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Trading off public values in High-Speed Rail development in China

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ABSTRACT

Theory on how different public values are prioritized in transport infrastructure planning is growing increasingly sophisticated, but most of it has focused on Western countries. Its relevance to China is thus far unknown territory. In this article, we apply the theory on public values and the way various values are traded off against each other to the case of High-Speed Rail development in China. We develop a Public value tradeoff matrix enabling us to identify and measure the various public values at play and to establish what changes took place in the prioritization of various public values over time. In the history of HSR development in China, a shift from regional equity and safety through economic growth and speed to organizational efficiency and cooperation can be observed in the period before HSR took off in China until now. The trading off process takes place through different institutional paradigms and organizational mechanisms in China than in Europe and America, and occurs more at the strategic apex of the administrative hierarchy.

1. Introduction

The speed and scale with which High-Speed Rail (HSR) infrastructures are expanding in China far exceed those anywhere else around the world. China formally introduced its HSR program that consists of 18,000 km passenger dedicated lines in the national *Mid and Long Term Railway Network Plan* in 2008 (The Central Government of China, 2008) (Fig. 1). As of late 2014, there are more than 800 newly constructed HSR stations, 9300 km of HSR routes in service and everyday almost one thousand trains run at a speed of 250 km/h or higher. The pace of development is startling, which is due to the strong political will and government commitment since the government expects HSR development can help to secure the realization of multiple public values unavailable in the era of conventional rail. Among them are economic growth, higher operating speed, higher quality of rail service, technological innovation, environmental sustainability, and some process-related values including higher levels of efficiency, productivity, competition and cooperation in the railway sector.

However, much has changed since then, since it appears that some values were easier to safeguard than others; realizing one value may inevitably affect, postpone or thwart the realization of others; disappointments may emerge. To name a few examples, the HSR program in China may stimulate economic growth, but it caused a high national debt rate that constitutes a serious threat for economic sustainability in the long run; the eastern regions are much more densely covered with HSR than the western areas, leading to a higher level of regional disparity (Yu et al., 2012). In addition, policy goals have shifted during the development of the HSR program in China; high ambitions in the early phases of policy development were dashed in later phases. For instance, speed has been once the heart of the railway policy, but after the Wenzhou accident[1] (Railway Gazette International, 2011; BBC News, 2011; Xinhua News, 2011) safety in HSR operations has obtained a higher priority than it used to have, while the dominance of speed has been mitigated.

Taking the work of Barry Bozeman (2007, pp.13) as a point of departure we define public values in the case of infrastructure delivery as "those providing normative consensus about (1) the rights, benefits and prerogatives to which citizens should (and should not) be entitled; (2) the obligations of citizens to society, the state and one another; and (3) the principles on which governments and policies should be based." The theory on public

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[1] On 23 July 2011, two high-speed trains traveling on the Yongtaiwen HSR line collided on a viaduct in the suburbs of Wenzhou. The two trains derailed each other and four cars fell off the viaduct. 40 people were killed and at least 192 were injured. The collision was the first fatal crash involving HSR in China and the third-deadliest HSR accident in history, after the 1998 Enschede train disaster in Germany and Santiago de Compostela derailment in Spain.

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values is built and developed based on Western experience and evidence, which admits the existence of value pluralism and aims at exploring the tensions between values (see, for example, Jorgensen, 1999; Jorgensen and Bozeman, 2002; Thatcher and Rein, 2004; O'Flynn, 2007; Wallis and Gregory, 2009). It allows researchers to look at various values together and to investigate the mechanisms through which they influence each other.

The goal of this research is: (1) to see if the Western-inspired theory on public values can also be applied to understand the Chinese policy context, and (2) to see if the prioritization of values has evolved for HSR in China over time. Therefore, the main question the article will answer is: how multiple and sometimes competing public values are traded off against each other during HSR development in China. There is very little empirical research on this topic, although it is both socially and academically relevant. The remainder of this article is organized as follows: in Section 2, we will look at the theoretical state-of-the-art on public values and ask the question how to establish the prioritization of public values, i.e. what are the criteria to judge value priority? In Section 3, we will discuss our data sources and methods of data analysis, i.e. the steps we have followed and the decisions we have taken to trace value trade-offs in the following empirical research. In Section 4, we will investigate what specific public values can be observed, and how their prioritization evolved over time? What values were safeguarded/delivered in practice and which have been sacrificed? And finally in Section 5, we will conclude with the theoretical reflections and policy implications of the empirical findings.

