered mainly in the areas of the allocation of planning powers, land plan preparation, and planning implementation, using a wide variety of specific approaches and research paradigms. As a result, the current findings on the relationship between the central and local governments in land planning systems remain ambiguous and confusing. Furthermore, we find that because central–local relations are influenced by several factors, different studies provide different, even contradictory, views of central–local relations, and all are supported by corresponding evidence or reasons. For instance, in the discussion of the governance mode of land planning, some scholars argue that land planning in China typically presents a centralized mode, with top-down hierarchical control, which has led to serious distortions in land allocation and inefficient planning [4]. In contrast, other scholars support that land planning in China is specifically implemented by local governments, with a clearly decentralized structure that achieves the expected performance of protecting farmland and promoting economic development [5]. To facilitate a systematic review of the progress in the study of central–local relations in land planning, it is necessary to identify which factors have shaped the central–local relations of the land planning system. An approach including structural, process, and cultural factors provides an ideal analytical framework for identifying these different factors.

This analytical approach was proposed by Zheng [6], a well-known scholar of Chinese political science, who argued that mainstream scholars in international scholarship had classified studies on China’s central–local relations into three perspectives, i.e., structural, process, and cultural [7,8]. Specifically, the structural approach focuses on the impact of formal institutional factors on central–local relations, i.e., the roles played by the central and local governments in terms of the configuration of the power structure. Depending on the power center, the structural approach can be subdivided into three types: the totalitarian model, the pluralist model, and the cellular model, which correspond to the central government as the center of power, the local governments as the center of power, and

the central–local governments as power polycenters. The process approach focuses on the influence of behavioral factors on the relationship between the central and local governments, revealing the specific behavioral patterns and internal operations of governments at different levels. The process perspective is based on the assumption of the rational man and more realistically reflects the decision-making and operational processes of central and local governments. In other words, the process perspective answers the question of how central and local governments are organized and interact with each other to implement land planning affairs within a formal institutional framework. Finally, the cultural perspective focuses on the influence of informal institutional factors, such as cognitive beliefs, on central–local relations. This perspective assumes that effective central-to-local governance is based on a national cultural identity and that such informal institutional factors are embedded in the inherent political institutions of the state and can implicitly influence central–local relations. Of course, there is no right or wrong viewpoint of central–local relations from different perspectives. However, since structural, process, and cultural perspectives all have their own strengths and weaknesses, they observe the central–local relations from different influencing factors and may obtain conflicting results. To eliminate the one-sidedness and confusion brought by such conflicts, methodological changes and integration of three perspectives are necessary. Zheng proposed an integrated approach of structure, process, and culture for reviewing central–local relations studies, which can show a knowledge mapping of central–local relations from different perspectives as a whole, thus reconciling conflicting central–local governance views and making the review more perfect and systematic in methodology. More importantly, the analytical approach that integrates these three perspectives can largely reflect the evolution of past scholarship on the central–local relationship, such as land planning governance. Overall, through this analytical approach, the aim of the presentation of multiple perspectives of central–local relations could be achieved (see Figure 1).



**Figure 1.** Analysis framework for the literature review.

To date, few literature reviews in the field of land planning have focused on the research progress of central–local relations. Therefore, the aim of this paper is to fill this gap by reviewing the existing research on central–local relations and presenting a picture of central–local relations in land planning. Based on the above background and inspired by Zheng’s idea, this paper systematically reviews the recent research on central–local relations under the land planning system from a structural, process, and cultural approach. This

helps us not only describe the multiple central–local relations in this field from different perspectives but also identify the status and shortcomings of current research and offer suggestions for enriching future research.

The remaining part of the article is organized as follows: first, a review of the structural perspective of central–local relations is presented, outlining the existing research on land planning systems in terms of three types: the totalitarian model, the pluralist model, and the cellular model. Second, the progress of the process perspective focusing on government behavior is described, including the three aspects of land planning implementation, planning policy innovation, and public goods provision in planning. Third, the cultural perspective on land planning is summarized, showing the focus of existing research on centralization. Through this analytical logic, we then discuss the shortcomings of research on central–local relations in land planning in China and the new issues of central–local relations in the context of territorial spatial planning reconstruction. Finally, we conclude with the main findings and research prospects.

## 2. A structural Perspective That Emphasizes the Division of Planning Powers

The structural perspective considers that central–local relations are influenced by formal institutional arrangements, and it therefore advocates the formal structure of the land planning system as the research objective for analysis, emphasizing the status of the distribution of land planning power between the central and local governments. Depending on the focus of the analysis, studies adopting this research perspective can be subdivided into three types: those following the totalitarian model, the pluralist model, and the cellular model [6].

### 2.1. The Totalitarian Model

The totalitarian model is a structural analysis from the central level, i.e., examining the formal system of land planning and its planning power arrangements from the perspective of the central government, the decision maker in the totalitarian context. Through this logic, some scholars argue that the planning system in China presents a single structural form, where the central government directly influences the land use of the whole country by controlling the rule-making power of land planning [9,10]. The central government owns and exercises the property rights of state-owned land on behalf of the state, and the allocation of land is decided by the central government through the coercive means of administrative intervention of land quota control [11]. The decision makers of the central government have centralized power, and the land-use plans that they make reflect the will of the central government, while the decisions of local governments are marginalized [12]. Yang described this power structure of land planning with the term centralized single-center governance [13].

Many studies have discussed how the central government tries to balance the goals of farmland protection and economic development through the control of land planning from top to bottom [14,15]. Ding discussed how the spatial location and quantity of construction land are determined through the annual land use plan [14]. Qu et al. discussed the institutional provision of farmland protection by the central government under centralized land planning [15]. Tan and Beckmann discussed the effect of China's land quota system in terms of administrative control and incentive intensity through the institutional comparison of land planning in China and other countries [16]. Other scholars have analyzed the actual operational effects of a centralized land planning system on the implementation of farmland protection goals [17].

