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A 'correlative' turn for transition studies on China

Abstract: Understanding China is critical to understanding global sustainability transitions. Transition theories within the Anglophone academic tradition are limited in uncovering the deep mechanisms of China's transition dynamics. Building upon Chinese epistemologies, this viewpoint calls for a 'correlative' turn for transition studies on China for the next decade. Through an illustrative case of entrepreneurial experimentation in China, we show how correlativeness is embedded in the logics of transition activities. A correlative epistemology might answer the important question of why transitions gain momentum in some places but not in others.

Keywords: sustainability transitions; transition frameworks; correlative epistemology; guanxi; China

Understanding processes of change in China is crucial to understand global sustainability transitions. China is not only the world's largest greenhouse gas emitter but also the world's largest producer and consumer of coal and steel. In 2020, China announced the goal of carbon neutrality by 2060, which foresees radical and fundamental transformations of its production and consumption systems. China shapes and drives decarbonization trajectories.

Yet, existing approaches to interpret China often generate superficial and stereotypical conclusions (Huang et al., 2021). Transition theories, such as the multi-level perspective (MLP) and technological innovation systems (TIS), are developed within the Anglophone academic tradition and draw on scholarship that derives predominantly from Europe and North America. They tend to misrepresent the social, cultural, and political structures that shape transitions in China. There is a mismatch between assumptions of transition frameworks (e.g., a stable landscape level, distinct public-private boundaries, democratic decision making) and the empirical realities of China:

- Contemporary China is characterised by multi-layered processes of radical and deep transformations of political, economic, socio-demographic and infrastructure systems. Analytically it becomes impossible, if not misleading, to identify any 'stable' exogenous landscape factors.
- The penetration of the public sector into different social domains blurs public-private boundaries in China. Actors' logics of action do not fit assumptions of state and market distinctions, nor do they follow formal network-building processes based on distinct organizational functions (e.g., investor, supplier, user), making it difficult to distinguish incumbents and challengers in a transition.
- Transition governance in China is simultaneously hierarchical and fragmented. Societal participation takes on a different form, less visible, but equally important in shaping transition outcomes (Huang et al., 2020; Huang and Liu, 2021). Analyses that neglect latent forms of societal participation might misinterpret processes of policymaking in China, which often are portrayed as socially exclusive.

A combination of these misrepresentations has obscured the dynamics of China's sustainability transitions, and the question of why transitions gain momentum in some places but not in others remains unanswered. Transition theories attempt to address the complex relations between technical systems and human society. Because societies differ considerably, transition studies must engage with a society's deep structures and epistemologies (Bridge, 2018). This viewpoint proposes an alternative epistemology for China's transition studies, grounded on Chinese social sciences scholarship. Social theory emerging from China can advance current thinking in transition studies.

Chinese epistemology is *correlative* (Zhang, 1947; Liang, 1987; Rošker, 2008). In Chinese correlative epistemology, the basic units of recognition are relations instead of entities (Rošker, 2017). The correlative perspective differs from conventional understanding of networks because a correlative network cannot be broken down to nodes (Di, 2020). Chinese society is ‘a society of continuum’, formed by innumerable, scalable circles of relations distributed in uncountable levels (Di, 2020). Hence, relations, instead of individuals, are the fundamental constituents of the Chinese society. Every individual is embedded in a complex, structured, and hierarchical *guanxi* network (Fei, 1947). As ‘correlative thinking’ represents a defining feature of Chinese thought (Granet, 1934), transition activities cannot escape *pre-existing* correlativeness in Chinese society.

The following case illustrates how entrepreneurial experimentation takes place in a correlative society. Entrepreneur A and B established a company in January 2021, specializing in intelligent operation and inspection of power grids with unmanned aerial vehicles¹. A and B belong to each other’s correlative networks (Figure 1). When A received an order from a relative, A reached out to B and they established a company. After the consolidation of a small team the company is expanding quickly. Figure 1 provides a conventional relational network (left) vis-à-vis a correlative one (right). The left interpretation explains the ‘togetherness’ of the network based on the two individuals’ linkages but does not reveal the range of resources available to their *guanxi* networks. In the right interpretation, it is not the capabilities of individuals but the features of their *guanxi* networks that drives the success of the company.

