transformative social innovation theory

A framework for Transformative Social Innovation

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About TRANSIT:

TRANSIT is an international research project that develops a theory of Transformative Social Innovation that is useful to both research and practice. It is co-funded by the European Commission and runs for four years, from 2014 until 2017. The TRANSIT consortium consists of 12 partners across Europe and Latin America. For more information, please visit our website: http://www.transitsocialinnovation.eu/.

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About this TRANSIT working paper:

This working paper presents the theoretical and conceptual framework (hereafter referred to as the 'TSI framework') developed to date in the TRANSIT project as a basis for the iterative development of a middle-range theory of TSI. An earlier version thereof was used to develop a first set of 'sensitizing concepts', which informed a first batch of TRANSIT empirical case studies (cf. Haxeltine et al. 2014, Jørgensen et al 2014). Empirical findings were used to improve the framework and guide a second batch of case studies with a second set of 'sensitizing concepts' (cf. Haxeltine et al. 2015, 2015, Wittmayer et al 2015).

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1. Introduction

1.1 Social innovation and the need for new theory

There is a growing interest in explaining social innovation in both public and academic discourses (Avelino et al 2016, van der Have and Rubalcaba 2016). The idea that social innovation is an effective way for dealing with societal challenges is manifested in policy discourses across the EU. Illustrative is former EU president Barroso's statement that "*if encouraged and valued, social innovation can bring immediate solutions to the pressing social issues citizens are confronted with*" (Hubert 2012: vi). The Bureau of European Policy Advisors (BEPA) defines social innovation as "*innovations that are social both in their ends and in their means*" and argues they are an effective way to "*empower people*" and "*drive societal change*" (BEPA 2010).

Social innovation is not yet a fully developed research field, rather it is an emerging body of theory and practice that has its roots in a number of social science disciplines (Westley 2013): to some extent, the boundaries of scholarship are still porous and "*characterized by conceptual ambiguity and a diversity of definitions and research settings*" (van der Have and Rubalcaba 2016: 1923). Considering the nascent state of the field, the diversity of manifestations and the high expectations placed on social innovation, there is now general agreement that there is a pressing need for new a theory of social innovation to inform research, policy and practice (Westley 2013, Haxeltine et al. 2013, Cajaiba-Santana 2014, van der Have and Rubalcaba 2016).

This working paper reports on steps towards the development of a new theory of social innovation in an EU-funded research project entitled "TRANsformative Social Innovation Theory" (TRANSIT; 2014-2017). The project aims to build a theory of *transformative* social innovation that is of practical relevance in formulating both policy and strategies for unlocking the potential of social innovation to contribute to societal challenges (Haxeltine et al. 2013, 2015, Avelino et al. 2014, 2016, Pel and Bauler 2014). It focuses on understanding and explaining the ways in which social innovation interacts with processes of systemic or transformative change, as many urgent societal challenges are understood as requiring fundamental and systemic transformations.

In clarifying the need for a new theory of SI, the project had to account for the perceived deficits articulated in the policy discourse as well as in the SI research literature—developing a reflexive critique of both. A particular need is to address the current under-theorisation of SI in terms of normative assumptions about 'ends' based on overly simplistic conceptions of the agency of SI-actors. We agree with Cajaiba-Santana's (2014: 44) assessment that: "*Social innovation has been frequently presented as a normative instrument used to resolve social problems through the creation of new services or new products …. This view is in part explained by the fact that the contexts in which social innovation has been evolving (social entrepreneurship … and public policy …) are based on actions aimed at solving social problems. However, presenting social innovation based on such an instrumental view is a teleological mistake: the assumption that because we see a particular outcome to a process we conclude that the process must always have that specific result.*"

We also agree with Franz et al. (2012) that the BEPA definition of SI (as innovation that is social both in its means and ends) gives SI an intentionality which may not be warranted. In this perspective, the 'social' in SI reflects that the object of innovation is fundamentally a social phenomenon (i.e. a social practice or relation, as opposed to e.g. a new technology or product). The social relations or practices do not refer to a desirable quality of the methods or the goals of innovation. Hence SI can be – or can turn out to be – rather 'a-social', both in its ends and in its

means. It is precisely for that reason that we argue that neither the intention nor the outcome should be included in the definition of SI. We suggest that there is consensus across various SI researchers that the ends should not be confused with means. However, at the same time, there are plenty of researchers that do still approach SI as something that is inherently 'good'. As such, it is particularly important that a theory of TSI takes a clear stance on this, allowing for analysis that recognises the variable ends of SI, both desired and undesired.

The current literature reveals a plethora of definitions of social innovation. Beyond divergence in normative assumptions, definitions vary as to how different dimensions of social innovation activity are emphasised or omitted (understood as the 'things' that social innovation does and engages with in the surrounding context). A practically useful theory should adequately explain the different dimensions of social innovation ***and*** their inter-relations. Relevant dimensions of social innovation identified in our initial research framing include: organization (system of responsibilities, legal form of companies, task distribution, internal and external relationships, etc.); scale of operation and nature of activities; basic values and beliefs; practices; identities; standards for conduct; and, power of the respective actors ("power to" and "power over").

In TRANSIT we are particularly interested in cases where the social innovation actors hold a view that the wider context is to undergo transformative change in some way. Rather than only focusing on the achievements of the actors in terms of their stated goals, we are interested in processes of 'co-determination' or 'co-production'. A too narrow view on the diffusion of social innovation practices would blind us to: firstly, how the 'context' enters social innovation (e.g. through motivations to do something differently, or as an enabler through the provision of resources) and, secondly, how social innovation interacts with transformations in the context.

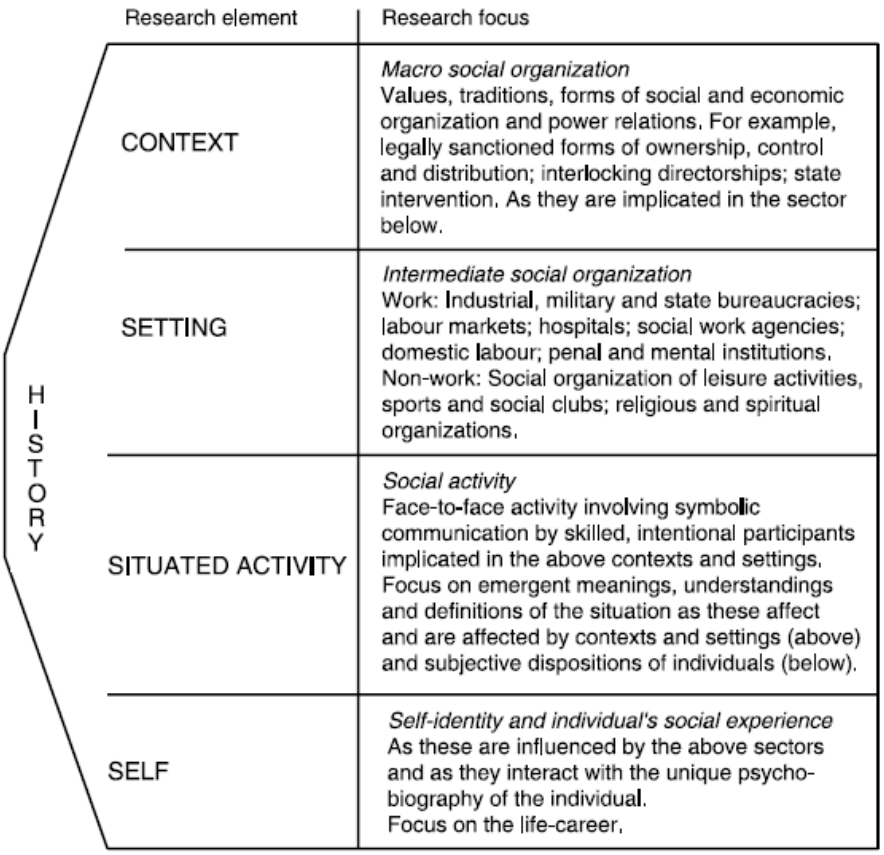


Figure 1. Social Innovation takes place in a wider context (Layder 1993, p72 in Danermark 2002, p169).

Social innovation activities take place in an immediate context and a wider context. The context is not stable but undergoing change of a transformative nature through e.g. marketization processes, reforms of the welfare state, or the rise of partnership models. Given this interest in how social innovation interacts with change in the wider context, we need to adopt a concentric view of context (see Figure 1.) and strive to develop a theory that explains not only what goes on in different 'layers' but that also addresses the links and feedbacks between individuals, social activities and the wider context in which social innovation takes place. For understanding the micro-macro link, we also have to study values, the motivations and identities of people in social innovation, and the (links to) ongoing transformations in macro-social organization.

The remainder of this paper is structured as follows. Section 1.2 summarizes our choices around both the type of theory to be developed and the method of theory development. Section 1.3 characterizes the theoretical challenges that a new theory of transformative social innovation (TSI) should respond to. Section 2 presents the core theoretical-ontological choices made in developing a framing of the social innovation process (SI) in processes of transformative change. Based on this, section 3 outlines a conceptual framework for TSI. Section 4 concludes by stating the contribution of this paper, and looks forward to the further elaboration of this 'TSI framework' as a middle-range theory, based on the analysis of a set of empirical case studies.