The common point of these studies is that the central government has absolute power over land planning. Local governments are merely agents for implementing the decisions of the central government, with limited operational power but no planning decision-making power. There is a consensus that the central government, with centralized planning power, controls local governments by setting top-down land quotas and approving the local plans formulated [18,19]. However, the totalitarian perspective, which views the state as a single entity and highlights the centralized power of the central government

in land planning, suffers from two main flaws: first, it views the central government as omnipotent, overemphasizing the central government's ability to control local governments and supporting the untenable assumption that the central government has full information. Second, it sees local governments as operators of land planning implementation, ignoring their autonomy and initiative.

## 2.2. The Pluralist Model

Pluralism is the opposite of totalitarianism, emphasizing that under the land planning framework, local governments with their own interest preferences have a certain degree of autonomy and space for policy operation. Given the background of the vast territory and local variation in China, the central government can neither make planning decisions suitable to every local region nor make detailed planning decisions for each local government. Therefore, the central government only specifies the general objectives of land planning and leaves the specific planning affairs to local governments to implement according to local conditions.

Scholars of this perspective argue that local governments play an important role in the decision making of land planning and participate in the allocation of planning power. According to the Land Management Law, local governments at various levels are the main body for land planning preparation. For example, county-level land-use master plans are prepared by county governments and natural resource management (formerly land and resource management) departments at the county level under the constraints set by higher-level planning [20]. Scholars note that in the preparation and revision of land planning in some places, the planning appears to follow the development of land, projects, and development zones [21]. This means that local governments have obvious decision-making power in the preparation of land-use planning in the areas under their jurisdiction. Driven by land finance, local governments operate urban construction land and make decisions in land planning so that planning can better serve local development intentions [22]. In addition to directly participating in planning decisions, local governments implement and supervise land planning, which is called localized management (*shudi guanli*) [23]. Many studies show that local governments and their officials have the actual power to protect local interests in implementing planning policies from the central government [24,25].

From these studies, it can be found that the land planning framework developed by the central government is used only as a guideline or principle, and the actual decision-making and concrete implementation are still led by local governments. Local governments exercise the power of land planning, playing the dual role of "referee" and "player". Although pluralism demonstrates the autonomy of local governments in land planning, it does not take into account the conflict between local self-interest and central planning objectives.

## 2.3. The Cellular Model

Unlike the totalitarian model, which takes the central government as the center of planning power, and the pluralist model, which takes the local government as the center of planning power, the cellular model emphasizes the coaction of the central and local governments as two centers of planning power and focuses on the interaction and conflict between the central and local governments in the allocation of planning power.

By analyzing the changes in land planning power, Feng et al. found that the allocation of planning power between the central and local governments does not change linearly and that the degree of decentralization tends to first increase and then decrease [26]. Different from the planned economy period, decentralization of land planning power has taken place, but in the process of decentralization, there has also been an upward shift of some planning powers (e.g., planning approval power) to the central government.

The implementation of land planning involves a series of interactions and conflicts between the central government and the local governments, such as disputes, compromises, coordination, cooperation, and deception. Lin and Ho's study reveals the central-local conflicts arising from the contradiction between improving land use efficiency and protecting



farmland in the implementation of land planning [27]. Because of the massive farmland conversion threatening food security, the central government has formulated a series of planning policies to tighten farmland occupation, but the high land interests motivate local governments to not implement the central government's policies thoroughly but respond through local strategies. Scholars have noticed the conflict of interest between the central and local governments in the planning revision and implementation. According to previous studies, the difference in land use objectives between the central and local governments with their respective planning authority is the main reason for the central–local conflicts in the revision process [28,29].

Through the cellular model, scholars found that the central and local governments maintain a de facto balance between centralization and decentralization, with the central government holding the initiative in the distribution of land planning power, but the local governments do not always follow the planning decisions of the central government, thus causing tension in central–local relations.

### 3. A Process Perspective Focusing on Government Behavior

The governmental behavior of concretely implementing planning affairs is so varied that it cannot be examined only in the context of the central–local relations under the relatively stable formal planning system. In recent years, a process perspective has been adopted to focus on government behavior and its operation process under the land planning system, i.e., examining specific patterns of government behavior. We summarize the central–local interactions involved in planning implementation, policy innovation, and public goods provision, especially the behavior of local governments.

#### 3.1. Government Behavior in Planning Implementation

The implementation of land planning involves action interactions between the central and local governments. The central and local governments play the game according to their roles and characteristics within the framework of the formal planning system. Existing studies mainly use game theory and principal–agent models to describe this process. Zhu and Tang [30] took the planning decision-making process of a township in Shanghai as an example to establish the principal–agent relationship between the higher and lower levels of government, manifested in the three ways of formal negotiation, informal bargaining, and passive response, to reveal how the local government obtains newly-added construction land quotas to achieve the goal of local economic development. By establishing a planning regulation game model and a planning innovation model between the central and local governments, Hu et al. found that although the behavioral strategies of the central and local governments can achieve equilibrium theoretically, in the actual situation, the central government's punishment of local government is ineffective, leading to the reinforcement of the local government's opportunistic behavior in planning violations, which indicates a need for innovation of the planning system [31]. Similarly, Wang constructed a central–local game model of overall land-use planning from the perspective of the principal–agent relationship and discussed the optimal behavioral strategies of the central and local governments with different punishments, regulatory costs, and local benefits of violations under the assumption of incompatible interests [32].

To make top-down rigid planning more suitable for local government operations, local governments have increased the flexibility and elasticity of planning in practice. Studies have noted the flexible design of land planning preparation and implementation by local governments. Taking Zhejiang Province as an example, scholars found that local governments implement dynamic ledger management of reserved quotas by reserving newly-added construction land quotas at the provincial level to cope with unforeseen land-use arrangements, such as large infrastructure projects, effectively realizing the implementation and management of land-use planning [5,33]. Focusing on Jinan District, Tianjin City, scholars found that the local government has achieved flexible control of planning and enhanced the resilience of planning by three ways: reserving quantitative flexibility,

reserving layout flexibility, and integrating land planning with the actual work of land management [34]. Other scholars have focused on the specific paths to achieve flexible planning, such as reserved land quotas and flexible control zones, using Jiangjin District in Chongqing as an example [35].