2. Towards measuring the trading-off process among public values

In general, the term *value* refers to the worth of something; it can be a concept of quality, amount or entity, a degree of importance, a need or a wish to obtain something; a benefit that an economic actor can gain; and it pertains to some desirable end state (Rescher, 1982; Meynhardt, 2009). In public policy, *public value* refers to an appraisal of what is created by government on behalf of the public; it reflects the survival and welfare need and right to which citizenry feels entitled (Moore, 1995; Alford and O'Flynn, 2009; Benington, 2009; Benington and Moore, 2011).

Various Western scholars have tried to identify public values. Among the most influential manifestations, Schwartz (1992), based on empirical tests in 20 countries, generated 11 universals in the content and structure of public values. Van Wart (1998) called for the creation of "a field of public administrative values" and enumerated 5 value sources used in public decision-making. Jorgensen and Bozeman (2007) performed a literature review with the purpose of identifying the values most commonly invoked by government and generated some 72 public values. Rutgers (2008) tried to "sort out public values" and examined multiple efforts to categorize and classify values in public administration. Van de Wal et al. (2008) presented a set of 20 process-based values to explore the similarities and differences between organizational values of the public sector and private sector.

Building on their work and additional literature study, Table 1 presents a selection of public values in infrastructure management, which explores the boundaries of values in public service and describes the elucidation of the concept. More specifically, public values in this paper have been disentangled as consisting of six subsets:

(1) Macro-societal aspects: values associated with the contribution infrastructure makes to the wider society, including economic, environmental and socially cohesive benefits the infrastructure projects bring to society.
(2) Intra-organizational aspects: values associated with intra-governmental performance, for instance, to what extent the infrastructure is provided effectively and efficiently, and to what degree the service delivery is productive and innovative.
(3) Quality aspects: values associated with the physical conditions of infrastructure projects, taking rail as an example, such as accessibility of a railway network, speed and comfort of operating trains.
(4) Inter-organizational aspects: values associated with the relationship and interaction between different governmental organizations and departments, including inter-governmental competition and cooperation.
(5) Procedural aspects: values associated with the relationship between public administration/governance and the general public/citizens. These have to do with the legal status of citizens vis-a-vis public administration, including values such as citizen involvement in decision-making processes, egalitarianism, equity and fairness that authorities ensure to citizens, legality, rule of law and a user orientation in service delivery.
(6) HR aspects: values associated with the behavior of public sector employees in planning and management of infrastructure projects. The central values in this category include accountability, professionalism, and incorruptibility, etc.

As Table 1 shows, we do not mention all possible public values that appear in the literature, but primarily those affected by the trading-off process among values in HSR development in China. This selection is based on three considerations: (1) value proximity, (2) value causality and (3) evidence acquisition. First, the proximity of values refers to the situation that one value is close to another in meaning. For instance, the values *fairness* and *egalitarianism* seem close to the value *equity* in the sense that citizens with different identities and in different regions are equally able to access HSR services, and thus we consider *equity* as a representative. Second, the causality of values refers to the situation that some values frequently appear at the same time or co-vary (e.g. one value has a positive effect on the other, or one value is a precondition for the other). For example, the values *rule of law and justice* are preconditions for *transparency (openness)* and *incorruptibility*; and the values *ethical consciousness, professionalism (expertise)* and *accountability* are also likely to co-vary. In this case, we choose *transparency, incorruptibility* and *professionalism* as representatives, for instance. Third, we consider evidence acquisition for the selection of values. For some values such as *social cohesion* and *risk-readiness*, the evidence demonstrating their status is hard to obtain, or no information sources (i.e. literature, news, reports, etc.) mention their performance in HSR development in China. In this case, we omit these values. Based on the above considerations we produce the selection of public values for our study (see Table 1 for their specific meanings).

Can public values be measured? Jorgensen and Bozeman (2007) state that measuring or assessing public values is a much more difficult task than identifying them. A variety of approaches to identify public values is available, but measuring public values is not only more complex but also far more disputed. In spite of this, scholars and practitioners in infrastructure development and public policy find their measurement compelling and useful. However, only few of them have really tried to take on this job. Cowling (2006) measures public values based on economic theory, i.e. using the concept of "value for money" to quantitatively assess the monetary benefits a value brings. Hills and Sullivan (2006) engage in qualitative measurement based on practical experience and evidence in specific cases. In our research, we also adopt a practical