1.2 Theoretical-methodological choices underlying the development of a TSI theory

In approaching the construction of a new theory of TSI we made the following theoretical-methodological choices about how to proceed (Jørgensen et al. 2015, Pel et al. 2015):

A) Choice to develop a 'middle-range' theory. A middle-range theory development approach (Merton 1949, Hedstrom 2005) provides a tried, tested and widely-used method for building a new empirically-grounded social theory. It aims to integrate theory and empirical research. Middle-range theory starts with a specific empirical phenomenon and abstracts from it to create general statements that can be verified by data. Hedstrom's development of the middle-range approach aims to: "*explain an observed phenomenon by referring to the social mechanism by which such a phenomenon is regularly brought about*" (Hedstrom 2005: 11). Hedstrom (2005: 35) provides three desirable criteria for a middle-range theory: 1) it should be psychologically and sociologically plausible; 2) it should be as simple as possible, and 3) it should explain action in meaningful and intentional terms. It suggests a step-wise process in which an initial framing of the phenomena is used to generate propositions, which are then compared to empirical findings, as basis for the further generation and refinement of propositions. In TRANSIT we have also chosen to present the theory in the form of propositions about TSI (cf. Fligstein and McAdam 2011) – thus propositions are used both as a device for organising and structuring our knowledge about TSI as well as a tool in building a middle-range theory (see Haxeltine et al 2016).

B) Commitment to developing a process theory. TRANSIT is committed to developing a TSI theory that not only helps to understand and explain societal co-evolution processes from a distance, but also empowers situated SI agents (see Jørgensen et al. 2015: 8-10 for a discussion). Arguably, this also requires the theory to account for the great empirical variety in, and the dynamic behaviours of, the contexts in which SI-actors seek to achieve their goals. Moreover, the theory is to account for the fact that actors tend to operate in dynamic environments: *TSI theory is to provide a process understanding, without which its practical relevance would be limited* (Geels & Schot 2010, see also Pollitt 2015). There are many types of process theory (see Jørgensen et al. 2015 and Pel et al. 2015) but all are distinct from variance theory. Process theory is interested in

discovering patterns in sequences of events, variance theory in explaining observed outcomes with the help of explanatory variables. "Whereas variance theories provide explanations for phenomena in terms of relationships among dependent and independent variables (e.g., more of X and Y produce more of Z) process theories provide explanations in terms of the sequence of events leading to an outcome (e.g., do A and then B to get C)" (Langley, 1999: 692). In TRANSIT, diverse theoretical resources like actor network theory, structuration theory, institutional theory, the multilevel perspective on transitions, and social psychology all contribute different perspectives (theoretical lenses) on TSI processes (Haxeltine et al 2014).

C) Use of Abduction (besides induction and deduction). TRANSIT, as any social science project, uses concepts, theory and framings to construct representations of social life. In social science, abstract (or abstracted) knowledge about social life is called social theory (Ragin, 1994: 60). TRANSIT makes use of three methods of reasoning: induction (reasoning from data to generality), deduction (reasoning from abstract theory), and abduction (reasoning from immersion in the study of an empirical phenomenon). Through the use of abduction we aim to avoid two common mistakes: that of being blinded by theory (typical for a deductive approach based on a single theory) and that of insufficiently engaging with social theory (in the form of theoretical explanations each with their own ontology). Issues of power and the role of marketization and utilitarianism as background factors, for example, are easily missed without a reflexive method grounded in critical social theory.

1.3 The theoretical challenges for a theory of transformative social innovation

Next we characterise the theoretical challenges that a theory of TSI should address. These constitute a summary of our assessment of: i) identified needs (in policy and practice), ii) current deficits and gaps (in the SI literature), and iii) theoretical resources available.

1) Accounting for social innovation both reproducing and altering/replacing institutions. (Accounting for the duality of institutional structures). In the light of the structure-agency debate, attributing SI to specific actors is naïve and testifies to insufficient awareness of the recursive relations between agency and structure (Cajaiba-Santana 2014). TSI theory, with its *necessary* focus on structural and transformative change, needs to be anchored in this key social-theoretical debate—it should account for the processes through which *"institutional practices shape human actions that, in turn, confirm or modify the institutional structure."* Cajaiba-Santana (2014: 47).

2) Accounting for *distributed agency* in social innovation processes. There are prominent discourses that attribute SI to certain actors (grassroots, social niches, citizen's initiatives etc.) rather than to others. This seems problematic for TSI, considering convincing accounts of distributed innovative agency and the 'glocal' characteristics that can be observed in empirical accounts of TSI. TSI theory requires a rich ontology of agency, locally rooted and globally connected, and active in porous fields of action rather than well-demarcated systems (cf. Nicholls & Murdock 2012).

3) Accounting for diverse transformations. TSI initiatives are waged with a very broad set of transformative ambitions in mind, targeting a very broad set of perceived institutional failures, and involving a high degree of contestation about the direction that a TSI process should take. The diversity of transformative goals at issue appears even greater than with regard to *sustainability* transitions. TSI theory should therefore be sensitive to the diversity of possible transformations (cf. Stirling 2011) rather than be preoccupied with singular, supposedly evident and 'integrative' transitions from one system state to another.

4) Accounting for patterned realities and path dependence versus (or within) the fluidity and contingency of co-produced social realities. A TSI theory should account for patterned realities and path dependence (cf. the multilevel perspective; Geels 2002, 2007, 2010) thereby allowing generalisation from (otherwise isolated) case studies, and (a potential for) relevance to policy, but balanced against this, TSI theory should also be generative of insights about the sometimes highly contingent and fluid social realities of TSI processes (phenomena which tend to be more emphasized in the STS literature). Next to the notion of path dependency, there is also the need to recognise the stability of institutional arrangements and social practices in the social-material context. The structuring of local practices is most often associated with stability and a high degree of routine behaviour, interspersed with occasional impulses towards de-routinisation and re-routinization. A TSI theory therefore needs to account for stability in the social-material context and the important implications this has for SIs, and especially TSIs.

5) Accounting for cooperation and contestation. Innovation is a constructive joint activity, oriented towards making something. That constructive nature carries all kinds of unwarranted expectations of cooperative actor relations with it. Moreover, as the stakes are generally high in transformation-oriented innovation, the contestation involved will arguably be greater (cf. Grin in Grin et al. 2010). It is therefore a theoretical requirement for a TSI theory to develop a balanced understanding of cooperative and contesting relations between the actors and institutions involved and to take account of underlying politics and power struggles. This also requires a theoretical understanding (framing) of the role of politics and power in social innovation.

6) Accounting for motivations and the dialectics of (dis-)empowerment. SI discourse is pervaded with hopes of, and assumptions about, the possibilities to empower (marginalized) individuals through SI. This discourse neglects some well-known intricacies of empowerment, notably the disempowerment that is easily entailed by attempts to use SI insights to construct empowerment instruments. A theory of TSI needs to account for the motivations of individuals and groups, and processes of (dis-)empowerment. It has been argued that SI discourse is a modernist discourse, closely tied to the understanding that we live in an 'innovation society' in which innovativeness is a key virtue (Rammert 2010). Especially TSI theory, for its focus on *transformative* SI, is at risk of unreflectively reproducing a modernist discourse where innovation is considered a virtue (cf. Rammert 2010), and thereby crucially overlooking how failing dominant institutions are not only evoking motivations towards active and optimistic TSI initiatives but also less constructive, negative behaviours like resignation, passivity, aggression and retreat from the public sphere. TSI theory should *reflexively* account for how individual and collective agents co-create contexts that contribute to empowerment processes.

7) Accounting for overlapping innovation phenomena. TSI theory should account for the circumstance that *social* innovation discourse develops amidst diverse adjacent innovation discourses (Rammert 2010, Levesque 2013). TSI theory should account for the dynamic reality in which SIs may change into, or be intertwined with, other innovation phenomena – refraining from essentialist ideas about what SI is. The notion of innovation is a social construction, reflecting assumptions of newness and normative goals. Actors involved in TSI actions may or may not label themselves as social innovators.

8) Accounting for emergence and fading away. There is a recognised tendency in innovation theories to be more attentive to the emerging and successful innovations than to those ending in the graveyard of history. The latter are of course usually also more difficult to do case studies on. A TSI theory needs to account for decline, setbacks (in innovation journeys), and fading away. These are notoriously neglected but nonetheless essential aspects of the TSI phenomenon: consider for example how many TSI examples involve re-emergence, re-invention, re-vitalization and restoration (cf. Shove 2012 on the 'shadowy side of innovation', and Pollitt 2015).

2. Ontological foundations for the development of a TSI theory

In the previous section we identified the challenges that a theory of TSI should respond to, in this section we present the underlying ontological choices made in theoretically framing TSI; in doing so we specify further how we see the social world, which existing theories we build on, and how we see the possibility for novelty etc. We find that such an ontological and foundational basis is necessary before defining a set of central concepts for TSI (which we proceed to do in section 3).

2.1 Metatheoretical perspectives on transformative social innovation

Research in TRANSIT has included extensive reviews of relevant social science theory, including recent theoretical work on social innovation (see D3.1 and D3.2; Haxeltine et al. 2014, 2015). These reviews were guided by an understanding of the need to move beyond the current theoretical limitations in the SI literature (as articulated in section 1.1). They involved an iterative process of selectively reviewing, and honing in on, the areas of existing social theory which might be of most use. In this way we were able to characterise the key theoretical challenges which a TSI theory should respond to (as articulated in section 1.2). Early on, we identified key recent theoretical contributions on SI (e.g. Cajiaba-Santana 2012), and papers that could help in 'sorting' the wide range of theoretical resources available (e.g. Garud and Gehman 2012). Garud and Gehman distinguish three metatheoretical perspectives: evolutionary, relational and durational, each with a useful contribution to make to policy, strategy and research. For the TSI theory development, a key insight was that a relational ontology could actually be used as a meta-theoretical platform, providing a theoretical basis from which to integrate and/or organize paradigmatic interplay between evolutionary, relational and durational theoretical perspectives. It then became possible to develop a framework for TSI that draws upon and adapts insights and conceptual framings from each of these three meta-theoretical perspectives:

From a relational perspective, we adopt and adapt a relational framing of SI. In essence this argues that the 'social-material context' within which SI takes place is made up of the sum-total of all existent social-material relations or 'entanglements' – including ecological relations, physical structures, and artefacts, etc. A particular SI exists within and is carried by some 'sub-parts' of these social-material relations or entanglements. SI both acts on the context and is produced by it. A relational framing of SI emphasizes the embedded and context specific nature of a SI, and allows to understand how and why a SI may take a certain form at a certain time and place. It emphasizes how activity is produced through social connections, how *"Social things organized in configurations … are transformed through the action of other configurations…"* (Schatzki 2002). A particular SI-initiative will be productive in association with and through the web of social-material relations that it is part of—from the relational perspective we adapt a foundational ontology and also the notion of 'coproduction' to describe how a SI engages in activities of 'producing together'.

