Swimming against the current:

the journey of Canadian Transition initiatives in their quest for transformative change

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Supervisor: Henner Busch, LUCSUS, Lund University

Abstract:

Humanity's current resource use patterns are unsustainable, and corrective action is required at all levels. Grassroots social innovation groups have great potential to contribute to solutions. The Transition movement has taken hold in Canada, but little is known about its successes and challenges in creating conditions for transformative change.

Aimed at social innovation practitioners as well as academics, this thesis uses Transformative Social Innovation Theory (TRANSIT) to explore the challenges faced by Canadian Transition initiatives (TIs). Specific attention is focused on how well TIs are meeting two prerequisites for transformative change highlighted by Dumitru et al. (2016): the ability to build initiatives that attract and maintain membership, and the development of effective strategies to engage with their communities. Areas of particular concern are highlighted, including a high rate of dissolution. In addition, the study highlights characteristics which distinguish successful TIs. These include a greater tendency towards distributed leadership, self-evaluation, strategic planning, and viewing all partner groups as potential allies in the quest to build a more sustainable future. The author discusses the implications of the Canadian context, monitoring and evaluation, engagement choices, and suggests additional areas for potentially fruitful partnerships, including health/social agencies, the business community and academia.

Based on data gathered through an in-depth questionnaire and interviews with 15 Canadian TIs, this thesis suggests that many initiatives are struggling to survive, let alone create transformative change. In the face of very significant hurdles, TIs need to arm themselves as fully as possible using social learning, system knowledge, strategic partnerships, and well thought-out engagement strategies to maximize their effectiveness, while being cognizant of the dangers of co-option. Further support from the TN, particularly resources on evaluation, strategic planning and the dynamics of social change could enhance their success, as could the establishment of a Canadian Transition hub. Without a higher level of interconnectedness and support, Canadian TIs will remain largely isolated and dependent on finding the right mix of resources locally – a formidable challenge which places the overall sustainability of the Canadian movement in doubt.

Keywords: Transition Movement, Canada, Community Initiatives, Transformative Social Innovation, Grassroots Innovations, Challenges

Word count (thesis): 13,999

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Table of Contents

1 Introduction

1.1 Problem definition

There is no doubt that humanity's current resource use patterns are unsustainable from a planetary boundaries perspective (Rockström et al., 2009; Steffen et al., 2015). However, there are different views regarding the best route to sustainable living: via technological innovations which allow the continuation of many existing patterns, or via profound societal transformations which change not only *how* we do things, but indeed *what* we do.

There is increasing concern that technological innovation itself is inextricably linked with current political structures dependent on economic growth, and that these existing patterns are inherently unsustainable (R. Smith, 2010; Westley et al., 2011). Indeed, Seyfang and Smith (2007) contend that "entrenched cognitive, social, economic, institutional and technological processes lock us into trajectories and lock out sustainable alternatives" (p. 588). Hence, calls are increasing for a radical shift in the way we live, towards a greater awareness of and harmony with our planet's natural systems (Folke et al., 2010; Folke et al., 2011).

Unsustainable global patterns of resource use are unlikely to be resolved at a single level: higher level policy changes will need to be combined with behaviour change at the community and the individual level (Fischer et al., 2012; Hale, 2010; Leach et al., 2012; Mulugetta, Jackson, & van der Horst, 2010; Seyfang, 2009; Seyfang & Haxeltine, 2012; Spaargaren & Mol, 2008). In this context, social innovation has emerged as an option to facilitate the transformation of attitudes and values in a holistic way (Bergman, Markusson, Connor, Middlemiss, & Ricci, 2010; Ornetzeder & Rohracher, 2013; Seyfang, Haxeltine, Hargreaves, & Longhurst, 2010; Seyfang & Smith, 2007; Unger, 2015; Westley et al., 2011).

As a global network of community action groups, the Transition movement can be seen as an agent of social innovation supporting a shift to more sustainable lifestyles (Longhurst & Pataki, 2015). The rapid expansion of Transition Initiatives (TIs) around the world since 2005 is a testament to its salience: as of 2014, there were over 1400 TIs in 50 countries (Hopkins & Thomas, 2016). This rapid and widespread adoption of Transition values at the global, grassroots level suggests that the movement has significant popular support, indicating potential to contribute to transformative change.

Just past its tenth birthday, the Transition movement is still relatively young and its effectiveness in achieving transformative social innovation has not yet been researched extensively, particularly in non-European contexts. Canada is one of the places where the Transition movement has taken hold (Poland et al., forthcoming), yet little is known about the performance of these initiatives in achieving their ambitious goals.

Partly due to the difficulty of assessing the impact of Transition initiatives (TIs) (Forrest & Wiek, 2014; Adrian Smith & Seyfang, 2013), the number of TIs is often used as a proxy for the movement's success (Amanda Smith, 2011). The Transition Emerging Study, a recent multi-year, multi-university collaborative study which examined the status of the Transition movement in Canada in 2012-2015, found evidence that 101 TIs had sprung up in Canada by the end of 2014 (Poland et al., 2016). As the Transition Emerging Study's authors point out, however, this number includes TIs at all stages: active, dormant and defunct. This distinction becomes important when assessing the status of the Transition movement due to the acknowledged 'volatility' of Transition groups (Feola & Nunes, 2014; Seyfang & Haxeltine, 2012), also noted by Poland et al. (forthcoming).

To achieve transformative change, social innovation initiatives need to sustain their momentum over a long period of time (Forrest & Wiek, 2015; Haxeltine, Avelino, Pel, Dumitru, et al., 2016). Sustaining Transition activities over longer lifespans is thus a key priority, yet comparatively little research has been done into the conditions and practices which are associated with longevity or success (Feola & Nunes, 2014).