### *3.2. Government Behavior in Land Planning Policy Innovation*

To alleviate the inefficiency problems of the current land planning system, the central and local governments have made innovations in the land planning system, such as the “Zhejiang model”, the Linkage between Urban-land Taking and Rural-land Giving (LUTRG), and the “land ticket” in Chongqing. Such planning innovations imply that local governments, with the acquiescence and support of the central government, have certain planning decision-making powers, which is a prerequisite for local governments to take corresponding innovative actions. In contrast to the pluralist model that advocates local governments as centers of planning power, the process perspective focuses on the operational logic, government behavior, and incentives of planning institutional innovation. These studies are numerous. Among them, Wang and Tao [36] and Wang et al. [37], from the perspective of land development rights, described how the government of Zhejiang Province established the “Zhejiang model” with the main contents of land consolidation-saving quota trading, protecting basic farmland across the regions and supplemental farmland across the regions. Zhang et al. [38] discussed the origin, operation rules, and practice of land consolidation-saving quota trading in the “Zhejiang model”, focusing on the impact of this planning innovation on local development. They found that quota trading does promote local economic development, and the economic promotion effect is more obvious in the counties that purchased quotas than in the counties that sold quotas. Long et al., starting from the reconstruction of hollow villages, described the top-down LUTRG policy and the incentive mechanism established by the local government and examined the positive and negative effects of this policy [39]. From the perspective of control and incentives, Tan [40] examined the development and operation process of the LUTRG policy and took the “land ticket” cases in Chongqing and Chengdu as examples to show how this LUTRG policy evolved under the roles of various levels of government. In his study, the internal motivation and incentive mechanism of the local government in the implementation of the LUTRG policy and its various effects were fully discussed. Chien’s study showed how the local government, under the planning constraint of farmland protection, adopted the positive strategy of quota territorialization, i.e., land comprehensive consolidation, interregional land quotas trading, and development of marginal lands, to successfully secure the construction land needed for local economic development [41].

### *3.3. Government Behavior of Public Goods Provision in Land Planning*

For farmland protection affairs in land planning, local governments regard farmland protection as a kind of public good, and all seek to reduce their responsibility for farmland protection in their own jurisdictions, with opportunistic behaviors of free-riding [42]. Scholars have interpreted the logic of local governments’ behavior in farmland protection affairs from different perspectives. Based on a multitask principal–agent model, Guo and Wu pointed out that to maximize their own benefits, local governments choose the strategy of using the efficiency mechanism for developing the economy and the legitimacy mechanism for protecting farmland [43]. Local governments achieve “goal substitution” from farmland quantity protection to farmland quality protection by information concealment, collusion, and lobbying, and thus realize farmland protection with the minimum cost. By establishing a noncooperative game model for farmland protection, Wu et al. analyzed the monitoring behavior of the central government and the implementation behavior of local governments and found that the incentives for local farmland protection from the central government were incompatible with the economic and political incentives for local economic development, which led local governments to choose the former targets and disregard the latter targets when faced with the fixed targets of performance assessment

and the soft targets of farmland protection [44]. The reluctance of local governments to protect farmland has forced the central government to respond with the constant centralization of planning power in farmland protection. Zhong et al. reviewed the evolution of China's farmland protection policy over the past four decades and showed how the central government, through the establishment of a land planning system and planning policy tightening, completed the process of centralizing the administrative authority over land conversion [4].

In recent years, scholars have focused on land consolidation projects and studied the governance mode of this public good provision. Tan and Zhou argued that to achieve effective provision of land consolidation projects, a new organizational form and behavioral rules have been formed between the central and local governments in China, namely the land project system [45]. Through a case study, the policy packaging and contracting behavior of the central and provincial governments and the project taking and packaging behavior of the county-level governments were found to be the operational mechanisms of the mode, reflecting the decentralized character of this mode. Using the political science perspective of interest analysis, Gui explored the behavioral logic between central and local governments and villages in the implementation of land consolidation under the project system and found that the central government delegates projects to local governments to solve the supervision problem but faces insufficient incentives of local governments, resulting in the dilemma of public goods provision [46].

#### 4. A Cultural Perspective Focusing on Centralized Domination

The central–local relations in the land planning system are influenced not only by the rational calculations of the actors but also unconsciously by cultural perceptions. Without considering the subjective perceptions related to culture, a review of the central–local relations in the land planning system is incomplete. Scholars have tried to apply a cultural perspective to explain the central–local relationship with a focus on land value, historical paths, and risk perceptions.

The land planning system established a strict farmland protection policy due to the land value concept of the central government. At the end of the last century, the well-known scholar Brown published the report “Who will feed China”, which had a great impact on the Chinese government [47]. The central government thus formally established the value of protecting farmland for maintaining food security. To curb the trend of farmland decline, the central government introduced a policy supporting a dynamic balance of total farmland and strictly adhered to the bottom line of 1.8 billion mu of farmland, which was implemented through land planning [48]. The aim to guarantee food security is an important reason for the central government to maintain centralized power over the land planning system. Given that local governments are out of control in farmland protection, scholars have revealed the logic of the Chinese central government's choice to centralize planning approval authority based on the perception of land risk [49]. In their study, an econometric regression model confirmed that the greater the land risk in cities caused by the local governments, the more likely the central government is to adopt a centralized control strategy when adjusting the land planning and approval authority of the city. With the construction of an ecological civilization, safeguarding ecological security and establishing a spatial planning system have gradually become the new value principles of the central government to strengthen zoning regulations [50]. To this end, the central government requires local governments, in addition to strictly adhering to the bottom line of farmland, to increase ecological protection and control of the bottom line of ecological land in the third round of general spatial planning revision and the fourth round of general spatial planning formulation, aiming to promote the protection and spatial use control of quantity, quality, and ecology in farmland and other ecological land. Scholars have pointed out that under the new planning concept, a unified spatial planning system should be established to change the situation of fragmented spatial control, and the relationship between central and local government should be straightened out to support the initiative of local governments [51].