From an evolutionary perspective, we recognise coevolutionary relationships as 'metaprocesses' between interacting elements or ´sub-systems' in a social-material context. Such metaprocesses and associated elements are identified empirically in terms of variations in patterns of local structuration. In this way the theory may be *informed* by complex systems, transition studies and evolutionary economics, while at the same time being *grounded in* a relational ontology. The term coevolution is therefore used here in a

less restrictive way to describe developments in different elements of the social-material context that are *both* interlinked *and* partially independent. In TRANSIT, 'selection' (of e.g. a law, organisational form or working principles) is viewed as the outcome of 'generative processes' and subject to processes of adjustment and elaboration.

From a durational perspective, we draw upon social theory that looks at the role of time in current social change, especially the work of Hartmut Rosa (2013) and perspective that late modernity can be characterised by problems of social acceleration, which SIs can therefore either confront of play into. We also make use of narrative approaches as they draw attention to temporal and relational properties. Narratives can be considered vehicles that help meaning-seeking agents to define "*who [they] are*" and "*what [they] know*" in relation to the ever-changing actor-networks they themselves, their identity and their agency are entangled with (Garud & Gehman, 2012: 983). In TRANSIT, we develop insights on 'narratives of change' and the role that these play in an unfolding SI process (Wittmayer et al 2015b). Narratives of change are discourses on change and innovation that actors engage with and/or that they construct. They allow the analysis of the entanglement of actors with a broader social-material context. This fits with the choice to develop a process theory rather than variance theory, emphasising that while we may study the 'narratives of change' associated with empirical SI processes, we are engaged in developing a process theory—not simply 'narrative accounts' of SI processes.

The work of Garud and Gehman (2012) also provided a useful method for reflecting on the genesis and ontological foundations of the multi-level perspective (MLP), which has had a dominant influence within the emerging field of transitions studies (Smith et al 2010; Markard et al 2012). The MLP was developed to explain regime shifts in 'technological regimes' (Geels 2005), with the concept of the 'technological regime' coming originally from Nelson and Winter (1977, 1982) and evolutionary economics. Here in developing a novel theoretical framework, specifically suited for the study of social innovation and transformative social change, we chose, in an analogous way to the MLP, to develop a hybrid framework that combines resources from (1) evolutionary economics, (2) social studies of technology/ANT, and (3) narrative and durational approaches, but to do so in a way that is optimally suited to the specific social phenomena of TSI.

The logic of the 'levels' defined in the MLP is that they imply different kinds of structuration of the activities in local practices (Geels 2005). Fuenfschilling and Truffer (2014) argue that the 'levels of structuration' in the MLP can furthermore be conceptualized as differing degrees of institutionalization, thereby treating institutionalization as a variable with different effects on actors, the stability of the system and thus the potential for change. In developing a framework for TSI, starting from a relational ontology as meta-theoretical platform, there is still a need to make use of a structuration perspective and to account adequately for the 'duality of structure', for emergence and fading away, for contestation in innovation journeys, and for dispersed agency. Albeit with a commitment to not use a framing in terms of discrete 'levels'. A SI process taking place in a particular context has to be understood in terms of how it *distorts* existing patterns in the structuration of local practices. Following Fuenfschilling and Truffer (2014) such distortions in the make-up of the social-material context can be best understood as processes involving *differing degrees of institutionalisation* (between the parts of the context most influenced by the SI process versus the parts less influenced by it). And so explaining how a SI process can transform contexts requires that we are able to explain structuration and institutional change, and therefore points to a need to integrate concepts and framings from institutional theories.

2.2 A relational framing of the social innovation process

As articulated in the previous section, we adopt a relational ontology as foundational, taking it as the most suitable theoretical basis for theorising SI; the basic contention of a relational ontology is "*that the relations between entities are ontologically more fundamental than the entities themselves. This contrasts with substantivist ontology in which entities are ontologically primary and relations ontologically derivative"* (Wildman, 2006). The ambition for this TSI framework is to make use of the complex systems-theoretical strengths of transitions theory – yet to also avoid the trap of making premature assumptions about the reality of 'regimes', 'niches', 'landscapes' and related distinctions of societal 'subsystems'. On the one hand, there is the basic assumption that SI-initiatives can only manifest transformative developments in co-evolution. On the other hand, there is an awareness that SI, as a fundamentally dispersed phenomenon, is not easily attributed to distinct entities and mechanisms (such as selection, variation, retention). This tension between system-evolutionary explanation and relational description (see Geels 2010, Jørgensen 2012, and Garud and Gehmann 2012, amongst others) is an important background to the TSI theory development. The term 'relation' refers to the (dialectic) relationship between actors and the dynamic processes of change and development, and not just to relations between actors: actors and networks, innovations and changes are mutually defined (Boggs and Rantisi, 2003). An important characteristic of a relational ontology is that it describes *realities that become* rather than existing facts, which makes it pertinent to processes of innovation. Stability is accounted for through obduracy, structuration and institutionalization, but 'change' is primary.

A particular SI-initiative will be productive in a range of different ways—in a range of 'dimensions'. Responding to the need for a simple but comprehensive framing of these dimensions and starting from a relational-complex ontology, we conceptualise SIs as heterogeneous social-material collectives comprising human and non-human elements, mutually constituted through the interweaving of the cognitive, the material, the social and the normative. SIs are made up of, shaped by, and produce (Chilvers and Longhurst 2014, 2015, 2016a, 2016b):

- Doings/material commitments (through the performance of practices, technologies, etc);
- modes of Organising/governing (how an initiative is configured, organised, governed);
- Framings/meanings (as issue definitions, visions, imaginaries);
- Knowings (knowledge, cognitive resources, competencies, forms of appraisal).

This distinction provides a convenient way to think about the different types of activity that the agents in SI processes (including ideas, objects, activities and/or groups of people that are socially innovative) are engaged with and the (social) relations of these agents to the context. A particular SI-initiative will likely be 'productive' but not necessarily 'innovative' in each of the four dimensions. In addition, the context acts upon SIs in each of these dimensions. A SI-initiative is understood as a 'collective' of different elements: humans, objects, forms of knowledge, rules, practices etc. To some extent, this collective coheres into a recognisable object, but it is also constituted by a set of relations to other collectives. In this way, the 'context' can be understood as a multiplicity of collectives and configurations, which tend to be stabilized into more durable forms of relations but are also fragile and open to change and emergence. The relations between the agents in a SI develop over time and space and work is usually required to hold them together.

SIs can remain as situated configurations—as localised, experiential or ephemeral experiments. Yet they can also become inscribed, made portable and circulate to be replicated at different sites. A relational perspective understands this 'growth' of a SI in terms of dispersal and expansion (rather than 'scaling up'). It would take the form of similar situated collective configurations of SI

becoming connected and standardised trans-locally and/or transnationally across multiple different sites in space and time. Political culture is considered important to explaining why certain SIs and certain forms of SI-initiative and network become established, credible and authoritative in certain countries and cultural- political settings and not others. Where by political culture we imply the systematic and routinized ways in which a political community validates knowledge and makes binding collective choices (Jasanoff 2004, 2005, 2011). These collective forms of public reason and entrenched cultural expectations grounded in public life help to explain how SIs fair differently in different contexts.

Our relational framing of the SI process understands agency as distributed, rather than being easily attributable to individual actors or groups: "*human actors are able to exercise agency, but it is an effect of the socio-material networks within which they are entangled. Agency is therefore fundamentally distributed, and a relational effect of the configurations within and between different collectives."* (Chilvers and Longhurst 2015). Processes of cognition are also understood as distributed: *"Knowledge relating to the operation of any given system is shared amongst a range of different human actors and collectives, with no single view of the system from the outside"* (Smith and Stirling 2007; quoted in Chilvers and Longhurst 2015). A relational framing emphasises the performative and emergent nature of SI: *"The agency of collectives, and thus the 'trajectories' of wider configurations can be understood as a temporally emergent phenomena"* (Pickering 1995, 14) and *"change is always the emergent outcome of multiple strategies of multiple actors."* (Bijker and Law 1992). It also emphasises the normativities and political struggles involved in moves towards coherence: what gets excluded, possible alternatives, and the forms of resistance that may occur. This requires paying attention to the ways in which SIs are constructed and framed, and the politics and exclusions associated with this, which has important implications for questions of empowerment and (social) learning (Chilvers and Longhurst, 2015).

