

## Abstract

Justice is a basic and classic theme. Compared with its meaningful connotations in sociology, economics, and legal disciplines, the spatial dimension of justice lacks sufficient attention and exploration. Can we define space as just or unjust? Although scholars have endeavored to build up the conception of spatial justice, there remains a theoretical gap between justice philosophy and spatial planning: the transformation from philosophical justice to spatial justice. As spatial planning involves planning practices that (re)produce space, the gap raises the question of how to transfer complicated philosophical theories of justice to spatial planning and the question of how to analyze the spatial justice of certain planning practices. Existing research puts emphasis on the spatial equity of the distribution of social goods, lacking the theory of justice in planning practices. This study focuses on one more specific question: for planning practice aiming at compensating for historical injustices, does it actually promote spatial justice? Taking the planning practice of shared-ownership housing in Shanghai as a case study, this thesis tries to provide an analytic framework for assessing the spatial justice of certain planning practices.

The dissertation is divided into two parts: the theoretical framework of spatial justice and the empirical research on the planning practice of shared ownership housing in Shanghai. In the first part, a theoretical framework of spatial justice reviews mainstreams philosophies of justice (i.e., utilitarianism and intuitionism, liberalism, Marxism and (neo) socialism, discourse ethics, and recognition justice). On the one hand, the two approaches to philosophy of justice—the normative approach and the cognitive approach—build up diversified philosophical frameworks and long-standing contradictions within and among these mainstreams. On the other hand, spatial justice is important because: 1) Spatiality is an inherent element in justice philosophy; 2) Space is an external representation of justice philosophy. However, there is a gap between the complicated philosophy of justice and the discipline of spatial planning. To bridge the gap, this research translates these philosophical thoughts into a pluralist understanding of space: Space is like a mirror, which reflects the plural images of justice philosophy in planning practice. This study does not take one particular philosophy of justice as a benchmark. Instead, it uses a deconstructive approach to analyze which theories of justice are adopted as the principles, means, and institutional contexts for spatial planning projects.

The second part then applies the theoretical framework to the spatial justice of the planning practice of shared ownership housing in Shanghai. This part first analyzes the spatial equity of five basic social goods, and then deconstructs the manifestation of spatial justice in the planning practice. The analysis of spatial equity conducted a horizontal comparison of five basic social goods, including health resources, educational resources, job opportunities, parks, and public transportation. The horizontal comparison refers to four horizontal indicators of one certain resource calculated from various GIS measures to assess the spatial equity, including accessibility, availability, proximity, and affordability. There are three key findings in the assessment methods of

accessibility: 1) The model formula plays a dominant role, which determines the geographical patterns of accessibility maps; 2) The use of geographical weights can change the accessibility results to a great extent, which can also lead to problematic outcomes; 3) The evaluation criteria for accessibility method should be in line with the space reproduction mechanism, including physical space, temporal changes, and user behaviors in order to reflect the relationship between resource supply and population demand. For each resource, the spatial equity in 2010 was taken as the status before the implementation of the planning, while the spatial equity in 2017 was taken as the state after the implementation. Due to the limited data sources, this time comparisons were made for certain health resources, educational resources, and parks. Each resource has distinct characteristics in the four indicators of spatial equity as well as in the temporal dimension and institutional organizations.

The analysis of spatial justice is divided into two parts: vertical comparison and the reflection of justice philosophy in the planning practice. The vertical comparison refers to the comparison across the five social goods and the different status quo of the residents. The results show that: the planning practice hardly changed the spatial structure of resource distribution and implemented different philosophies of justice during the planning practice. Even with specific resource reallocation policies in place, the historical (dis)advantages recorded by space are difficult to change. Residents of shared ownership housing owned better living conditions at the cost of a high-level acquisition of the five basic resources. The planning practice facilitated the inflow of migrants in the city center and population growth in the suburbs, thereby promoting the overall development of the city. Furthermore, there are inconsistencies and blends of spatial justice in the planning practice: the planning practice took overall utility maximization as the planning principles, followed liberalist justice for construction, and built institutional limitations based on post-socialist justice. In this way, the planning practice simultaneously realized the affordable and investment attributes of the shared ownership housing.

This study provides a pluralist analytical framework of spatial justice based on the planning practice of shared ownership housing in Shanghai. There are three major findings: 1) Different justice theories play different roles in the planning practices; 2) The spatial distributions of social goods are related to their corresponding user behaviors; 3) A question that may take precedence over the question of the justice or injustice of spatial planning is: What kind of justice philosophy governs certain planning practices. Spatial justice could be an important reflection of historical (in)justice which records the reproduction of capital, social relations, and institutions in the spatial dimension. The concept of spatial justice can contribute to further developments in the planning theory and practice.

**Keywords:** spatial justice, accessibility, spatial equity, shared ownership housing, planning practices