Nevertheless, in regard to the institutional design of ecological security, the integrated control of the central government should not be weakened [52]. This means that changes in land values in different periods bring new planning affairs to local governments, but the central government must continue to maintain centralized planning power with top-down cap control and quota management.

Other scholars believe that the central government in China adopts centralized control over land management and decomposes land quotas from the top to the bottom because of historical path dependence. The idea of centralized control of land throughout the country by the central government has a long history, as in the saying “all the lands in the world belong to the king, and all the humans in the world are the king’s people.” Gao points out [53] that the political and economic systems that lasted for thousands of years in China are deeply rooted in the concepts of “unification” and “centralization”, and local governments have a sense of identification with the power centralization under the central government; land planning management is no exception. Kang and Shi put forward the idea that land management in China is mainly derived from the direct allocation of resources by the central government in the planned economy and believed that the management of land quota allocation in land planning originated from the traditional logic of the economic system and is directly related to the country’s transition from a planned to a market economy [54].

In general, the cultural perspective emphasizes informal institutional factors, but there are few studies of this type, and they are not sufficiently integrated with the exploration of central–local relations. In addition to scholars’ neglect of cultural factors in the land planning system, the difficulty of conceptualizing and operationalizing the subjective perception of culture is the reason for the little progress made in such studies.

## 5. Discussion

### 5.1. The Shortcomings of Existing Research

By reviewing the central–local relations of land planning, we find that previous studies have developed an initial framework of the central–local relations in terms of the structural, process, and cultural perspectives. However, in general, the existing research has the following shortcomings.

(1) The understanding of the central–local relations in the land planning system is still relatively simple and one-sided, different views coexist, and no influential theoretical model has been developed to characterize the main logic of the central–local relations in China’s land planning. While the many scholars who studied spatial planning in Europe and the United States consistently presented the view that the planning in these countries follows a decentralized governance structure [55–57], in the study of land planning in China, scholars have debated the power structure of the planning system, with evidence supporting the totalitarian model, pluralist model, and cellular model. (2) Most of the existing studies are limited to the field of land planning itself and lack a macroscopic vision, leading to the dilemma of “seeing the trees but not the forest”. In fact, scholars from political science, sociology, and economics have developed several influential models and concepts of central–local relations in political and economic systems in contemporary China, such as federalism with Chinese characteristics [58,59], the promotion tournament model of local officials [60,61], and state governance theory [62–64]. However, these influential theories of central–local relations have not been fully expanded and applied to land planning affairs, which to some extent hinders the theoretical development of central–local relations in the field of land planning. (3) Game theory is an appropriate tool to study the behavior of central–local governments and their interaction in the planning process. However, the behavioral game of central and local governments in previous studies is limited to the noncooperative game model with complete information, which is too simple and cannot accurately describe the characteristics of central and local actors. In other words, previous studies lack a complex and accurate game model. (4) Finally, most of the current studies focus on the structural and process perspectives, and few studies develop the cultural

perspective, which is not conducive to an in-depth understanding of the central–local relationship in the land planning system.

### *5.2. Reconsideration of Central–local Relations in the Context of Territorial Spatial Planning Reconstruction*

With the construction of the territorial spatial planning system in the new era, Chinese scholars of central–local relations in the field of planning have begun to focus on new issues, such as the restructuring of planning powers, offering mostly normative analyses.

As the academic community reaches the consensus that the clear delineation of planning powers between central and local governments is key for the construction of the spatial planning system [65–67], scholars have put forward several principles of reconstructing spatial planning powers, and the following representative propositions have been formed.