SI actors both enact existing *practices* and attempt to enact any new or modified ones that they may be engaging with, as part of the SI. In doing so they create and maintain both existing and new social relations. A SI may consist of the creation and promotion of new relationships between existing practices (new bundles of practices) and/or the modification of existing practices, as well as the introduction of wholly novel practices; in all cases, the SI process involves the creation of new social relations in terms of both new connectivities and new qualities of relating. In performing or enacting practices SI actors are informed (both enabled and constrained) by institutionalised traditions, forms and logics (that may include norms, rules, conventions, values, assumptions, beliefs, identities) and make use of available resources (knowledge, connections, money, etc.). Agency is distributed and neither wholly situated at the level of actors nor practices: institutional change and the emergence of new practices are conceptualised as totally inter-twined processes (see e.g. Lounsbury and Crumley 2007); the enactment of practices by SI-actors is intrinsically bound up with the persistence across time and space of institutionalised traditions.

This relational framing of SI can be combined with structuration and institutionalisation perspectives to resolve and explain how SI interacts with transformative change. However, the foundation of a relational ontology, has important implications for how these concepts should be understood, i.e. they must be theorised and conceptualised in relational terms. So, for example, institutions can be understood through a relational ontology as being enacted over time and space through the ongoing and emergent coproductive social-material relations or 'entanglements' of all 'social things' (Schatzki 2002) in the context. In the following sections we provide skeletal framings of institutions and institutionalisation, agency, and resources, and, power and empowerment in theoretical terms that are consistent with the use of a relational ontology.

2.3 Framing transformative change in terms of processes of institutionalization

In TRANSIT, the social-material context (hereafter referred to as the context) is also conceptualized from a relational perspective. The context is understood as the sum total of the actors and their social relations, as well as the institutions (as e.g. norms, rules, conventions and values; cf. Cajaiba-Santana 2014, p46), resources, and material relations with which a SI process interacts. Furthermore, transformative social change is understood in terms of institutional change and (therefore) as a process that leads to ongoing changes and variations in the structuration of local practices, as discussed in the previous sections.

Transformative social innovation can now be articulated as a social innovation process that challengers, alters, or replaces existing institutions and institutional arrangements *across* the context (i.e. in more than just a single isolated social experiment). Therefore in order to develop a conceptual framework for TSI, we need first to articulate concepts of structuration and institutionalisation, and to do so in a way that is consistent with our use of a relational ontology. Cajaiba-Santana (2014: 47) summarises the concept of structuration as follows:

> *"Through the interplay between institutions and actions, called the process of structuration, institutional practices shape human actions that, in turn, confirm or modify the institutional structure. Thus, the study of structuration involves investigating how institutions and actions configure each other in the process of creation of social systems."*

In terms of developing a theory of TSI, the most important contribution of structuration theory is the way that it foregrounds the reciprocal nature of interactions between structure and action. In Giddens´s original formulation of the theory he proposed the concept of the 'duality of structure':

> *"which refers to the fact that social structures are both constituted by human agency, and yet, at the same time, are the medium of this constitution. Therefore, the structure, by using institutions, acts over agents constraining and enabling their actions; through this process, social systems and social practices are recursively created. There is a reciprocal iterative process between agent and institutions as each one shapes and creates the other." (ibid: 47).*

As articulated in the framing of the 'theoretical challenge one' in section 1.2 above, we prose that an adequate theory of TSI needs to bring together institutional and structuration theories to develop: "*a more holistic view of the phenomenon of social innovation in which agentic actions and social structures can be conceived as both dualistic and interdependent.*." *(ibid: 46).* In adopting this theoretical framing, we keep open the possibility to explain TSI as both driver of transformative social change *and* as an emergent outcome of ongoing social (societal) transformation processes.

Structures are understood as having a dual nature, they consist on the one hand of institutions but on the other hand of resources—actors make use of resources in enacting institutions. This so called 'duality of structure' accounts for the stability of social life—but agency is also possible. Agency is possible to the extent that existing institutions and resources can be used in novel ways, resulting in a dialectic of change that leads to novelty in structures. Agency is also possible through the creation of new resources and/or new proto-institutions—and here our framing differs from Giddens´s original formulation of structuration theory. In this way actors have the potential to both reproduce existing structures and to create novelty. Starting from this foundational framing we need concepts of agency and empowerment in TSI, and linked to these, a concept of autonomy as a process in which a group of SI-actors achieve some degree of freedom from existing institutions and therefore the possibility to manifest new ones (sections 2.5 & 2.6).

Clearly then we require a concept of institutions: we start from the observation that *"[s]tructures can be viewed as a set of institutionalized traditions or forms that enable and constrain action"* (Cajaiba-Santana, 2014: p47), and adopt an initial working definition of formal and informal institutions as "*norms, rules, conventions and values…*" (Cajaiba-Santana 2014, p46) that both constrain and enable social relations and established patterns of doing, organising, framing and knowing. Dominant institutions can be viewed as the dominant ways of doing, organising, framing and knowing, that have been established in the social-material context.

Institutions are *understood as rule-like 'social facts', as: "systems of established and embedded social rules that structure social interactions" (Hodgson, 2006, p. 18). They provide: "prescriptions, cognitive models, schemas or scripts for making sense of the world, identifying options and taking action. (Meyer, 2008, p. 790).* From the perspective of a relational framing they can be understood as *"shared cognitions in the form of taken-for-granted, phenomenological processes the power of which is not to be underestimated yet rarely made explicit" (Zucker in DiMaggio & Powell, 1991).* Institutions vary greatly in how tractable or intractable to change or replacement they are. They exhibit varying degrees of 'depth' and 'stability' and a conceptual language for describing such properties needs to be articulated in developing a theory of TSI. The assumption is that actors follow rules, either consciously by imitation or coercion, or unconsciously by tacit agreement (Fligstein and McAdam 2011, p21).

Structuration provides a basis for explaining the stability and order of social life as well as how institutions change. The term institutionalisation can be used to describe the processes by which changes in institutional structures emerge and become more widely embedded. As a working definition we can say that institutionalisation refers to the process of embedding some aspect of social life (which can be e.g. norms, rules, conventions and values, or a mode of behavior) within an organization, a wider field of social relations, or within the social-material context as a whole. For any given process of institutionalisation there can be differing 'degrees' of institutionalisation at different times and in different contexts (Fuenfschilling and Truffer 2014).

As a SI process develops over time and space, it will be subject to ongoing patterns of structuration whilst at the same time engaging with challenging, altering and/or replacing existing institutions. However following Fuenfschilling and Truffer (2014) we also note that structuration can usefully be conceptualised in terms of processes of institutionalisation. The SI process can then be understood in terms of how it influences variations in the patterns of local structuration, which in turn are conceptualized in terms of varying degrees of institutionalization, thereby treating institutionalization as a variable with different effects on actors, the stability of the system, and the potential for change. (Fuenfschilling and Truffer 2014).

The influence or reach of a SI process can then be "*assessed by identifying the degrees of institutionalization of its core elements*" (Barley and Tolbert, 1997; Tolbert and Zucker, 1999). The SI process is understood in terms of how the webs of social relations and actions produced by heterogeneous configurations SI actors coming together in initiatives and networks are able to provide different kinds of coordination and structuration to activities in local practices, that differ in terms of stability (and size). In other words, SIs represent *different degrees of institutionalization* as well as different forms. However, the strength, homogeneity and internal alignment of a SI process, and the mechanisms by which it interacts with (other) processes of institutionalisation, are framed as empirical questions, rather than assumptions of a 'TSI theory'—a big part of the theory development project then involves uncovering, and developing explanations for, how processes of institutionalisation have unfolded in empirical cases of TSI.

2.4 Framing how institutionalization processes are patterned within the context

Social reality is further complicated by the fact that there are many relationships *between* the institutions with which a specific SI interacts. Such relations are often described in terms of institutional arrangements or institutional structures. In developing a framing of TSI, we are interested in the institutional orders, forms and logics that pre-structure actions. Such groupings of institutions will include norms, rules, conventions, values, assumptions, beliefs and identities. In the messy social realities that SIs exist in, the institutions implicated in any given pattern of structuration need to be understood in terms of 'groupings' or 'clusters', hence the need to invoke concepts which address institutional structures, such as institutional fields or logics. Different terms and concepts are available that capture different ideas about scale relations and about how institutions manifest, intersect and overlap in 'structuring' processes, and as developed in different social science literatures with differing theoretical and empirical foci.

Broad societal framework conditions are also identified by some theorists that are said to have influence across diverse sets of institutions implicated in multiple sectors and areas of social life (see e.g. Reisig 2014). Understanding the relations between TSI processes and the transformation of such broad societal framework conditions is then an important aspect of explaining how TSI might be implicated in societal transformations.

From a relational and productivist perspective, such broad societal framework conditions can also be associated with the 'constitutional relations' between citizens (civil society), science, the market, and the state, as articulated by Sheila Jasanoff and colleagues (Jasanoff, 2011). These are defined by the relational configuration of all collective elements that make up the context, which is held together and made durable by collectivities like infrastructures, laws, regulations, socio-technical imaginaries, scientific artefacts, political cultures, established social practices, democratic procedures and so on.

The use of the terms 'established' and 'dominant' institutions in the initial set of working definitions for TSI outlined in this paper, can be further unpacked in terms of e.g. (historically contingent) institutional logics (e.g. Thornton and Ocasio 1999) and/or Strategic Action Fields (e.g. Fligstein and McAdam 2011). In TRANSIT, we adapt several approaches from institutional theory to provide the theoretical and conceptual resources required to resolve and explain such processes of institutional patterning in the (social-material) context. Here we briefly address two such approaches: Institutional Logics (ILs) and Strategic Actions Fields (SAFs).

The institutional logics approach can be used to characterize the content of various institutional structures and arrangements present in a system and to trace conflicts and contradictions between them (Fuenfschilling and Truffer 2014). In developing explanations of TSI, we can use the institutional logics concept to aid in the analysis of the specific content and coherence of the structures in the social-material context within which a SI process takes place. The ILs approach is used to conceptualise how processes of institutional change associated with SIs are conditioned (structured) by the social-material context in which they unfold. The institutional logics approach provides a contribution to the TSI framework that enables us to resolve how SI actors and processes are influenced by their institutional context, and how they in turn respond.

