From my perspective

A proposed theoretical framework for actors in transformative change

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ABSTRACT

In this opinion piece we suggest a number of theoretical innovations related to the representation and conceptualisation of actors and agency in transitions studies. The research field has gained significant academic and policy popularity and reached a degree of maturity that belies its youth. Despite the ongoing advances and sophistications however, we argue that major lacunae remain regarding actors and agency. Because transitions are reaching advanced stages with more prominent roles for actors, addressing this issue is a prerequisite for progress in transition research – something which is widely acknowledged in the field.

Rather than the archetypical way of conceptualising a transition as some kind of systemic fight between alternative systems (niches) and dominant systems (the regime), we present a transition as a fluid unfolding of network activities by diverse actors aligned with a particular stream, resulting in a transformed system. We emphasize that our framework is a proposition – to stimulate debate and suggest avenues of further research. The ideas in this framework have yet to prove themselves, empirically and theoretically as regards their merits for transitions research, but at least they provide a different conceptualisation of transitions with a central role for actors and agency.

1. Introduction

Over the last two decades a vast amount of knowledge on transitions and transformative change has been amassed.[1] This emerging scholarship – under the moniker of sustainability transitions – has gained significant popularity, both in academic and in policy circles. To a substantial degree, this has been made possible by the availability and further development of theoretical frameworks that were originally intended to study innovation and technological transitions. Consequently, the present body of transitions knowledge – its scholarly success and policy appeal notwithstanding – has inherited some biases.

One such a bias is an emphasis on systems and technologies while actors are typically poorly represented. Despite the ongoing sophistication of transitions frameworks, the archetypical way of conceptualising a transition is still as some kind of 'systemic fight', where one or more alternative systems (niches) emerge within or alongside the existing, dominant system (the regime), which is considered to be under pressure, either from outside influences (e.g. resource constraints) or from the inside (new, competitive solutions) and an emerging system replaces or transforms the dominant one leading to an overall better adapted system.

The systemic fight picture is no doubt a caricature, but it serves to illustrate that the actions of people are somewhat of an afterthought in the explanations we are used to in the field – at least from our perspective. Therefore we propose a conceptualisation of transitions wherein societal and socio-technical systems change is *explicitly* the consequence of strategic actions of people. We do not, however, aim to discard or replace the existing transitions frameworks, but rather to achieve a balance. We feel it is now tipped to the side of systems and technologies and to correct this we would like to give the explanatory primacy to agency.

We are by no means the first or only ones to point out this explanatory disbalance. In fact, the main transitions frameworks seem to have been attracting ongoing criticism for their inadequate representation and implementation of agents and agency. By 2012, authors like Farla et al. (2012) and Markard et al. (2012) are clearly putting the actor issue on the research agenda, with Farla et al. observing that systemic framings 'might have come at the expense of a more actor-oriented and agency-sensitive analysis' and Markard et al. noting that 'understanding of the agency of different actor groups' appears be a promising realm for further research, respectively.

Such critique applies to virtually all the transition concepts, such as the Multi-Level Perspective (MLP, Geels, 2002; Rip and Kemp, 1998), Transition Management (TM, Loorbach, 2010, 2007; Rotmans et al.,

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2001), Strategic Niche Management (SNM, Kemp et al., 1998), Technological Innovation Systems (TIS, Hekkert et al., 2007) and the Multi-Pattern Approach (MPA, de Haan and Rotmans, 2011). In some of these, actors are represented in an overly simplified way, as regime versus niche players, in others there is a focus on a particular type of actor, such as frontrunners and yet others have no explicit conceptualisation of actors at all.

Obviously, these frameworks do have a rationale of how actors somehow underlie the systemic change.[2] Singling out the MLP, for example, we read Geels (2011) saying that it 'is shot through with agency' and that MLP concepts are 'enacted by actors in concrete activities', and the assumed forms of agency (bounded rationality and interpretive activities) are outlined also. Moreover, the MLP has been employed to investigate actor-related dynamics in many case studies. For example, learning processes and network building (Kemp et al., 1998), empowering (Smith and Raven, 2012), strategies of actors (Geels et al., 2016). Also, various roles and types of actors have been analysed in MLP studies, social movements (van de Poel, 2000), activists and communities (Seyfang and Smith, 2007), intermediary actors (Hargreaves et al., 2013; Kivimaa, 2014), strategic and political activities of niche and regime actors (Geels, 2014; Smink et al., 2015) and recently Schot et al. (2016) investigated the role of users as actors in transitions within an MLP framing.