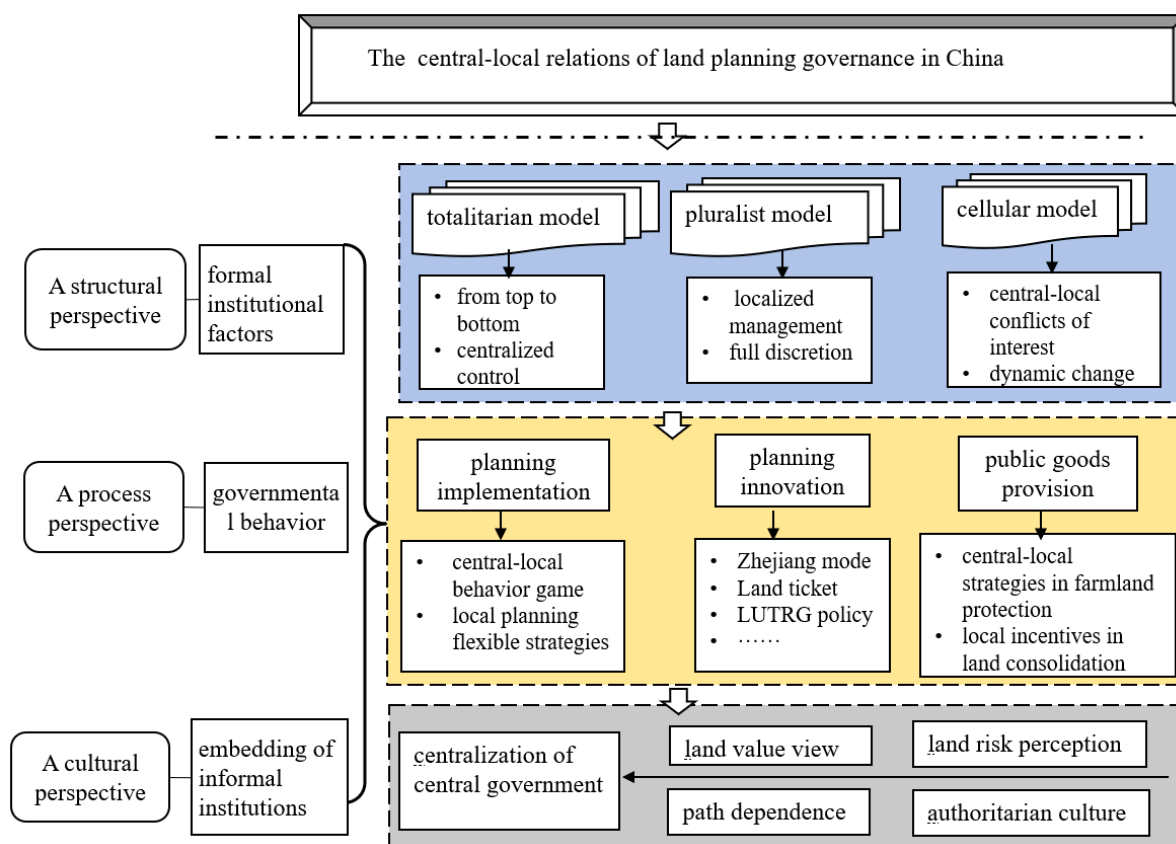
(1) The principle of dividing planning powers according to interests. Zhao [68] proposes that the content of planning in the national interest should be submitted to the central government for approval, while the planning decisions involving local interests should be left to the local governments themselves. (2) The principle of dividing planning powers by spatial scale and sphere of influence. Xuan [69], Yue and Wang [70], and other scholars believe that planning affairs with a high spatial level, a large scope of influence, and a large scale should be handed over to the central government, while planning affairs with a low spatial level, a small scope of influence, and a small scale should be handed over to the local authorities. (3) The principle of dividing planning powers by region and factor type. Lin and Zhao [71] and Xun et al. [72] believe that the allocation of territorial space with regional and important characteristics should be under central government control, and the allocation of territorial space with characteristics of production factors and local rights and benefits should be subject to local governments. (4) The principle of dividing planning powers by the size of affairs. Other scholars propose the idea of a vertical division of powers, in which the central government makes unified, constraining, and powerful decisions in major affairs, focusing on the protection of territorial space, and local governments make local decisions in small affairs, adopting flexible and effective methods and focusing on the development of territorial space [73].

In addition to proposing theoretical ideas, other scholars also discussed the reconstruction mode of planning power division in practices. Sheng et al. [74] proposed the idea of a four-level power division system of territorial spatial planning in the Wuhan practice based on the power division principles in terms of public goods externalities, information complexity, and incentive mechanisms. Xie and Wang [75] and Xie [76], on the other hand, proposed a mode of reconstructing the spatial strategic planning system at the local level, taking the experience of foreign planning power division and the practice of “Multiple-plan Coordination” in Xiamen as examples. Taking the establishment of the territorial spatial master planning system in Nanjing as an example, Zhang [77] proposed that the higher-level government focuses on keeping the bottom line of space governance and promoting high-quality territorial spatial development, and the authority of the lower-level government focuses on satisfying territorial spatial development, thus developing the power division mode of the prefecture level to coordinate the bottom line and the county level to coordinate development.

## **6. Conclusions**

As the Chinese government tries to establish a spatial planning system with unified authority and responsibility and a clear division of power, reviewing previous research progress on the status of central–local relations in land planning has become the basis for promoting research on central–local relations in spatial planning. However, literature reviews on the governance of spatial planning rarely focus on the progress of central–local relations. Considering that the current research on land planning systems involving central–local relations is not systematic but is relatively scattered, this paper reviews the research progress on the central–local governance of land planning based on the structure–

process–culture approach. Finally, a knowledge mapping of central–local relations is offered (Figure 2), and the following conclusions are drawn.



**Figure 2.** The knowledge mapping of research progress.

First, studies from a structural perspective provided divergent views on the distribution of land planning powers between the central and local governments. The totalitarian suggests that the central government controls land use from top to bottom and has the decision-making power in land planning. Pluralism argues that local governments actually have full land planning power in light of the localized management character of land planning affairs. Scholars adopting the cellular model argue that the distribution of planning power between the central and local governments is dynamic and changing and focus on revealing the conflicts of interest between central and local governments in planning.

Second, studies from the process perspective have been a hot topic in recent years. These studies discuss the central–local relations based on the actual operation of the government, using game theory, institutional change theory, and other theories to examine government behaviors, such as planning implementation, planning policy innovation, and public goods provision in planning affairs. The central government guides local governments to achieve the land planning goals of economic development and farmland protection through the means of incentives and controls, and the governments at both levels take rational actions to maximize their own interests. However, the picture of central–local relations given by this perspective is usually fragmented.

Finally, studies from the cultural perspective are given less attention, and the literature is scarce. Their main contribution is to use conceptual perceptions of land values, historical path dependence, and risk perception to provide an explanation for why land planning power is centralized and governed by the central government.

The contribution and international significance of this review on central–local relations in China’s planning governance are that (1) it enhances academic knowledge of how central–local governments in countries with backgrounds of public property rights use public

planning power to achieve the goals of arable land protection and economic development. This review helps to open the black box of central–local planning governance under public property rights. (2) While many countries have spatial planning systems, China’s land planning practice provides a different planning concept and central–local governance mode for international scholarship. (3) As an increasing number of countries are paying attention to the issues of urban sprawl and ecological protection caused by land-use expansion, China’s strict control system of land planning based on arable land protection can provide experience for the innovation and reform of central–local planning governance in other countries. Of course, the experience of central–local relations in land planning governance also has an important implication and reference for the reconstruction of the spatial planning system in China. Based on the picture of the central–local relations in China’s land planning, this paper argues that research on the central–local relationship for planning governance in China is still a hot topic and that there is much space for future research. From the shortcomings discussed above, we find that the current research has obvious shortcomings in conceptual models, theoretical exploration, methodological application, and integration of research perspectives, which restrict the development of research on central–local relations. To this end, we suggest that future research should focus on the following four directions.