The strength of the approach, it has been argued, lies in its focus on the content and meaning of institutions (Friedland and Alford, 1991; Haveman and Rao, 1997; Thornton and Ocasio, 1999). The essence of the approach is that:

"It suggests that society consists of various institutional sectors that entail different rationalities, i.e. different beliefs, norms, values and practices that shape actors cognition and behavior. These rationalities are called institutional logics and are defined as "the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality"(Thornton and Ocasio, 1999, p. 804)." (Fuenfschilling and Truffer, 2014, p. 775)

While drawing upon and adapting a concept of institutional logics in this TSI framework we are not adopting wholesale the approach of institutional logics. In TRANSIT, questions concerning what might be the most suitable typology of institutional logics for describing a particular SI process in a particular social-material context are framed as empirical questions, rather than being answered as assumptions of a 'theory'. While previous studies have focused on differences or changes of specific field logics, we use it to explore (multiple) competing or contested institutional logics (that may be in flux) within one organisational field.

In TRANSIT, the structure-agency duality, reminds us that a change in institutional logic will likely lead to a *"…change in 'actors' strategies, problem focus or technology."* (Fuenfschilling and Truffer, 2014, p. 775). However, also that SIs and SI actors may (strategically or unintentionally): i) influence the make-up of a particular dominant institutional logic; or ii) play a part in the dynamic of competing or contested institutional logics within a particular organisational field in which they operate. Other possibilities also suggest themselves, which can be searched for empirically such as SI-actors playing a role in the re-combining of institutional logics into new forms or SI-actors acting as intermediaries between different organisational fields.

TRANSIT also adapts the concept of 'strategic action field' (SAF; Fligstein and McAdam 2011, 2012) from institutional theory. We use the concept of 'field' to describe the institutional environment in which SI-actors operate. It is comprised of:

"*those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products*" (DiMaggio and Powell, 1983, p. 148; quoted in Fuenfschilling and Truffer 2014, p.775).

The SAFs approach has further developed the concept of the organisational field as a 'strategic action field' (Fligstein and McAdam 2011, 2012). In essence this provides "*a concept of the arena of social action*" (Fligstein and McAdam 2011, p20) and as such has similarities with the Arenas of Development approach developed in the field of transition studies (Jørgensen, 2012). Such a concept of individual and collective action inside fields is necessary to provide a way to:

"…understand if a meso-level social structure is emerging, stable, or in the process of transformation. Without such a theory, it is hard to make sense of what actors are doing, both as individuals and collectives" (Fligstein and McAdam 2011, p20).

Drawing upon insights from SAF literature, our conceptualisation of the SAF for a SI process includes: the set of the social relations of the actors in the SI-initiatives and networks under study; the co-productive activities, or social practices that actors are engaged in; the institutions and institutional structures that are associated with these actors and their social relations and activities. The SAF concept provides one way in which we resolve the context as stratified but also intersecting—happenings in one action field may influence happenings in another.

2.5 Framing (distributed) agency in the social innovation process

Institutions both inform and set limits on human agency and are also the subject of human action and agency: "*modifying, eliminating, or creating new institutions and eventually new social systems*" (Cajaiba-Santana 2012; p47). SI-agents, such as SI-actors, SI-initiatives and SI-networks carry forward projects and ideas that sometimes contribute to changes in the dominant institutions within which they operate. Agency relies on the capacity for purposive action and the capacity to imagine new ways of being, new relationships and new ways of doing. Although these capacities depend themselves on the biological, social and cultural contexts that inform and shape who we are, they cannot be considered mere effects of these contexts. The concept of agency has many times been given connotations of free will, understood as a result of our cognitive/rational capacities for understanding options and choosing according to our own criteria. Going beyond such conceptualizations of agency, we include its relational dimensions—seeing it as a central feature of the relational, embodied person, embedded within dynamically evolving social and interactive contexts. Agency is not a static set of capacities, but rather a fluid process through which individuals and groups direct their actions to effect change at individual and interpersonal levels and in the context in which they exist. Agentic capacities are thus conceptualized as emergent, embodied and experiential, and: "*this process always evolves within an intersubjective field and cannot be understood as the function of a disengaged, rational mind*" (Frie 2008, p.36). Understanding SI has to be informed by an understanding of how individuals organized in groups, imagine, experiment with and promote alternative ways of doing, organizing, framing and doing; and how they organize action in ways that challenge, alter or replace institutions in the context.

We acknowledge agency as a distributed phenomenon, not confined to human actors, while (also) taking a particular interest in the agency of human actors and the (dis)empowerment processes through which human actors – both individually and collectively – gain (or loose) a sense of agency in processes of SI. We are interested in unpacking how human actors co-produce SIs with transformative impacts by asking the questions: What drives human actors to start and join SI initiatives? What elements influence their motivation, sustenance over time and persistence in the face of obstacles? What types of contexts do they strive and need to create through the exercise of agency in order for collective action with a potential for transformative impact to be possible?

Before striving to achieve transformative impact, SIs need to self-perpetuate and attract a sufficient number of members who dedicate their resources such as time and energy. For transformative SI, involvement needs to be sustained over time, and a theory of TSI should provide an account of the process through which involvement and persistence is achieved, and of the contextual elements that support optimal motivation for action in SI, which is currently missing in the literature (Reznickova & Zepeda, 2016). Beyond the achievement of optimal motivation as a precondition for effective action, we also strive to provide explanations for the trade-offs between maintaining optimal motivation for individual members and the ability to articulate effective collective action that successful initiatives display. Understanding motivations thus becomes important in order to account for the conditions under which members feel empowered to act and to develop strategies that lead to the attainment of the objectives the SI has established for itself. We define empowerment as the instrumental subset of agency (Alkire, 2005), by which individuals and groups become able to act on goals that are important to them and develop effective strategies to do so. We draw on theoretical resources from the field of social psychology to further unpack this concept, particularly a body of related theories commonly referred to as self-determination theory (Ryan & Deci, 2000a)

Self-determination theory (SDT) is particularly appropriate as it moves away from previous explanations of human behavior that emphasized the reactive nature of human behavior, to a more dialectic and relational perspective on the interactions between natural human resources and the contexts that both shape and are shaped by them (Seligman & Csikszentmihalyi, 2000). Based on extensive and cross-cultural empirical research, SDT posits three innate psychological needs, which are considered basic for optimal human functioning and for the actualization of potentialities for growth and creativity. In order for pro-active behavior to be possible, satisfaction of needs for *autonomy*, *competence* and *relatedness* are necessary, and the quality of their satisfaction provides an explanation for both positive and negative outcomes. Autonomy refers to the ability to choose one´s own acts and to act in line with personal values and identity, relatedness is about feeling part of a social group, and competence is related to the perception of effectiveness in carrying out actions to achieve one´s goals, and involves a search for stimulation and optimal challenges (Bidee et al., 2013).

The quality of basic need satisfaction has relevance for the types and levels of motivation individuals experience (Ryan & Deci, 2000b) which are posited on a continuum that ranges from amotivation (or no-self-determination) to intrinsic or self-determined motivations. By providing an account of how external drivers become internalized and integrated into motivations for carrying out action and also by showing how contextual factors stimulate, hinder or block the natural propensity towards growth, integrity, intrinsic motivation and wellbeing (Ryan and Deci, 2000b), SDT is particularly well-suited to explain the dialectical relationship between human agency and structure in SI processes. It is the theory´s account of the contextual factors that enhance or undermine intrinsic motivation, self-regulation and wellbeing, which provides a compelling explanation for why people can be pro-active, engaged and constructive or passive and alienated. It thus also provides a framework for the understanding of how these conditions are co-created within SI initiatives and how they contribute to sustained engagement and empowerment of members across the different stages of a TSI journey.

Two broad categories of motivation can be distinguished as autonomous versus controlled motivation (Grouzet et al., 2004; Ryan and Deci, 2000b). Autonomous motivation is about engaging in activity out of free will or a sense of choice, while controlled motivation refers to engaging in it in order to achieve another end, which is normally a desired consequence (Ryan and Deci, 2002). While intrinsic motivation is a natural human propensity, its maintenance requires supportive conditions. Furthermore, transformative individual and collective action requires the internalization and integration of sets of values, behavioral goals and rules, and identities that are co-created within the SI.

The development of autonomous motivation can be considered a key dimension of how human agency unfolds in the SI process. Situational factors are very important in the development of autonomous motivation, and support the satisfaction of basic psychological needs (for autonomy, relatedness and competence). Autonomy support allows individuals to transform organizational values into their own (Ryan and Deci, 2000b), which makes it a key process for the articulation of both individual and collective agency. Failing to provide supports for competence, autonomy and relatedness contributes to alienation and ill-being, while success in providing them leads to self-determined behavior and well-being. We can thus argue that empowerment relies on the adequate satisfaction of basic psychological needs, leading to autonomous motivation and behavior that is strongly self-determined, as well as outcomes such as wellbeing, creativity and commitment, which we hypothesize are essential for innovative ideas to arise within SI processes (e.g. Slow Food, Reznickova & Zepeda, 2016).