1.2 Research outline

Taking a problem-driven, solution-oriented approach (Kates et al., 2001; Wiek, Withycombe, Redman, & Mills, 2011), I use Transformative Social Innovation Theory (TRANSIT) to delve deeper into the practical challenges affecting the ability of Canadian TIs to achieve the societal change to which they aspire. In the TRANSIT paper entitled "Social Learning for Transformative Social Innovation", Dumitru, Lema-Blanco, and García Mira (2016) state the following:

> In order for social innovation initiatives to engage in transformative change, defined as change that challenges, alters and/or replaces established dominant institutions in a specific socio-material context, we contend that there are **two prerequisites**: first, they need to **be able to build a project/initiative that attracts and maintains membership**; and secondly, they need to **develop effective strategies to engage with different elements in the socio-material context**,

including other actors, ideas, institutions and existing relations of power. (p. 9, bolding added by me)

The aim of my thesis is to shed light on how these two prerequisites for achieving transformative change are being met by Canada TIs, particularly the most successful[1], and to share this knowledge and the resulting recommendations for enhanced effectiveness not only with academics, but also on-the-ground practitioners. This will allow them to gain a higher-level perspective on their own activities, enabling reflection which may lead to changes in their practices and, ideally, longer lifespans. The knowledge gained may also be useful for other grassroots social innovation groups. My research questions (RQs) are the following:

RQ1: How successfully are Canadian TIs:

a) building initiatives that attract and maintain membership? and

b) developing effective strategies to engage with different elements in their communities?

RQ2: What characterizes the most successful Canadian TIs as they face these challenges?

I investigate these questions using practitioner perceptions as the main source of empirical data, first via a questionnaire and then personal interviews. In Section 2, I provide more detail on the Transition movement in general and the Canadian context in particular. Section 3 describes TRANSIT, the social innovation theory which provides the theoretical basis for this project, as well as my interpretation of the (dis)empowerment cycle from the perspective of a single SI-initiative. Section 4 provides more details on my methodology, Section 5 provides an analysis of the data, followed by the Discussion in Section 6 and the Conclusion in Section 7.

1.3 Relevance to sustainability science

In their seminal article on sustainability science, Kates et al. (2001) challenge researchers to focus on "the character of nature-society interactions, on our ability to guide those interactions along sustainable trajectories, and on ways of promoting the social learning that will be necessary to navigate the transition to sustainability" (p. 642). Social innovation, with its potential to foster collective

[1] The word 'successful' is used here with hesitation, as it can be defined in myriad different ways (Bergman et al., 2010; Forrest & Wiek, 2014; Nicholls, 2015). Here 'success' is defined exclusively according to the number of active members in a TI, a characteristic which Feola and Nunes (2014) suggest is a “meaningful indicator of success” (p. 237) and Feola (2016) describes as "cross-cutting" (p.10) with respect to other dimensions of success. There has been no attempt to measure impact.

behaviour shifts away from unsustainable patterns (Haxeltine et al., 2013; Unger, 2015) fits within this mandate.

Being "use-inspired" (Kates, 2011, p. 19450), the thesis responds to the request from the Transition Network for research projects which "help share the learning from, and assess the impact of, the Transition movement" and are helpful to the Transition practitioners themselves (Transition Network, 2017). Thus, the work helps to transform "knowledge to action" (Kates, 2011, p. 19450) via the "systematic use of networks for the utilization of expertise and the promotion of social learning" (Kates et al., 2001, p. 641).

With this thesis, I hope to become what Jan Rotmans refers to as a “scientivist” – that is, combining the roles of scientist and activist (McGrail, 2016). Having been active in the Transition movement in Canada as a practitioner previously, I am aware of the dearth of practical information regarding the movement in that context. I hope to make a contribution to sustainability not only by generating new & relevant knowledge to further the academic study of the Transition movement, but also by placing my recommendations for increased effectiveness into the hands of practitioners across the country. Thus, I strive to help "bridge the gap between theory, practice, and policy" (Bettencourt & Kaur, 2011, p. 19540).

2 The Transition movement

2.1 The global Transition movement

The "ongoing social experiment" (Hopkins & Thomas, 2016, p. 7) that has become known around the world as the Transition movement[2] formally began in 2006 when a permaculture instructor, Rob Hopkins, and a 'peak oil' activist, Naresh Giangrande, joined forces in the English town of Totnes to create the world's first "Transition Town", a place-based, citizen-led organization dedicated to reducing fossil fuel use, increasing social capital and building economic resilience through relocalization (Hopkins, 2008).

As a hands-on, local response to growing concerns about our ability to live well on our planet, the model proved incredibly popular, spreading organically around the globe in a few short years, as noted above. Because not all were located in 'towns', but also regions, neighbourhoods and suburbs, they are now called 'Transition initiatives' (TIs) rather than 'Transition towns'.

The vision of the Transition movement is both ambitious and simple: "a low-carbon, socially-just, healthier and happier future, which is more enriching and more gentle on the earth than the way most of us live today" (Transition Network, 2014, p. 1). Drawing on a variety of sources including permaculture theory, community engagement research, and addiction theory, the actions of TIs are based on the belief that small-scale, localized, collective actions can trigger larger, systemic changes (Longhurst, 2015b). Using visioning, positive storytelling, participatory decision-making, and prefigurative action, participants[3] aim to stimulate a gradual, proactive shift towards a “high well-being society” (Longhurst, 2015b, p. 5) where environmental health and economic resilience trump over-consumption and globalization.