(1) Construction of the conceptual model. At present, research on planning systems is in the initial development stage. To construct a useful theory, a model of central–local relations should be proposed based on the concepts of centralization and decentralization, and the logic of central–local relationships should be clarified.

(2) Expansion of existing theories. At present, there are several theories of central–local relations in other disciplines, which should be actively extended to the study of central–local relations in spatial planning fields. In the process of exploration, the institutional structure of political centralization and economic decentralization in China should be recognized as the study basis, with the central government taking administrative contracts to local governments and local governments competing under the authoritarian system to form the internal mechanism of central–local relations. Applying the above theories to explain the logic behind the operation of planning governance can enhance the theory in this field.

(3) Application of new methods. New methods are emerging from different research perspectives. In the context of the research topic, we should focus on the latest progress of game theory and use the evolutionary game instead of the traditional game to explain the government’s behavioral strategy of planning governance and find the evolutionary stable strategy in central–local relations. To promote the development of empirical research, the paradigm of experimental economics can be used to simulate the behavior of the central government and local governments in planning affairs, such as land quota allocation and trading. To address the weakness of current research, it is necessary to study changes in the connotation of planning philosophy from the cultural perspective.

(4) Integration of research perspectives. In the past, the three research perspectives developed relatively independently, which is not conducive to the construction of the whole research system. For this reason, efforts should be made to integrate and synthesize different perspectives.

**Funding:** This research was funded by the Ministry of Education in China Liberal arts and Social Sciences Foundation through project No.22YJCZH267, the Ministry of Education of China through project No.20JZD013, the Soft Science Foundation of Zhejiang Province, China through project No.2021C35066.

**Data Availability Statement:** Not applicable.

**Acknowledgments:** We are grateful to the editors and the anonymous reviewers for their insightful comments and critical contributions.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Notes

- <sup>1</sup> China's government hierarchy is divided into five levels: the central level, provincial level, prefecture level, county level, and township level. The local governments discussed in this article are those at the provincial level and below.

## References

1. Needham, B. *Planning, Law and Economics: The Rules We Make for Using Land*; Routledge: London, UK, 2006.
2. Li, M. The effect of land use regulations on farmland protection and non-agricultural land conversions in China. *Aust. J. Agric. Resour. Econ.* **2019**, *63*, 643–667. [\[CrossRef\]](#)
3. Hao, J.; Ai, D. A new territorial spatial planning system for a new era. *Land Sci. Dev.* **2019**, *4*, 19–22. (In Chinese)
4. Zhong, T.; Mitchell, B.; Scott, S.; Huang, X. Growing centralization in China's farmland protection policy in response to policy failure and related upward-extending unwillingness to protect farmland since 1978. *Environ. Plan. C* **2017**, *35*, 1075–1097. [\[CrossRef\]](#)
5. Zhou, T.; Tan, R.; Shu, X. Rigidity with partial elasticity: Local government adaptation under the centralized land quota system in China. *Land Use Policy* **2022**, *118*, 106138. [\[CrossRef\]](#)
6. Zheng, Y. *De Facto Federalism in China: Reforms and Dynamics of Central-Local Relations*; World Scientific Publishing Co., Inc.: Singapore, 2007.
7. Chung, J.H. Studies of central–provincial relations in the People's Republic of China: A mid-term appraisal. *China Q.* **1995**, *142*, 487–508. [\[CrossRef\]](#)
8. Lieberthal, K.G. Introduction: The 'fragmented authoritarianism' model and its limitations. In *Bureaucracy, Politics, and Decision Making in Post-Mao China*; Lieberthal, K.G., Lampton, D.M., Eds.; University of California Press: Berkeley, CA, USA, 1992.
9. An, Z. Analysis on the power structure in land planning: Integrated mode of public participation and approval of the People's Congress. *China Land Sci.* **2013**, *27*, 22–28. (In Chinese)
10. Chen, L. Institutional Equilibrium Analysis of Land Use Planning in the Transitional Period of China. Ph.D. Thesis, Nanjing Agricultural University, Nanjing, China, 2007. (In Chinese).
11. Lu, S.; Wang, H. Limited decentralization: Understand China's land system from the perspective of central-local relation. *Land* **2022**, *11*, 517. [\[CrossRef\]](#)
12. Zhao, N. Research on legal system of decentralization in Land-use planning. *J. Cent. South Univ. (Soc. Sci.)* **2013**, *6*, 016. (In Chinese)
13. Yang, L. The enlightenment of polycentric governance theory to improve our land use planning system. In Proceedings of the 20th Conference of China Land Science Society, Beijing, China, 1 June 2010; pp. 82–84. (In Chinese).
14. Ding, C. Land policy reform in China: Assessment and prospects. *Land Use Policy* **2003**, *20*, 109–120. [\[CrossRef\]](#)
15. Qu, F.; Chen, J.; Chen, W. Theoretical and empirical study on the land conversion economic driving forces. *J. Nat. Resour.* **2005**, *20*, 231–241. (In Chinese)
16. Tan, R.; Beckmann, V. Diversity of practical quota systems for farmland preservation: A multicountry comparison and analysis. *Environ. Plan. C Gov. Policy* **2010**, *28*, 211–224. [\[CrossRef\]](#)
17. Cheng, X. Reflection and reconstruction of China's current land management system. *China Land Sci.* **2013**, *27*, 15–20. (In Chinese)
18. Dang, G.; Wu, W. Land planning and management reform: Right adjustment and rule of law construction. *Chin. J. Law* **2014**, *36*, 57–75. (In Chinese)
19. Yan, J.; Xia, F.; Ma, M. Strategy orientations of transformation development: Land consolidation in the new period of China. *China Land Sci.* **2016**, *30*, 3–10. (In Chinese)
20. Wang, X.; Mei, A.; Zhou, Y. Stakeholder analysis in the process of land use master planning at county level. *China Land Sci.* **2014**, *28*, 47–52. (In Chinese)
21. Chen, Y.; Mei, Y. A study of theory and methods and innovative implementation in the new period land-use planning revision. *Sci. Technol. Manag. Land Resour.* **2004**, *21*, 80–84. (In Chinese)
22. Wang, J.; Wu, Q.; Yan, S.; Guo, G.; Peng, S. China's local governments breaking the land use planning quota: A strategic interaction perspective. *Land Use Policy* **2020**, *92*, 104434. [\[CrossRef\]](#)
23. Xing, H.; Hao, S. Thinking about the reform path of China's land planning and control system in the period of rapid urbanization. *China Real Estate* **2007**, 21–24. (In Chinese)
24. Skinner, M.W.; Kuhn, R.G.; Joseph, A.E. Agricultural land protection in China: A case study of local governance in Zhejiang Province. *Land Use Policy* **2001**, *18*, 329–340. [\[CrossRef\]](#)
25. Yang, D.Y.R.; Wang, H.K. Dilemmas of local governance under the development zone fever in China: A case study of the Suzhou region. *Urban Stud.* **2008**, *45*, 1037–1054. [\[CrossRef\]](#)
26. Feng, L.; Yang, Y.; Yao, L. Decentralization and incentives: Research on the central-local relations within the land supply system. *China Land Sci.* **2013**, *27*, 4–10. (In Chinese)
27. Lin, G.; Ho, S.P.S. The state, land system, and land development processes in contemporary China. *Ann. Assoc. Am. Geogr.* **2005**, *95*, 411–436. [\[CrossRef\]](#)
28. Liu, L.; Chen, Y. Research on Interest Conflicts Concerning Quotas in Revision of Land Use Planning. *China Land Sci.* **2009**, *23*, 37–40. (In Chinese)