2.6 Resources, power, and empowerment in the social innovation process

Actors make use of both resources and rules (or institutions) as they perform specific practices. Originally, resources were conceptualised as "*the media whereby transformative capacity is employed as power in the routine course of social interaction*" (Giddens' 1979; p92; quoted in Sewell 2005, p132), or as Sewell reformulates it: *"resources are anything that can serve as a source of power in social interactions"* (Sewell 2005, p132). We distinguish between non-human resources such as physical infrastructure and objects "*that can be used to enhance or maintain power"* (Sewell 2005, p133) and human resources, such as *"physical and mental attributes, knowledge and expertise that can be used to enhance or maintain power*" (Sewell 2005, p133). Resources can also be understood as qualities of social relations, such as connections, privilege, titles. Indeed, from a relational perspective all resources can be understood as being dependant on the interpretation given to them by actor-networks embedded in specific social-material contexts. The notion of resources then is intrinsically bound up with understandings of power.

Power has been defined in terms of the capacity to mobilise resources to achieve goals (Avelino & Rotmans 2009). One way to distinguish between different types of power is according to the resources that are mobilised, as is the case in Mann's (1986) classical distinction between ideological, economic, military, and political sources of power. Resources can be defined broadly as persons, assets, materials or capital, including human, mental, monetary, artefactual and natural resources. We acknowledge processes that involve the creation of new resources – as an addition to Giddens' original formulation. As Stewart (2001:16, emphasis added) expresses it: "*in spite of Giddens' formal commitment to possibilities of 'making a difference', it effectively makes power a function of the* [existing] distribution of resources*, subject only to actors' capabilities to draw upon such resources effectively (…) [Giddens specification of power] makes socially transformative capacity substantially dependent upon* 'existing' structures of domination". When we acknowledge that actors also have the capacity to create new resources, and to develop altered institutions, we can distinguish between three types of power: reinforcive power (reproduction of existing institutions and resources), innovative power (creation of new resources), and transformative power (renewal of institutions) (Avelino & Rotmans 2009, Avelino 2011).

Acknowledging different types of power also implies an acknowledgement of different types of power relations. An important conceptual starting point here is that power "*resides in the social context*" (Barnes[1988]2002:127), that actors "*possess power only in so far as they are relationally constituted as doing so*" (Clegg[1989] 2002: 257), and, more simply, that power refers to a social relation. Here we can distinguish between three types of power relations: (1) A has/exercises power over B, and/or (2) A has/exercises more/less power than B to achieve something, (3) A and B exercise a different type of power to/over. Each of these three power relations can be manifested in various 'power dynamics', including one-sided dependence or mutual dependence, cooperation or competition, synergy or antagonism (Avelino & Wittmayer 2016). Different types of power relations can coincide with one another, but not necessarily. The observation that actor A exercises more power than actor B in absolute terms, does not necessarily mean that A has power over B, nor vice versa. For B may exercise a type of power that A cannot, thereby achieving a certain level of independence from A. These are important distinctions in order to be able to explain how and when SI-initiatives manage to challenge, alter and/or replace existing institutions. Furthermore, such a typology of power relations helps to systematically discuss how social power relations between actors, and between actors and institutions do or do not change (e.g. from one-sided dependence to mutual dependence).

Critical perspectives on empowerment emphasise that attempts to empower others, may have the paradoxical effect of disempowering them. This may occur through the creation of a new dependency relation (e.g. Hardy & Leiba-O'Sullivan 1998). Relations of power depend on "one's location in the system", and one cannot easily alter these relationships at the interpersonal level without changing the system (Boje & Rosile 2001:111, in reference to Clegg). The critical paradigm emphasises that empowerment is not a pure individual and entrepreneurial concept, and places collective action and changes of unjust opportunity structures at the centre of empowerment (Craig & Mayo, 1995). Moreover, power is a self-developing capacity: it is thus impossible to empower others in terms of 'giving' others power. One might be able to create a context that is more enabling, but ultimately people "must choose to be empowered" and "efforts that assume an empowered [individual] is a passive recipient of a brilliant program design are doomed." (Quinn and Spreitzer 1997: 41).

Taking account of these critical understandings, we argue that any research on TSI empowerment should give explicit attention to power relations and processes of *dis*empowerment (whether intentional or unintentional). This is why we propose to consistently refer to *(dis)*empowerment, to emphasise that both empowerment and disempowerment are two sides of the same coin. SI does not necessarily lead to desirable social goals (e.g. more empowered people) and can be the cause of potentially 'dark' and unintended effects of (T)SI (e.g. disempowerment of people). These issues of (dis)empowerment are particularly intricate as TSI tends to involve multiple groups of people and the relations between them: there is no obvious group of human actors that should empower or be empowered. Despite good intentions, empowerment attempts may have unintended counter-effects, in that policies designed to empower people may require people to already be empowered, in terms of being able to implement new policy (Avelino 2009).

Our perspective starts from a fundamentally distributed agency: TSI, and associated processes of (dis)empowerment, can be initiated by any kind of actor, in any kind of context. Still, whilst denying any societal quarter a privileged position in TSI, there are grounds to believe that the Third Sector plays a particularly important role. The Third Sector can be seen as an *intermediary* institutional space, lying between government, market and community (Evers & Laville 2004). It has been characterised as "*a place where politics can be democratised, active citizenship strengthened, the public sphere reinvigorated and welfare programs suited to pluralist needs designed and delivered*" (Brown et al 2000:57). Individual actors, intermediary organisations, and transnational networks act as crucial nodes at the intersection between market, government and community; they translate, spread and connect SIs across different sectors and localities, and they co-shape narratives of change in relation to game-changing developments.

So the radical acknowledgement of distributed agency leads us to appreciate the Third Sector as a pivotal area for TSI, without considering it the originating source or designated beneficiary. Typically, TSI involves shifting relations between and within sectors (state, market, community, Third sector), and redefinitions of the boundaries between their different institutional logics. These reconfigurations between different yet interpenetrating and repositioning sectors, can be considered as key manifestations of TSI in themselves (Nicholls & Murdoch 2012; Pel & Bauler 2015, Avelino & Wittmayer 2016). Such shifting relations and contested boundaries inherently come with power struggles and processes of (dis)empowerment between various actors. We position individual and organisational actors, operating collectively in initiatives and networks, as being empowered or disempowered in processes of change and innovation, either as a condition for TSI, and/or as a result of TSI.

3. A conceptual framework for transformative social innovation

In TRANSIT, the image and metaphor of an *innovation journey* appears to be useful for studying processes of transformative social innovation. The image of a journey captures the dynamic and open-ended nature of TSI-processes, the directionality of change processes (which stems from the intentions of those involved expressed in narratives of change) and the interaction with the context. We use it as a guiding metaphor in introducing the central elements of a conceptual framework for TSI here, and also in developing propositions about the agency and dynamics of TSI (see the companion TRANSIT working paper, Haxeltine et al 2016). In this section, we briefly describe the central elements of the conceptual framework for TSI. These are as follows:

Social innovation and the agents of social innovation (section 3.1)

- **Social innovation (SI)** –changes in social relations, involving new ways of doing, organising, framing and/or knowing.
- **Social innovation agents (SI-agents)** – agents that are engaged in social innovation, with particular focus on SI-actors, SI-initiatives, SI-networks and/or SI-fields.

Transformative social innovation, coevolution and the social-material context (section 3.2)

- **A social-material context** – set of relevant contextual factors that includes institutions, resources and practices; and processes of structuration that result in varying degrees of institutionalisation.
- **Transformative change (TC)** – change that challenges, alters and/or replaces established (and/or dominant) institutions in (parts of) the social-material context.
- **Transformative social innovation (TSI)** –process, through which social innovations challenge, alter and/or replace established (and/or dominant) institutions in the social-material context, can be described as *TSI-journey*.
- **Coevolution** – a metaprocess occurring between some form/s of situated novelty (e.g. SI) and (parts of) the social-material context.
- **Institutional Logics (ILs)** – logics, which both regularize behaviour and at the same time enable agency and change; may be contested, multiple, and/or overlapping
- **Strategic Action Field (SAF)** – the 'web' of social-material relations and institutional arrangements through which the emergence and unfolding of a *TSI-journey* takes place.

TSI-agency and (Dis)Empowerment (sections 3.3 and 3.4)

- **TSI-agency** – capacity of SI-agents to contribute to transformative change.
- **Transformative impact, potential and ambition** –different levels in the extent to which SI-agents contribute to transformative change.
- **(Dis) Empowerment** – process in which SI-actors gain a sense of autonomy, relatedness, competence, impact and meaning.
- **Narratives of change** – sets of ideas, concepts, metaphors, discourses or story-lines about (transformative) change and innovation.
- **TSI-strategies** – the strategic actions of SI-agents towards transformative change.

The resulting TSI framework builds on sustainability transition studies, social innovation research, social psychology studies of empowerment, and other social theories to deliver a novel theoretical and conceptual framework, grounded in a relational-complex ontology, which is being used as a theoretical-conceptual platform in the development a middle-range theory of TSI. The following sections briefly articulate each of these central conceptual elements.

3.1 Social innovation and the agents of social innovation

Consistent with a relational ontology, a careful distinction is made between the phenomena of social innovation itself and the actors, organisations and other 'agents' that create and further a social innovation. The distinction is clarified in the following working definitions.

Social Innovation (SI) = A change in social relations, involving new ways of doing, organising, framing and/or knowing. We approach SI as a process and as a qualitative property of ideas, objects, activities and/or (groups of) people. All of these can be (or become) *socially innovative* to the extent that they engage in/ contribute to a change in social relations, involving new ways of doing, organising, framing and/or knowing. Combinations of ideas, objects and activities that are considered to be socially innovative, can be referred to as 'social innovations'. (Groups of) people that are considered to be social innovative, can be referred to as 'social innovators' or 'social innovation actors'. In the following we use the term 'SI' when we refer to SI as a process.

