**Placing Sustainability: Geo-Historical Entanglements of Grassroots Innovations and Place-Making Politics in Taiwan**

Bottom-up collective actions for ‘alternative’ social experiments with greener technologies, such as alternative food networks and community renewable energy projects, have emerged around the world to address various socio-ecological and development challenges confronting different places and societies. Grassroots innovations as an encompassing concept to describe such collective actions have been a primary focus in civic-oriented studies on transformative pathways towards a more socially just and ecologically sound future. Nevertheless, conventional grassroots innovation studies often adopt a socio-technical systemic approach, whereby the local context of each grassroots innovation is often neglected in favour of a focus on establishing a somewhat universal guideline on expanding and replicating grassroots innovations across places. Grassroots actors’ aspirations, mobilization efforts, and visions beyond the scope of certain socio-technical transitions are largely left off by this predetermined research agenda.

This thesis proposes a place-centered enabling approach that foregrounds site-specific needs and place-based politics to better capture the nature and transformative potential of grassroots innovations. To address the theoretical inclination to adopt a sector-orientated research scope and the de-contextualization tendency of the socio-technical systemic approach, it first reconceptualizes a grassroots niche as ‘a hybrid space’ grounded in dynamic socio-spatial contexts and networked politics and mixed with elements of incumbent socio-technical regimes. Drawing inspiration from political ecology and human geography, it then recasts grassroots innovations as grassroots place-making actions similar to other forms of place-based activism and analytically focuses on three constituents: the development history of the host community, outstanding place-framings, and internal and/or external place-making politics. In so doing, it can investigate the grassroots actors’ experiences, motivations, and aspirations in relation to a community’s socio-spatial transformation and the underlying politico-economic structure, thereby facilitating a potential dialogue between grassroots innovation studies and critical social studies on grassroots activism for social change.

To examine the value of this approach, this research draws on evidence from three cases of energy and agri-food grassroots innovations in Taiwan: the Taromak 100% Green Energy Tribe Initiative, the organic agri-food initiatives in Wanbao Village, and the Taihsi Green Energy and Health Community Initiative, which each address important problems emerging from modern capitalist development in Taiwan, including the violation of indigenous rights, resource grabbing, and industrial pollution. Empirical evidence was built through a comprehensive data collection, in-depth interviews, and participant observation over the course of 11 months in 2016 and 2017 in addition to three annual post-fieldwork visits in the following three years.

The empirical findings suggest that the formation of a grassroots innovation is often strongly motivated by the geo-historical processes that communities are subjected to, co-evolve with, and may seek to change in line with other defensive and/or innovative actions. This finding is important: it is not only essential for understanding the meanings and objectives of bottom-up social experiments from the perspective of the main executors and intended beneficiaries; it also helps unpack the structural challenges underlying the site-specific concerns that require solutions beyond certain socio-technical systems which are also prone to the structural lock-ins. More importantly, overlooking these unmet site-specific needs and ends that motivate grassroots actors to carry out a grassroots innovation contributes to a problematic gap in knowledge production for policymaking, which can unintentionally consolidate the injustice a community has faced and seeks to redress.

This research thus argues that grassroots innovation scholars can better specify the meanings and the transformative potential of grassroots innovations by linking the agendas of socio-technical transitions to the visions for socio-spatial transformations aiming to address geo-historically produced concerns. In so doing, this research joins the call for a geographical and political turn in transitions theories. This synergetic perspective can help policymakers, activists, and scholars develop more contextualized and concrete support for grassroots innovations by offering in-depth understanding of grassroots innovations’ geo-historical contexts, their interplay with place-based politics, and site-specific challenges and objectives for future community development. It can also enrich the meaning of ‘sustainability’ in Taiwan’s context and in general by expanding the scope from socio-technical transitions to socio-spatial and structural transformations from a grounded, bottom-up perspective, which I argue, is vital to reach a real ‘win-win’ balance between ‘sustainable’ community development and ‘sustainable’ socio-technical transitions.