29. Ng, M.K.; Tang, W.S. The role of planning in the development of Shenzhen, China: Rhetoric and realities. *Eurasian Geogr. Econ.* **2004**, *45*, 190–211. [\[CrossRef\]](#)
30. Zhu, J.; Tang, W. Conflict and compromise in planning decision-making: How does a Chinese local government negotiate its construction land quota with higher-level governments? *Environ. Urban.* **2018**, *30*, 155–174. [\[CrossRef\]](#)
31. Hu, J.; Chen, Y.; Mei, Y. Institutional innovation mechanism of land use planning in China. *China Popul. Resour. Environ.* **2010**, *20*, 155–159. (In Chinese)
32. Wang, Y. Study on governing land use planning gaming between central and local governments. *J. Nanjing Agric. Univ. (Soc. Sci. Ed.)* **2011**, *11*, 73–79. (In Chinese)
33. Xu, Z. Some ideas about the implementation and management of land use planning in Zhejiang Province. *Zhejiang Land Resour.* **2011**, 33–35. (In Chinese)
34. Wei, J. Discussion on the approach to realize flexible control in land use planning. *Nat. Resour. Econ. China* **2013**, *26*, 21–23. (In Chinese)
35. Wang, R.; Diao, C.; Chen, M.; Gan, Z.; Li, C. The study of combining “Rigidity” with “Flexibility” in revising the plan of land utilization—A case study in Jiangjin, Chongqing. *J. Guangxi Teach. Educ. Univ. (Nat. Sci. Ed.)* **2005**, *22*, 61–64. (In Chinese)
36. Wang, H.; Tao, R. Transfer and transaction of land development right on the “Zhejiang Mode”: Institutional origin, operation mode and its important meaning. *Manag. World* **2009**, 39–52. (In Chinese)
37. Wang, H.; Tao, R.; Wang, L.; Su, F. Farmland preservation and land development rights trading in Zhejiang, China. *Habitat Int.* **2010**, *34*, 454–463. [\[CrossRef\]](#)
38. Zhang, W.; Wang, W.; Li, X.; Ye, F. Economic development and farmland protection: An assessment of rewarded land conversion quotas trading in Zhejiang, China. *Land Use Policy* **2014**, *38*, 467–476. [\[CrossRef\]](#)
39. Long, H.; Li, Y.; Liu, Y.; Woods, M.; Zou, J. Accelerated restructuring in rural China fueled by ‘increasing vs. decreasing balance’ land-use policy for dealing with hollowed villages. *Land Use Policy* **2012**, *29*, 11–22. [\[CrossRef\]](#)
40. Tan, M. Strict control and incentive: The evolution of the policy of linking decrease of arable land with increase of construction land and its local implementation. *Soc. Sci. China* **2014**, *7*, 125–142+207. (In Chinese)
41. Chien, S.S. Local farmland loss and preservation in China—A perspective of quota territorialization. *Land Use Policy* **2015**, *49*, 65–74. [\[CrossRef\]](#)
42. Tan, R. *China Land Security Review*; Social Science Academic Press: Beijing, China, 2014. (In Chinese)
43. Guo, Z.; Wu, Y. “Goal Substitution” in the Implementation of Farmland protection System: A study based on Multi-task agent model. *Economist* **2016**, *6*, 58–65. (In Chinese)
44. Wu, Y.; Jiang, H.; Qu, F. Dilemma and way-out of farmland protection in China: From Perspective of subject behavior. *J. Nanjing Agric. Univ. (Soc. Sci. Ed.)* **2009**, *9*, 67–71. (In Chinese)
45. Tan, R.; Zhou, T. Decentralization in a centralized system: Project-based governance for land-related public goods provision in China. *Land Use Policy* **2015**, *47*, 262–272. [\[CrossRef\]](#)
46. Gui, H. Analysis of project system and rural public goods provision system—Take farmland consolidation as an example. *China J. Political Sci.* **2014**, 50–62. (In Chinese)
47. Brown, L.R. *Who Will Feed China? Wake-Up Call for a Small Planet*; WW Norton & Company: New York, NY, USA, 1995.
48. Li, X. The change of cultivated land area in China in recent 20 years and its policy implications. *J. Nat. Resour.* **1999**, *14*, 329–333. (In Chinese)
49. Zhou, T.; Hu, R. Why the Central government prefers to centralize spatial planning approval authority in China? *An explanation based on land risk. J. Environ. Plan. Manag.* **2022**. [\[CrossRef\]](#)
50. The Xinhua News Agency. Decision of the CPC Central Committee on Some Major Issues Concerning Comprehensively Deepening Reform. Available online: [http://www.gov.cn/jrzq/2013-11/15/content\\_2528179.htm](http://www.gov.cn/jrzq/2013-11/15/content_2528179.htm) (accessed on 15 November 2013).
51. Shi, Z. Holistic control of natural resource use and its institutional design. *Stud. Social. Chin. Charact.* **2017**, 81–87. (In Chinese)
52. Dong, Z. Integration of multiple plans focuses on the power division of zoning regulations between central-local relations. *Outlook Wkly.* **2016**, 30–32. (In Chinese)
53. Gao, H.A. Historical Review of the Change of Chinese Land System in the 20th Century. *J. Zhejiang Univ. (Humanit. Soc. Sci.)* **2007**, *37*, 124–133. (In Chinese)
54. Kang, X.; Shi, Z. Research on land management operation mechanism based on quota regulation. *China Public Adm. Rev.* **2013**, *15*, 76–89. (In Chinese)
55. Schmidt, S.; Buehler, R. The planning process in the US and Germany: A comparative analysis. *Int. Plan. Stud.* **2007**, *12*, 55–75. [\[CrossRef\]](#)
56. Valk, A.V.D. The Dutch planning experience. *Landsc. Urban Plan.* **2002**, *58*, 201–210. [\[CrossRef\]](#)
57. Waterhout, B.; Othengrafen, F.; Sykes, O. Neo-liberalization processes and spatial planning in France, Germany, and The Netherlands: An exploration. *Plan. Pract. Res.* **2013**, *28*, 141–159. [\[CrossRef\]](#)
58. Qian, Y.; Weingast, B.R. China’s transition to markets: Market-preserving federalism, Chinese style. *J. Policy Reform* **1996**, *1*, 149–185. [\[CrossRef\]](#)
59. Jin, H.; Qian, Y.; Weingast, B.R. Regional decentralization and fiscal incentives: Federalism, Chinese style. *J. Public Econ.* **2005**, *89*, 1719–1742. [\[CrossRef\]](#)