The activities that a TI might choose to organize are wide-ranging, from climate change lectures or environmental film series, "re-skilling" workshops (teaching lower-resource use practices from the past), campaigns promoting local food sovereignty or permaculture practices, to the establishment of

[2] Although it can be argued that the Transition movement doesn't meet the classic definition of a social movement as provided by Tarrow, Tilly, Kolb and others, that debate is outside the scope of this thesis. Since the term "movement" is used by the Transition Network itself, I will use it throughout this thesis.

[3] Although the Transition Emerging Study (Poland et al., forthcoming) found that a small number of Canadian TIs do pay for some staff time, I use the words participant, practitioner, member, volunteer and Transitioner interchangeably throughout this document, since they apply to the vast majority of people involved.

complementary currencies, or the development of renewable energy projects. In tandem with these attempts to create tangible societal changes, referred to by practitioners as 'outer Transition', the movement espouses the notion of 'inner Transition', with members supporting each other to deal with the psychological challenges of changing behaviours and attitudes. Key tenets of Transition are that the work should be collaborative and joyful (Hopkins, 2011). As Richard Heinberg puts it, Transition work "ends up looking more like a party, than a protest march" (Hopkins, 2011, p. 10).

One of the defining features of the Transition movement is its non-prescriptive adaptability: a group of interested citizens simply gets together, forms a group (sometimes legally constituted, sometimes not), and starts doing what they feel needs doing in their community. In terms of guidance from the Transition Network, there is no recommended process or rulebook: practitioners are merely encouraged to incorporate a set of seven 'ingredients' (formerly 12 'steps') into their activities (Hopkins & Thomas, 2016). These are shown in Table 1, below.

Table 1. The 7 essential ingredients of Transition as selected by the Transition Network
Source: Hopkins and Thomas (2016)

Healthy groups: Learning how to work well together
Vision: Imagining the future you want to co-create
Community Involvement: Developing relationships beyond friends and natural allies
Networks and Partnerships: Collaborating with others
Practical Projects: Developing inspirational projects
Part of a Movement: Linking up with other Transitioners
Reflect and Celebrate: Celebrating the difference you're making

Hopkins describes the movement as having a lot of "surface area" (Poland, 2016) -- participants can choose from a wide variety of potential engagement points and customize their activities according to the interests of volunteers and the needs of their communities. The Transition movement has recently increased its focus on strengthening local economies. This shift is made apparent in the movement's first-ever strategic plan (Transition Network, 2014) and in the latest guide for practitioners (Hopkins & Thomas, 2016).

In 2007, the Transition Network (TN) was formed specifically to support the development of TIs worldwide, providing a platform for information-sharing and for TIs to register themselves. TIs are encouraged, but not required, to register their initiatives there. National hubs have been created in 24 countries, providing additional resources. Thus, the Transition movement has become an exemplar of what Seyfang and Smith (2007) call grassroots innovations: "networks of activists and organisations generating novel bottom-up solutions for sustainable development'' (p. 585). As such, the Transition movement clearly places greater emphasis on social processes than specific technological improvements.

2.2 The Canadian context

Studies and polls over the past 10 years show consistently that a large majority of Canadians desire to see real action on climate change, yet successive national governments have dragged their feet on implementing substantive policy (Lachapelle, Borick, & Rabe, 2012; Mildenberger et al., 2016). As happened in the UK (Forrest & Wiek, 2014), Canadians who were deeply concerned about the issue and frustrated by the lack of government action gravitated to other levels where they could take direct action. By banding together with like-minded neighbours, Canadians created a flurry of local, small-scale sustainability initiatives. One of the recipients of this energy has been the Transition movement, as indicated in Figure 1, below.

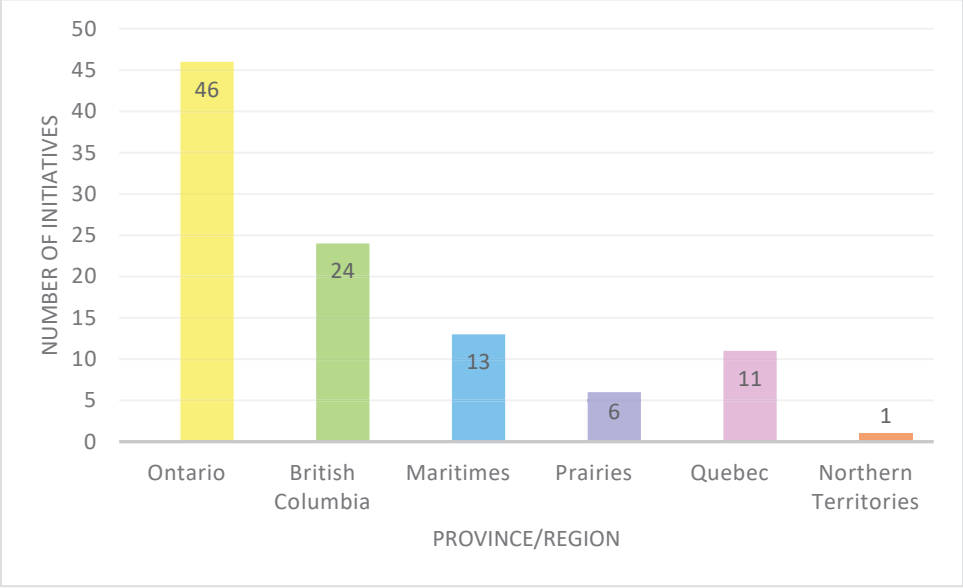

Figure 1. Number of Canadian Transition initiatives by province/region up to and including 2014. The Transition Emerging Study identified 101 initiatives through a web scan. Adapted from Poland et al. (2016).