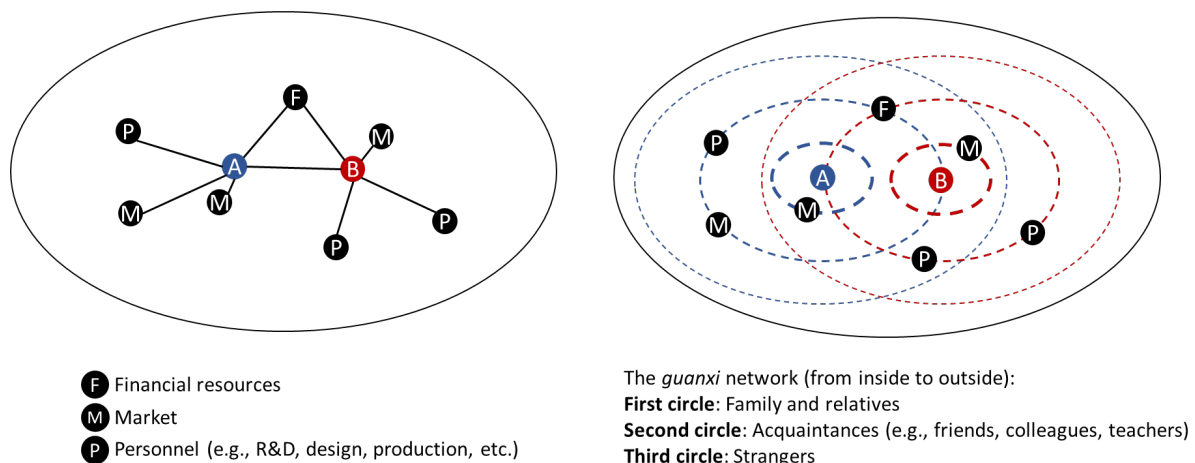


Figure 1. Conventional relational networks (left) and correlative networks (right) in entrepreneurial experimentation

The case shows that correlativeness is a key mechanism for entrepreneurial experimentation in China. In this case, both entrepreneurs are in their 30s, yet they are already strategically using *guanxi* to access key resources. This indicates that correlative thinking has been sustained in Chinese society. Since the economic reform, Chinese society has transformed the capitalist logic of free markets into a market logic with Chinese characteristics, with correlative thinking embedded in economic activities.

This viewpoint calls for a ‘correlative’ turn for transition studies on China. A correlative perspective does not assign a boundary to “transition arenas” but views them as connected. In other words, change cannot be confined to any specific ‘system’ or ‘level’ but occurs simultaneously in multiple dimensions. Instead of focusing on the function of actors, a correlative approach might guide

¹ Following ethical convention, the names of the interviewees whose experiences are related here have been anonymised.

researchers to follow guanxi to uncover the deep mechanisms of social relations and resource flows. Moreover, the Chinese correlative epistemology extends beyond interpersonal guanxi and encompasses the correlativeness between human and nature. Considering socio-ecological relations from the lens of correlativeness may open up new perspectives on the materiality of transitions. In China, the correlative epistemology could help tackle the difficult (and long neglected) issue of how societal reconfigurations involve shifts in nature-human relations.

For transitions scholarship, a correlative approach also raises new challenges, particularly because correlativeness is not readily observable from an outsider position. A correlative epistemology might point to the uncertainty and unpredictability of transition dynamics. In cases of urban sustainability transitions in China, the contingency and messiness that is constitutive of transitions is often overlooked (Castán Broto, 2020). A correlative perspective answers the question of why and how a transition unfolds but it raises the challenge of studying Chinese society in greater depth. Implications of the correlative perspective for environmental governance are only starting to emerge, such as, for example, the blurred boundary between environmental leadership and illegitimate forms of governance. It will not be long before the transition scholarship discovers the power of correlativeness in explaining dynamics of change in China.

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