SI is conceptualised as a phenomenon that involves diverse **agents of social innovation (SI-agents)** that can be considered as being 'socially innovative' or contributing to 'social innovation'. Starting from a 'rhizomic' nature of agency characterizing TSI phenomena (Scott Cato & Hillier 2010), our ontology of TSI agency includes different (groups of) people (e.g. individuals or communities) and various combinations of objects and ideas (e.g. narratives of change, theories, discourses, products). It also includes multiple functional, temporal, social and/or spatial delineations of combinations of ideas, objects, activities and/or (groups of) people that can be considered to be socially innovative: organisations, places, projects, fields, (local) initiatives, (transnational) networks, discourse coalitions, alliances, and (social) movements.

The theoretical focus of the TSI framework is primarily on the agency of individuals, initiatives, networks and fields, and how those engage with ideas, objects, activities and (groups of) people that engage in a change in social relations, involving new ways of doing, organising, framing and/or knowing (new DOFK). We conceptualise a **SI-initiative** as a collective of people working on ideas, objects and/or activities that are socially innovative. We conceptualise a **SI-network** as a network of initiatives working on ideas, objects and/or activities that are socially innovative. As a general category, we refer to **"SI-agents"** as any collection of individuals, initiatives, networks and/or fields (of social-material relations) that engage with SI processes.

SI involves different types of actors interacting together in groups, networks and other organisational forms to reproduce current social 'forms' and 'patterns' and to also 'innovate' new ones. This definition includes as part of the changes in social relations also changes in the dimensions of doing, knowing, organising and framing. It foregrounds the view that SI refers to new social relations, associated with new productive activities aimed at satisfying one's needs and those of others; but also that the 'innovation' may be in terms of social relations, irrespective of whether or not they are productive in instrumental terms.

3.2 Transformative social innovation, coevolution and the context

The social-material context (the context) = the set of relevant contextual factors within which SI takes place and a SI-agent must operate. Conceptualized from a relational perspective, the context is understood as the sum total of the actors and their social relations, as well as the institutions and the resources (including physical structures and artefacts) with which a SI interacts. It therefore includes: i) established institutions, as norms, rules, conventions and values

(Cajaiba-Santana 2014, p46) and established institutional structures or arrangements, ii) other individuals, initiatives, networks and fields, and iii) the 'broad societal framework conditions' which can be characterised in terms of e.g. an institutional logics approach. Social-material relations are relations between any of the contextual factors outlined above, e.g. between physical infrastructures, artefacts and a SI-initiative.

Established (and/or dominant) institutions within this context are understood as both formal and informal institutions that constrain and enable social relations and established patterns of doing, organising, framing and knowing (DOFK). The co-productive relations of SI-initiatives/networks operating in the context can be understood as both reproducing established institutions and being constrained and/or enabled by them—and also, to the extent that they are socially innovative in a transformative sense, working to challenge, alter and/or replace them.

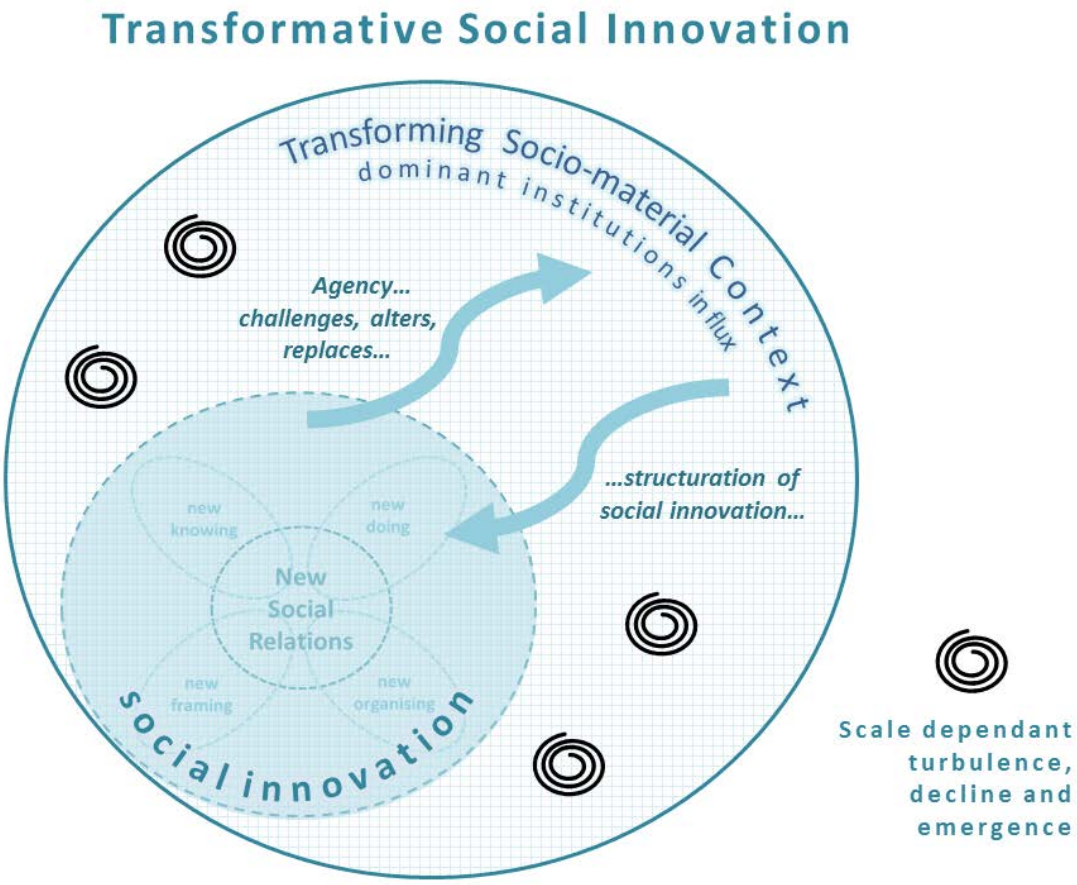
Transformative change (TC) = change that challenges, alters and/or replaces established (and/or dominant) institutions in a specific social-material context. TC can be understood as a persistent adjustment in societal values, outlooks and behaviours of sufficient 'width and depth' to alter any preceding situation in the social-material context (see Haxeltine et al 2015). Change in only one dimension of the social-material context (such as XYZ) not considered to be a social transformation or transformative change. There have to be (related) changes in several dimensions; they have to happen simultaneously and across an array of places. Broad societal transformations such as the industrial revolution, European integration, or the rise of the market economy and the ideology of economic liberalism, as described by Polanyi (2001) have historically transformed the social-material context, and these types of transformations form a backdrop to our work in TRANSIT, and to the development of a theory of TSI.

However, in looking for relationships between SI and TC in contemporary empirical cases we need a more tractable notion of TC, hence our conceptualisation of TC as change that challenges, alters and/or replaces dominant institutions in the social-material context. Inspired by McFarland & Wittmayer (2015) we further specify the differences between challenging, altering and replacing as follows: to 'challenge' refers to questioning the legitimacy or existence of dominant institutions (as ways of doing, organising, framing, and knowing); to 'alter' refers to changing and or supplementing (parts of) dominant institutions; to 'replace' refers to replacing (parts of) dominant institution(s) with new institutions.

This definition expresses TC in terms of institutional change, and leads to a further set of questions concerning how processes of institutionalisation are constituted and vary across the context. Institutional change is a necessary but not sufficient condition: all institutional change can be considered 'social change' but not all is institutional change can be considered as TC. If a new law is introduced to supplement an existing set of laws, such change does not need to be transformative. This is why it is important to add that 'dominant institutions' are challenged, altered, or replaced. Further articulation of what constitutes a 'dominant institution' is then framed as an empirical question for case study analysis, rather than an assumptions of 'a theory'.

Transformative social innovation (TSI) = process in which social relations, involving new ways of doing, organising, framing and/or knowing, challenge, alter and/or replace established (and/or dominant) institutions in a specific social-material context. Rather than as a 'type' of innovation, we consider TSI as a process that alters existing patterns of structuration (in local practices) resulting in varying degrees of institutionalisation as a *TSI journey* unfolds across time and space.

Figure 2. A simple cognitive map of a mutual influence model of TSI and the social-material context.[1]



A simple visualisation of the interaction between TSI processes and the context is given in Figure 2. TSI processes exist in a dialectic relationship with the context: the TSI-agents involved, and the social relations between them, undergo change for example as a result of voluntary interactions with new partners (such as social impact investors) or due to specific demands imposed upon them by government and judges through legal rulings. TSI processes will also be affected by broader processes of cultural change entering TSI projects. TSI processes can be understood as contributing to change in the context, but equally as reproducing the institutional make-up of the context and/or as an emergent property of the context. A TSI may exhibit a degree of autonomy from the context, implying that it is, in part, able to influence the structuration of local practices.

Co-evolution = refers to developments in different subsystems, which are interlinked *and* partially independent. Co-evolution is a special type of interdependency: *A* influences but does not wholly determine *B* and *C*, which in turn influence but do not determine *A*, although all of A, B and C change irreversibly in the process. The different evolving units enjoy relative autonomy in development (Kemp 2007). When technical change co-evolves with institutional change (within systems of governance and organizations and culture) both processes mutually influence, but do not determine each other. We are interested in the co-evolutionary dynamics between some form/s of situated novelty (e.g. SI) and the social-material context. Coevolution is considered a *metaprocess* (in the social-material context) and it is important that coevolving

[1] The so called 'petal diagram' showing the dimensions of DOFK is adapted from Chilvers and Longhurst (2014).

elements are identified in terms of the varying degrees of institutionalisation with which they can be *empirically associated,* and not in terms of 'technologies', 'actors' or other 'social identifiers'.