Because these numbers include active and dormant (or defunct) TIs, they may inadvertently present an overly optimistic picture of the movement's success in Canada, given the aforementioned 'volatility', i.e. short lifespans. The Transition Emerging Study notes that many Canadian TIs appear subject to a surprisingly brief life span of approximately three to five years (Poland et al., forthcoming). A confirmation of this trend would cast doubt not only on the ability of Canadian TIS to achieve transformative change, but perhaps on the sustainability of the Transition movement in Canada itself.

3 Theoretical framework

3.1 Need for a new social innovation theory

While the sustainability transitions literature has exploded in the past 20 years, Seyfang and Haxeltine (2012) point out that the bulk of studies to date have paid greater attention to "the technological aspects of sociotechnical transitions, at the expense of social innovation, movements, and actors" (p. 382). Grin, Rotmans, and Schot (2010) refer to the contributions of citizen-led, bottom-up innovations as "underrated and under-conceptualized" (p. 331). However, recognition of the potential contributions of social innovation to solving sustainability problems is growing; recently the subject has seen increased interest from researchers and policymakers alike (BEPA, 2010; Fagerberg & Verspagen, 2009; Howaldt & Kopp, 2012; Seyfang & Haxeltine, 2012).

While not always in agreement on the direction a theory should take, researchers have pointed to the lack of a comprehensive theory on social innovation as a major shortcoming (Moulaert, MacCallum, Mehmood, & Hamdouch, 2013; Mulgan, 2012; Rauschmayer, Bauler, & Schäpke, 2015; Seyfang & Haxeltine, 2012; Seyfang & Longhurst, 2013). In response, a joint project was formed to develop a new theory focusing on "understanding and explaining the ways in which social innovation interacts with processes of systemic or transformative change" (Haxeltine, Avelino, Pel, Dumitru, et al., 2016, p. 2), involving 12 European and Latin American academic institutions. Researchers include Avelino, Dumitru, Haxeltine, Kemp, Longhurst, Loorbach, Pel, Rotmans, Seyfang, Weaver, and Wittmayer.

3.2 Fundamentals of TRANSIT

The nascent theory, called Transformative Social Innovation Theory (TRANSIT), is intended as a middle-range theory which will be useful to social innovation (SI) practitioners and academics alike (Haxeltine, Avelino, Pel, Kemp, et al., 2016). It draws on existing academic work relating to sustainability transitions theory, social movement theory, institutional theory, theories of power relations and psychology (Haxeltine, Avelino, Pel, Kemp, et al., 2016). TRANSIT researchers have grounded their work through empirical case studies on a selection of 20 SI-networks (of which the Transition Network is one), and are synthesizing findings across four cross-cutting themes: governance, social learning, monitoring and evaluation, and resourcing (Jørgensen, Avelino, Dorland, Rach, & Wittmayer, 2016).

I chose to use TRANSIT for this thesis despite its incomplete status because the fundamental centrality of the concept of social relationships aligns well with my interest in the ability of TIs to attract and retain members, as well as their external collaborations. TRANSIT's incorporation of the "glocal" elements of SI (Haxeltine, Avelino, Pel, Dumitru, et al., 2016, p. 5), works well in view of the multiple levels at which the Transition movement functions (i.e. local TIs and the international Transition Network interact simultaneously). An unexpected bonus is TRANSIT's commitment to making the theory accessible and useful to non-academic practitioners of SI, which mirrors my own goals in this regard.

Given the relative novelty of TRANSIT, I will describe the latest theory prototype here, and provide definitions of key terms in Appendix A. Focusing on how grassroots social innovation can lead to institutional change, TRANSIT is **relational**, meaning that "the relations between entities are ontologically more fundamental than the entities themselves" (Haxeltine, Avelino, Pel, Dumitru, et al., 2016, p. 9). Social innovation* (SI) is defined as **changes in social relations**, involving "new ways of doing, organizing, framing and/or knowing" (Haxeltine, Avelino, Pel, Dumitru, et al., 2016, p. 19), whereas transformative change* is described as "change that challenges, alters and/or replaces established (and/or dominant) institutions in (parts of) the social-material context"* (p. 19). The theory is process-oriented: SI-agents* are engaged in a constant mutual 'dance' with the people, institutions, objects and activities surrounding them (their "socio-material context"), each influencing the other in a process called "co-evolution"* (Haxeltine, Avelino, Pel, Dumitru, et al., 2016, p. 19). Thus, the influence of place and context are highlighted (Haxeltine & Kemp, 2017), a significant consideration given that transformative social innovation* (TSI) agency "tends to be locally rooted yet also globally connected" (Haxeltine, Jørgensen, et al., 2016, p. 13). Figure 2 provides a visual representation of the dynamics of TSI.