But our point is not to argue that actors and matters of agency are not being addressed by, or with, the canonical transitions frameworks. Our point is that actors are not explicitly represented and often poorly conceptualised. With all the above-mentioned frameworks, it is possible to provide an account of a transition without referring to actors – as illustrated by the systemic fight caricature. Agency can be added in a case narrative as desired, or drawn from external theories if deemed useful, but the frameworks do not *rely* on agency for their explanations of transformative change. In other words, the explanatory primacy is not on agency. This situation we would like to shift. We are not saying that the systemic perspective is wrong – and it is in fact compatible with our proposed framework – but we suggest that employing agency may provide richer explanations and a basis for progressing transitions governance.

In summary, we observe a specific lacuna in transitions research with regards to the representation and conceptualisation of actors. This is in fact broadly acknowledged in the transitions literature. Avelino and Wittmayer (2015) note that 'most contributions in transition studies which refer to actors are troubled by conceptual ambiguity—do they refer to specific individuals or individual organizations, to more generalized categories of actors or to roles of actors?' and propose their multi-actor perspective with an aim to better understand potentially changing power relations in transitions. Fischer and Newig (2016) recently surveyed the sustainability transitions literature on the importance of actors and agency, going back as far as 1995. The 'conclude that actors in transitions can be part of several different categories, which can change over the course of time'. They furthermore cite Loorbach's (2014) work, who observes that new technologies 'enable individuals to shift between networks, communities and governance contexts almost freely' and say this 'suggests that a comprehensive actor typology for transitions will need to consider these dynamics'.

To address this lacuna, we propose a theoretical framework that intrinsically and explicitly explains systemic change in terms of the actions of actors in different roles. The framework consists of

1. a conceptualisation of agency combined with a typology of individual actor roles and a typology of actor alliances (such as networks),

2. a reinterpretation of systems which integrates most of the familiar transitions concepts and terminology, and

3. a new concept – streams – to explain how the value-based motivations of individual actors can connect to shared societal value sets and thus enable them to join forces.

We do not consider actors as bound to, or part of, particular systems, but rather as affiliated to potentially several systems or individual technical or social solutions. Transitions, from our perspective, are the consequences of myriad actions and interactions of actors and the alliances they form in their pursuit of systemic changes.

Without claiming to present empirical validation at this stage, we do illustrate our actor framework with a preliminary case study of transformative dynamics in energy supply. The case is set in the Netherlands which we consider a representative context for similar dynamics across North-Western European countries. Within this context we show how the key concepts of actors, streams and systems and the actor typology can be employed in an explanatory narrative. We argue that our theoretical framework is able to explain dynamics which appear paradoxical from a pure systems change perspective using only the traditional transitions concepts.

2. Our proposition – the framework

Before we elaborate our framework in more detail, let us first provide an overview and some positioning of its main characteristics.

The central aim is to explain transformative systems change as the consequence of actions and interventions of actors and alliances. We consider transformative change the consequence of deliberate, or even strategic actions of specific types of *value*-driven actors. The values that drive these actors are those that are part of *streams*: sets of values that could be upheld on a societal level by the available solutions and organisational possibilities. Because of this, streams are in a sense *societal* value sets rather than personal values. Streams represent those sets of values that are, or could be, embodied – as it were – in systems. Values cut across specific needs and solutions to meet them, and we therefore think that the stream concept provides a key to understanding how very similar transformative change is pursued and occurring in very different societal systems.

Connecting to streams allows individual actors to form *alliances*, aligning their actions and finding strength in numbers. In fact, the formation of alliances of various kinds amongst actors is considered crucial in achieving transformative systems change. Alliances include organisations, corporations, networks, movements. Actors and alliances can have different, sometimes concurrent, affiliations to systems. The cumulative actions of actors and alliances aligned to a stream, if successful, bring about change aligning the relevant system or systems with that stream.

From the above it is clear that the key elements of our framework are *actors*, *streams* and *systems* – in no particular order as all of them are crucial in explaining transformative change. We call the bundle of actors, streams and systems the *stage* – as it is where actors play their roles. We speak of a *transformative* stage if the actors, streams and systems on it are in such positions relative to each other that transformative change is possible. In other words, if it provides the necessary conditions for a transition. In summary:

- Actors are strategic and interpretive, operating individually or as part of alliances. Their strategic actions are aimed at making certain solutions available to society, or at phasing certain solutions out. These actions, if successful, would change systems. Actors *connect* to streams and *affiliate* with solutions, possibly several of either.
- Streams are value sets enabled by the state of knowledge (science, technology or otherwise) and the available organising principles (e.g. economical, infrastructural) with which that knowledge could be harnessed to meet societal needs. When actors *connect* to streams,

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