60. Li, H.; Zhou, L. Political turnover and economic performance: The incentive role of personnel control in China. *J. Public Econ.* **2005**, *89*, 1743–1762. [[CrossRef](#)]
61. Zhou, L. Governing China's local officials: An analysis of promotion tournament model. *Econ. Res. J.* **2007**, 36–50. (In Chinese)
62. Cao, Z. Centralization and decentralization of power structure: A theory of ruling risks and empirical evidence from Chinese history. *Chin. J. Sociol.* **2018**, *4*, 506–564. [[CrossRef](#)]
63. Cao, Z. The vertically decentralized authoritarianism and the mechanisms of political stability in China. *Sociol. Stud.* **2011**, *25*, 1–40+243. (In Chinese)
64. Zhou, X. Authoritarianism and effective governance: The institutional logic of contemporary governance of China. *Open Times* **2011**, 67–85. (In Chinese)
65. Deng, L.; Zeng, S.; Zhang, N. The study on the improvement of space planning system from the perspective of governance power. *Urban Dev. Stud.* **2016**, *23*, 24–30. (In Chinese)
66. Zhang, J.; Xia, T. Transition and reconstruction of spatial planning system under the goal of modernization of governance. *J. Nat. Resour.* **2019**, *34*, 2040–2050. (In Chinese)
67. Xuan, X. Government power and responsibility division in the reform of “Multiple Plans Coordination and Integration”. *J. Urban Reg. Plan.* **2018**, *10*, 74–92. (In Chinese)
68. Zhao, Y. Territorial spatial planning: A new opportunity to reshape the planning system. *Beijing Plan. Rev.* **2020**, 152–153. (In Chinese)
69. Xuan, X. Problems, cause and suggestions of spatial planning system in China—Based on the perspective of central and local relations. *Econ. Rev.* **2018**, *397*, 2+48–56. (In Chinese)
70. Yue, W.; Wang, T. Rethinking on the basic issues of territorial and spatial use control in China. *China Land Sci.* **2019**, *33*, 8–15. (In Chinese)
71. Lin, J.; Zhao, Y. State governance, Spatial Planning and “Central-local” coordination: With discussion on the development and trend of central-local relationship in the evolution of the spatial planning system. *City Plan. Rev.* **2019**, *43*, 20–23. (In Chinese)
72. Xun, C.; Li, R.; Han, Y.; Xiao, J. Establishing national land use and space planning system based on central-local government relationship reform. *Planners* **2020**, *36*, 58–63. (In Chinese)
73. Xuan, X. The construction and improvement of China's spatial planning system from the perspective of central-local relations. *Reg. Econ. Rev.* **2019**, *2*, 15–31. (In Chinese)
74. Sheng, H.; Yin, Y.; Jiang, T. A study on spatial planning system based on hierarchical control from the perspective of megacities. *City Plan. Rev.* **2018**, *42*, 109–114. (In Chinese)
75. Xie, Y.; Wang, W. From “Multiple-Plan Coordination” to the reform of the spatial planning system. *Urban Plan. Forum* **2015**, *3*, 19–25. (In Chinese)
76. Xie, Y. Spatial planning system construction for the improvement of governance capability. *Planners* **2017**, *33*, 24–27. (In Chinese)
77. Zhang, Y. Thoughts on the compilation of land spatial planning from the perspective of inter-governmental power between cities and districts. *Mod. Urban Res.* **2019**, *12*, 47–53. (In Chinese)