* All words marked with an asterisk are further defined in Appendix A

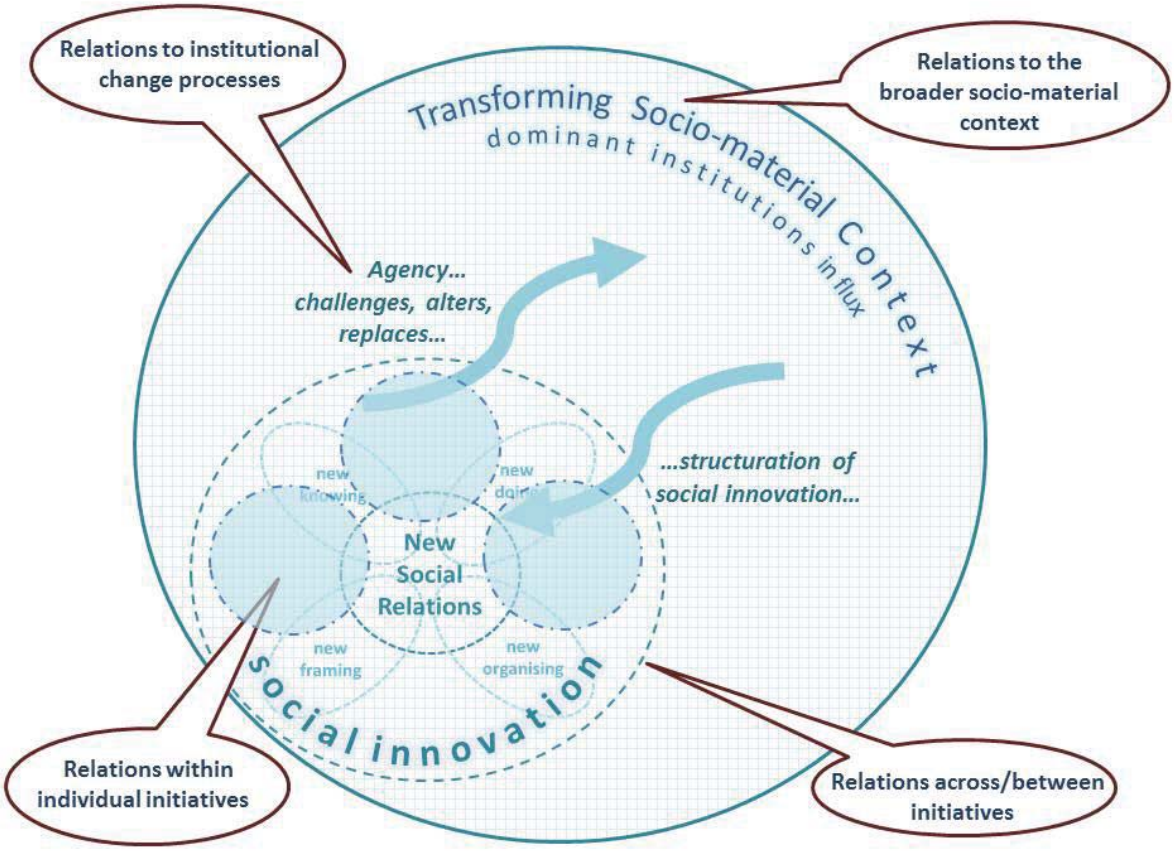

Figure 2. The dynamics of social innovation. New social relations are formed via bi-directional processes. Source: Haxeltine, Jørgensen, et al. (2016, p. 3)

TRANSIT is founded on the concept that SI-agents **create new social relations** within their web of influence ("field"*), which can also create changes in the larger context surrounding them. **The degree to which these changes become institutionalized determines how transformative the SI is** (Haxeltine & Kemp, 2017, p. 11). The dialectical process of SI-initiatives stimulating change and simultaneously being changed by factors in the surrounding context* is represented in Figure 3.

* All words marked with an asterisk are further defined in Appendix A

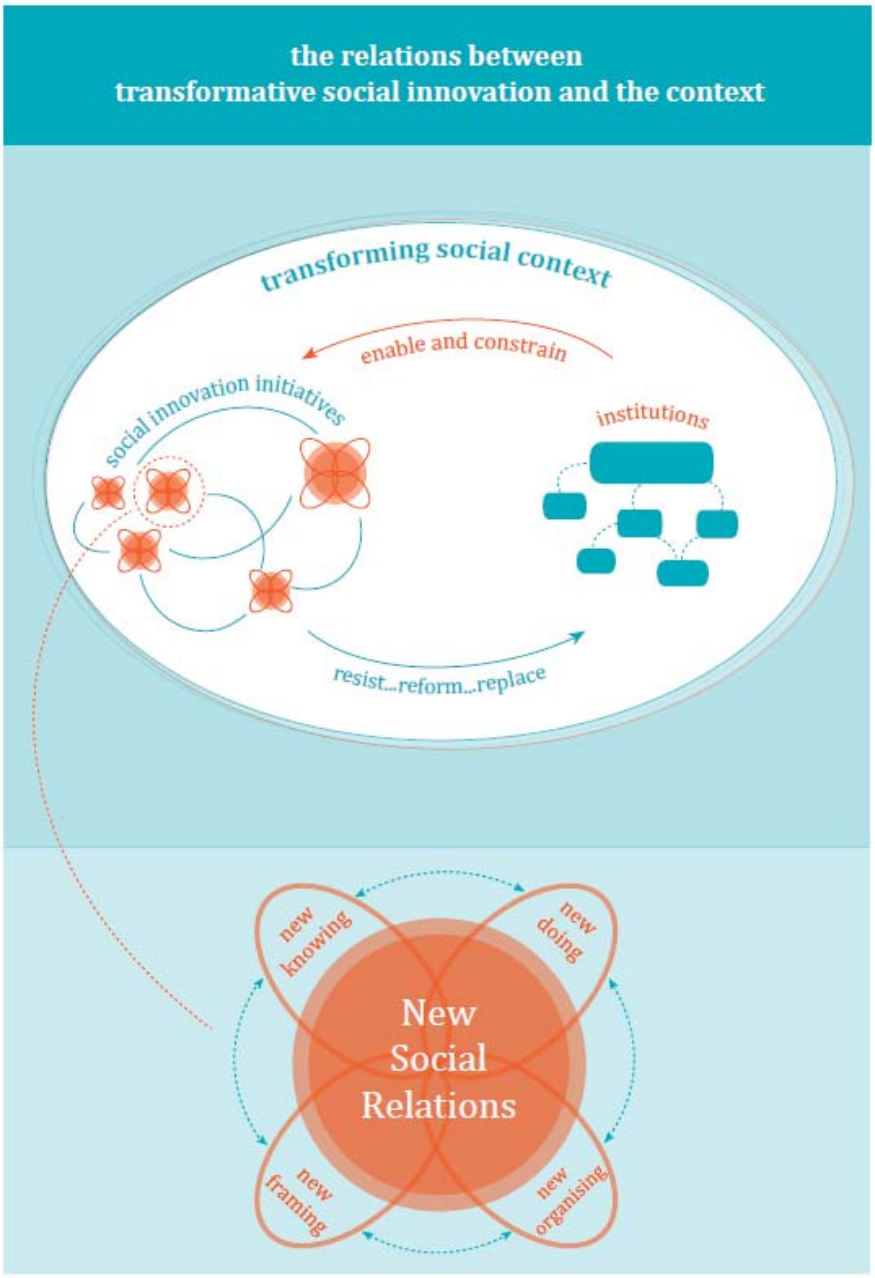

Figure 3. The dialectical relationship between SI-initiatives and the context.
Source: Haxeltine and Kemp (2017, p. 13).