Institutional Logics (ILs) are defined as *"the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality" (Thornton and Ocasio, 1999, p. 804).* Institutional Logics conceptualise how processes of institutional change, such as those associated with SI processes, are structured by the social-material context in which they unfold. They represent different arrangements or structures of established and dominant institutions covering e.g. market, state, and community.

Strategic Action Field (SAF) = the 'web' of social-material relations and institutional arrangements through which the emergence and unfolding of a *TSI journey* takes place. Institutional change occurs within/through Strategic Action Fields, understood as a 'mesolevel' social order where the field's 'rules' (institutions) are both reinforced and contested: with the field rules may be temporally differentiated from the broader context as a SI process unfolds.

3.3 TSI-agency and (Dis)Empowerment

TSI-agency refers to the capacity of SI-agents to contribute to transformative change. Use of a relational ontology leads to a perspective on agency as distributed; SI-agents can include individual and collective human actors but also ideas, objects, activities, discourses and narratives of change. Although we acknowledge agency as a distributed phenomenon that is not confined to human actors but also includes ideas, objects, activities, discourses and narratives, we are particularly interested in understanding the agency of *human* actors – individual and collectively - to co-produce SI with transformative potential and impact. We focus in particular on four types of SI-agents, namely SI-individuals, SI-initiatives, SI-networks and SI-fields.

Understanding the processes through which SI-agents contribute to transformative change, requires an acknowledgement that there are different ways and degrees of contribution (see comparison of empirical cases in TRANSIT, Sørgensen et al. 2016). We distinguish between:

> **Transformative ambition** to signify when a SI-agent holds a vision or ambition to achieve/contribute to an identified transformative change. This may be through the formal vision, aims, or mission statement or it may be more implicit;
>
> **Transformative potential** to signify when an object, idea, activity or SI-agent displays inherent and/or intended qualities to challenge, alter and/or replace dominant institutions in a specific social-material context; and,
>
> **Transformative impact** to signify when a SI-agent shows evidence of having achieved a transformative change.

In TRANSIT, we hypothesise that SI-agents with transformative ambitions can increase transformative potential by 'playing into' the co-evolutionary interactions between the different meta-processes of change and innovation in the social-material context (Avelino et al. 2016). For instance, by linking with multi-layered 'narratives of change' in both mainstream and grassroots movements, by couching their initiatives in a discourse that aligns well with other SIs (Pel & Bauler 2015), or by playing into the 'game-changers' of their times, while also connecting to political changes or reform.

(Dis)empowerment is a process through which human actors (both individually and collectively) gain (or loose) the ability to act on goals that matter to them and develop effective strategies to do so. Both at individual and collective level, empowerment relies on the optimal satisfaction of basic psychological needs for autonomy, competence and relatedness and on the development of autonomous motivation that is sustained over time. This leads to pro-active and shared strategies for change that are considered important and/or become an integral part of the self, also contributing to meaning-making. Empowered human actors can challenge, alter and/or replace elements of the social-material context that thwart the satisfaction of these basic psychological needs, and, as a consequence, lead to passivity and alienation, as well as to social relations and institutions that do not support the natural human potential for growth, integration and pro-active, engaged and committed behaviours.

Narratives of change refers to "*sets of ideas, concepts, metaphors, discourses or story-lines about change and innovation*" (Wittmayer et al. 2015b: 2). We distinguish two types. Firstly, those on the level of society, e.g. the narrative of change on the 'social economy', which can be considered 'generative' in the sense that actors can draw upon them to give meaning to specific physical or social phenomena (cf. Murray et al. 2010). Secondly, those brought forth by SI-actors themselves to frame their own practices, and these may aim towards countering existing framings and discourses. A social (counter-)movement such as the anti-globalisation movement, attempts to create a narrative of change that counters dominant discourses, and co-evolves with new paradigms on how society approaches processes of globalisation (cf. Polanyi 2001).

3.4 Framing the strategies of transformative social innovation actors

Given that transformative change is conceptualised as change that involves the challenging, altering, and/or replacing of established institutions, then in developing a theory of TSI, we are interested in the actual strategies by which SI actors are able to achieve institutional change. We are interested both in situations where transformative change is achieved intentionally and guided by strategic actions that explicitly target a particular transformative change, and situations where transformative change emerges as an unintended consequence or side effect of local actions targeting solutions to specific local problems. Sewell (2005) addresses the question of how structural change is possible from the perspective of a theory of social transformation, by addressing the question: if actors make use of existing resources and existing institutions in order to perform existing practices, then: why should anything ever change? Starting from his analysis, we conceptualise four generic types of strategy by which SI actors can engage with processes of institutional change:

- Enact an (existing) institution in a different way;
- Make (novel) choices about which (intersecting) institutions to enact;
- Use resources differently or use different resources or create new resources; and,
- Take advantage of contingency and context dependence (in resource accumulation).

This framing provides a starting point in conceptualising how SI actors engage with institutional change. Table 1 offers an illustration of how these different generic strategies can be identified for the empirical case of the Transition movement—one of TRANSIT's empirical case studies. An important task in developing theoretical explanations concerning TSI dynamics will be to explain the strategies employed by SI actors for engaging with institutional change, and the factors that give rise to (which) different (transformative) outcomes, and under which enabling conditions.

Table 1. Different generic strategies employed social innovation actors engaging with institutional change, with illustration for the empirical case of the Transition movement.

Actors in a social innovation initiative attempt to can engage with institutional change by…	Illustrative concomitant empirical question/s, and illustrative examples (for the Transition Towns case)
Enact an (existing) institution in a different way: SI-actors engage with structural change by enacting existing institutions in novels ways.	*What (existing) institutions are being enacted in (which) novels ways?* *- question conventions around lifestyle and energy use, then promote alternative practices;* *- subvert norms around use of public spaces (e.g. plant nut trees in city);* *- take TTs into local schools.*
Make (novel) choices about which (intersecting) institutions to enact: SI-actors engage with structural change by making (novel) choices about which (intersecting or overlapping) institutions to enact.	*What (novel) choices are being made about which (intersecting/overlapping) institutions to enact? Are these choices the result of 'strategic action' or just 'muddling through', or both/neither?* *- Emphasize/enact more traditional social practices around making stuff, food growing, sharing, etc.;* *- Choose to buy a veg-box from CAP scheme rather than supermarket;* *- subvert notions of "the good life", social value to low impact lifestyles (e.g. air travel becomes taboo…).*
Use resources differently or use different resources (or create new resources): SI-actors engage with structural change by using resources differently and/or using different resources.	*How are SI-actors using resources differently and/or using different resources (and/r creating new resources)?* *- Enhance local social networks* *- Create a local currency* *- Secure government funding for a community-owned energy project* *-Turn domestic gardens into a shared food growing space*
Take advantage of contingency and context dependence (in resource accumulation): SI-actors engage with structural change by taking advantage of contingency and context dependence (in resource accumulation).	*How are SI-actors taking advantage of (what) contingencies and context dependence? How has this affected (which) processes of resource accumulation?* *- Financial crisis makes it possible to grow membership (and/or the number of local manifestations)* *- Take advantage of high oil prices to grow members by presenting TTs as a response to a Peak Oil narrative* *- Respond to lower oil prices by re-focusing on the need for local job creation….*

4. Conclusion

This working paper has outlined the need for a new theory of social innovation and characterised the theoretical challenges and requirements for specifically a theory of *transformative* social innovation (section 1). It has presented a theoretical and conceptual framework for TSI, as developed in the TRANSIT research project (sections 2 and 3). The resultant 'TSI framework' is not yet a theory in itself but is rather being used as the basis for the development of elements of a new TSI theory that confronts the theoretical challenges identified.

The method of theory development employed is based on a *middle-range theory* development approach, a commitment to developing a *process theory* of SI, grounded in a relational-complex ontology, and the device of developing propositions about the agency and dynamics of TSI, as a way of confronting the theory with the empirics, and thereby constructing new theory.

The TSI framework presented here was developed based on insights from successive iterations of empirical case studies as well as reviews of relevant literatures (Haxeltine et al. 2014, 2015). The TSI framework was brought together with the original empirical case study data (Jørgensen et al. 2016) generated by the project (and mediated by a Theoretical Integration Workshop, see Longhurst 2016) to develop a set of propositions about the agency and dynamics of TSI which are presented in a companion TRANSIT working paper (Haxeltine et al 2016).

A final theoretical integration step will be to further develop the TSI propositions and framework based on a meta-analysis of the '*Critical Turning Points*' (CTPs) encountered by initiatives on their *TSI journeys*. The meta-analysis will make use of a large set of in-depth interviews of TSI cases from which a novel 'CTP data-base' has been developed.

The contribution of the TSI framework presented in this paper can be summarised as follows:

- specifying the need for new theory of SI, and characterising the theoretical requirements and challenges for a new theory of TSI (thereby providing a checklist for further TSI theorizing);
- identifying which bodies of literature are of particular relevance in meeting these theoretical requirements, and articulating how they can be brought together within a bespoke theoretical and conceptual framework for TSI theory development;
- consolidating literature reviews, on both the SI literature and on the related bodies of social science theory that are being used in developing the TSI theory;
- facilitating the work of operationalizing various theoretical insights into 'middle-range' kinds of distinctions, understandings and models, about the hypothesised agency and dynamics of TSI; and,
- providing the theoretical basis and conceptual language for the further analysis of empirical cases and thereby facilitating the task of using them to develop 'proto-explanations' of TSI in the form of propositions about TSI agency and dynamics.

The intention of the TRANSIT project is that the resulting theory of TSI, in the form of the TSI framework presented here and the eventual set of propositions about the agency and dynamics of TSI, together with associated heuristics and conceptual framings, will as they are developed further in the project be of eventual practical use in future social innovation activity.

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