Throughout this co-evolutionary 'dance', SI-initiatives must walk a fine line between cooperation and co-optation, during multiple iterations (Kemp et al., 2015). Because they lack resources, SI-initiatives often look to increase their impact by building strategic partnerships. In the process of attracting and maintaining partnerships, SI-initiatives experience a degree of institutionalization themselves (Pel et al., 2015). Their challenge is to retain authenticity: they need to remain true enough to their own principles to retain the trust of their members and stay on track with their goals, while adapting to the practical realities surrounding them as well as the needs of their partners (who are concurrently adapting). TRANSIT refers to institutionalization as "a dialectical process of alternating transformation

and capture" (Pel & Bauler, 2014, p. 1), in which "SI is pulled in both transformative and rather system-reproducing directions" (p. 12). Conflicts and power struggles are inevitably part of TSI*, since changes in dominant institutions and relations will always meet resistance (Haxeltine, Avelino, Pel, Dumitru, et al., 2016). As Haxeltine, Jørgensen, et al. (2016) point out, SI-agents are generally weaker than the institutions they wish to change, so they often end up intertwined with them in "co-productive relationships" (p. 22) where the innovation is "captured" (p. 22). Thus, TSI is a relatively infrequent outcome (Haxeltine, Jørgensen, et al., 2016).

Social learning is a key tool In the struggle to resist capture (Dumitru & Lema-Blanco, 2017). It can empower SI-agents by helping them to recognize and leverage game-changers* in the socio-material context (such as major economic downtowns), create and adapt effective narratives of change* (new discourses or storylines), and develop strategies to take advantage of higher-level system innovations and favourable societal transformations (Avelino et al., 2014; Dumitru et al., 2016; Haxeltine, Avelino, Pel, Dumitru, et al., 2016).

3.3 The perspective of an individual SI-initiative

To make the key concepts of TRANSIT more accessible to practitioners, I've created a visual illustration showing my interpretation of the dynamics underlying Dumitru's (2016) two prerequisites for transformative change. Specifically, I have created a causal loop diagram (CLD) showing how I perceive the dynamics of the (dis)empowerment cycle of SI-initiatives in TSI (see Figure 4). The context in which the TIs find themselves (the background of the diagram) permeates the cycle: it affects and is in turn affected by every element within the loops (the dialectical 'dance' described in Section 3.2). The loops are reinforcing and thus can have a positive (i.e. greater empowerment) or negative (i.e. disempowerment) trend. TRANSIT researchers consistently use the prefix "(dis)" when discussing empowerment to underline that the outcome is process-dependent and can be either positive or negative for the SI-agent (Haxeltine, Avelino, Pel, Dumitru, et al., 2016).

* All words marked with an asterisk are further defined in Appendix A

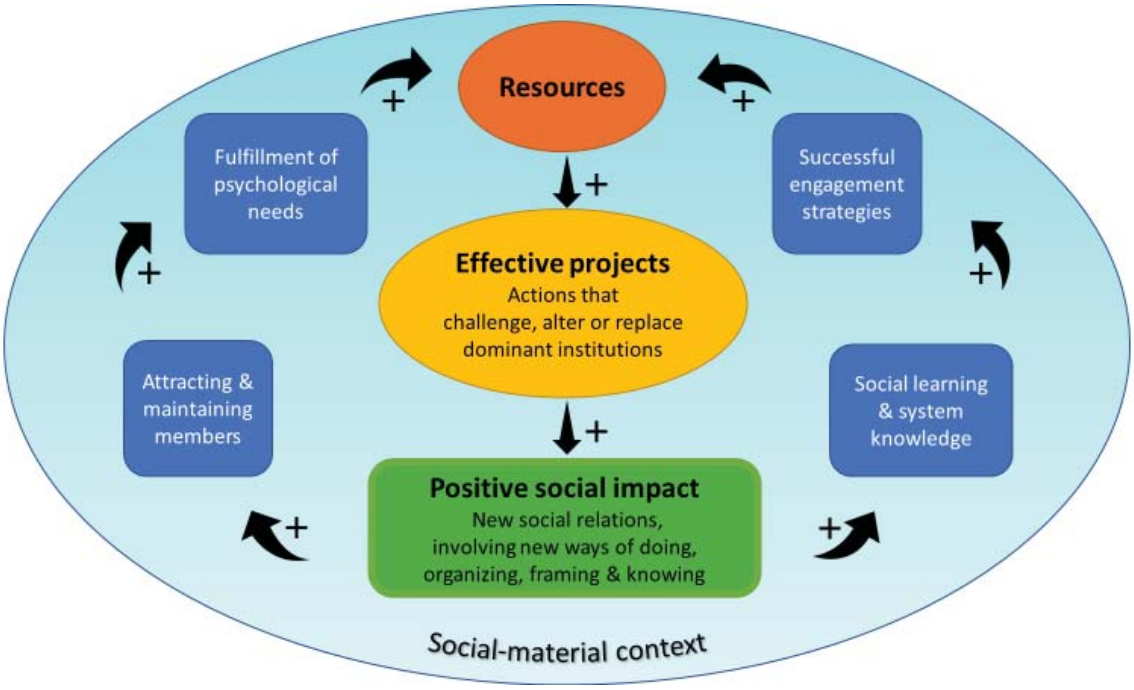

Figure 4. The (dis)empowerment cycle of SI-initiatives in transformative social innovation. It is depicted as two reinforcing loops based on the prerequisites for transformational change described by Dumitru et al. (2016). Loop 1 (on the left) refers to the ability of TIs to "build initiatives which attract and retain membership" (Dumitru et al., 2016, p. 9). Loop 2 (on the right) relates to their ability to "develop effective strategies to engage with the different elements of the socio-material context" (Dumitru et al., 2016, p. 9). Each of the elements affects and is affected by interactions with the socio-material context (the surrounding environment). If all components are functioning well, TIs will see an increase in impact and empowerment. If some portions are not functioning well, either due to shortcomings in the TI's performance or an inability to overcome the effects of an inhospitable context, the result is decreased impact and disempowerment. (Source: Own drawing based on author's interpretation of TRANSIT concepts from the perspective of an individual SI-initiative.)

The elements in the diagram are situated within the social-material context, with which they are constantly interacting. The centre of the diagram corresponds to the central purpose of a TI: to implement effective projects which achieve positive social impact. Successful projects earn the TI a reputation in the community and increase credibility with potential partners (Dumitru & Lema-Blanco, 2017), which impacts both loops. The level to which this central goal is achieved determines (and is determined by) the degree of empowerment of the TI.

The left side of the diagram (Loop 1) relates to the first prerequisite: building a project/initiative that attracts and maintains membership. When projects go well and result in positive social impact, the initiative gains legitimacy, attracting new members and providing validation for existing members (Dumitru & Lema-Blanco, 2017). TRANSIT posits that members have psychological needs for "autonomy, relatedness and competence" (Haxeltine, Avelino, Pel, Dumitru, et al., 2016, p. 16). When

these needs are satisfied, the group's resources increase, and the TI's ability to implement effective projects is strengthened, creating a reinforcing loop.

The right side of the diagram (Loop 2) refers to the second prerequisite: developing effective strategies to engage with different elements in the socio-material context. As TIs develop their activities, they increase their knowledge about the roles of and connections between other "actors, ideas, institutions and existing relations of power" (Dumitru et al., 2016, p. 9) in the system surrounding them. Social learning is integral to this process. Leveraging system knowledge enables strategic decision-making about how to engage most effectively. TIs must choose appropriate intervention points, develop locally-appropriate narratives, build helpful collaborations, and capitalize on opportunities provided by game-changers, societal shifts, or higher-level system innovations. This once again leads to an increase in available resources (human, financial or other), creating a second reinforcing loop.

In agreement with Dumitru et al.'s (2016) two prerequisites, I contend that the two reinforcing loops of this diagram need to be working in tandem if TIs are to be effective in their quest for transformative change social innovation. This depends partly upon the elements in the loops, and partly upon the impacts of the context itself. If a TI is unable to maintain momentum among its volunteers, even the best engagement strategies will suffer from a lack of human resources. Likewise, a strong corps of volunteers is little more than a social club if not complemented by successful engagement with the larger community. Thus, if one or more of the elements in the loops are not being performed well, or if the influence of the context is overwhelmingly negative to the extent that the actions of the TI cannot overcome it, the result is disempowerment.

This diagram representing my interpretation of the (dis)empowerment cycle of SI-initiatives provides the structure for my upcoming analysis of the data.

4 Methodology

I begin with a deductive orientation, using theory to formulate research questions on the ability of Canadian TIs to achieve transformative change, an approach described by Bryman (2012). Using a "cross-sectional research design with case study elements" (Bryman, 2012, p. 69), I set out to gather data on how the prerequisites for transformative social change identified by Dumitru et al. (2016) are being met: how TIs build initiatives that attract and retain members, and how they engage with others within their communities. I examine which factors correlate with success, situate the findings within the larger context of Transition, and reflect on how TI's practices in these areas might be improved. Although I gathered input from 15 different TIs across the country, they are positioned as individual examples providing information about the movement as a whole; thus, the Transition movement within Canada remains the unit of analysis.

There is a normative aspect to my thesis since I believe that while the Transition movement is not a panacea for shifting the world to sustainable resource use patterns, I do see it as a potential catalyst contributing to a successful global transition -- my recommendations are intended to empower those involved at the grassroots level to meet this potential by providing usable, context-specific knowledge. As a co-founder of a short-lived Transition initiative in my hometown of Kamloops, British Columbia, Canada, I combine the practical perspective of a practitioner with the academic insights I've gained through LUMES. This position allows me to emulate an approach used by other practitioner/researchers who are sympathetic critics of the Transition movement, including Haxeltine and Seyfang (2009); North and Longhurst (2013) and Quilley (2013).

I began the research with a literature review, selected an appropriate theoretical foundation (as discussed in Section 3), collected data from selected TIs via a questionnaire, and conducted follow-up interviews with a sub-set of the sample group.

4.1 Data collection & analysis

I began by acquainting myself with current research in the field, undertaking a literature review, searching Lubsearch, Google Scholar and the Transition Research Group's repository for papers specific to the Transition movement in Canada. Finding very few, I broadened my scope to the global Transition movement, looking for information on successes and challenges of TIs, longevity, relationships with other actors and on collaborative activities.

To gain more insight into the Canadian context, I communicated with two current 'knowledge leaders' of the Transition movement in Canada, Michelle Colussi & Blake Poland. Blake generously provided me with a draft of the forthcoming overview paper on the Canadian Transition Emerging Study, of which he is the lead author.

Criteria-based purposive sampling was used to study the pool of 16 Canadian TIs which either Poland (2016) and/or Feola and Nunes (2014) flagged as most active or particularly long-standing at the time of their research. The choice to use this selection rather than a more representative sample of Canadian TIS is justified by my particular interest in the group of initiatives which are managing relatively well, in accordance with what Bryman (2012) refers to as "criteria central to the main topic of research" (p. 423). Furthermore, it is logical to assume that challenges experienced by this sample are likely common to all TIs.

Following Bryman's (2012) contention that 'e-research' can be suitable for gathering qualitative data and indeed often results in replies which are "more detailed and considered" (p. 669), I settled on an online questionnaire incorporating aspects of "online personal interviews" (p. 668) as my primary source of data. This choice made travel unnecessary and eliminated the challenges associated with time-zone differences. The questionnaire was designed using the online platform SurveyMonkey, and consists of 82 structured and unstructured questions with multiple sub-questions, covering group dynamics, activities, decision-making and planning practices, external relationships, and collaborations with other organizations. The structured questions mainly incorporate Likert scales measuring the level of agreement with specific statements, whereas the unstructured questions consist of open-ended invitations to describe particular aspects of their TI as well as comment boxes beneath each structured question encouraging participants to share additional thoughts as they arise. Examples are shown in Figure 5, below. A link to the complete questionnaire is provided in Appendix B.

Since I became aware during the process of establishing contact that several groups were currently inactive, the requests for participation sent via email emphasized my interest in hearing from both active and inactive TIs. Participants were informed that the purpose of the research to "explore the successes & challenges of the Transition movement in Canada". Within a week, 15 of the 16 TIs I approached had indicated their willingness to participate. The 16th is inactive and a contact person could not be found.

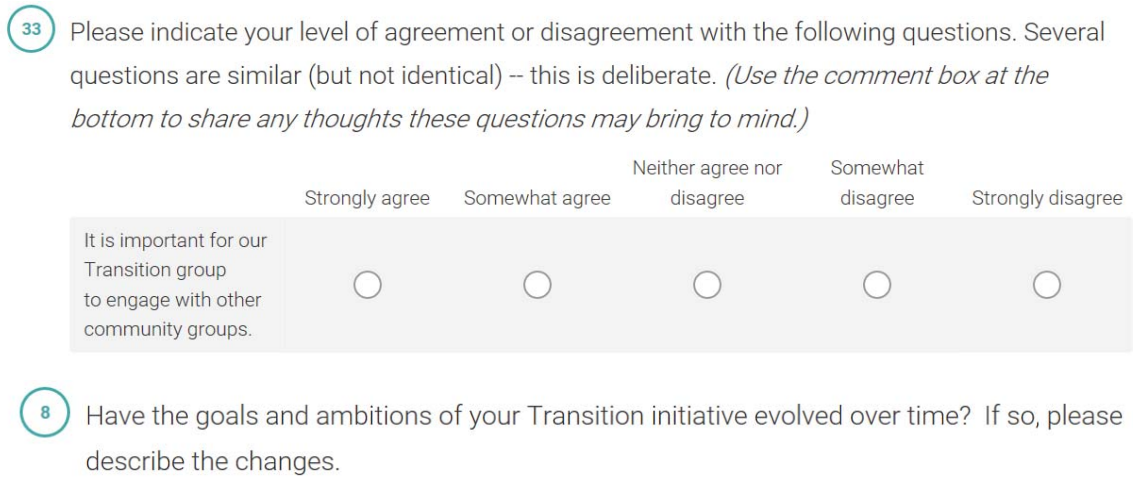

Figure 5. Examples of structured and unstructured questions. Source: Author's questionnaire.

A direct link to the questionnaire was sent to one veteran practitioner from each of the 15 participating initiatives via email. Respondents from currently inactive TIs answered the questions based on patterns during the time the TI was active. Bryman's (2012) contention that online interviews require "greater commitment and motivation" (p. 669) than in-person interviews is validated in this case by the thoughtful quality of the responses I received. Given that the questionnaire took between 30 and 60 minutes to complete depending on the number of comments added (one respondent stated that it took her over two hours), this deep level of engagement lends credence to the salience of this topic in the eyes of the respondents (Bryman, 2012). In addition, all participants indicated a willingness to be contacted for follow-up research. Bryman's (2012) recommendations regarding ethical research methods were followed throughout the process.

The results of the questionnaire were analyzed by initiative with a specific focus on RQ1 to gain a perspective on the activities and participant base of each TI. These results were then coded and compared, which enabled the identification of two clusters of Transition initiatives. Clustering allows differences between the two groups to be distinguished in spite of the very diverse nature of the individual TIs (Feola & Nunes, 2014). The data was then reanalyzed by cluster with the aim of finding trends differentiating the two groups, providing insights relevant to RQ2.

I once again used purposive sampling during the interview phase, choosing to engage more deeply with the cluster of six active TIs with comparatively high number of participants. Five were available to participate in semi-structured personal interviews approximately 50 minutes in length, conducted via Skype. Appendix C shows the interview template.

The interviews allowed participants an opportunity to reflect on and corroborate or refine statements made on the questionnaire, confirming and enhancing the data as described by Bryman (2012). Challenges identified by TIs in the questionnaire were explored in greater depth, including strategic planning, evaluation processes, and interactions with the municipality. The interviews were analyzed thematically, and cross-checked for agreement with responses given on the questionnaire.

In addition to the questionnaire and the interviews, some information was solicited directly from participants via email, as well as through publicly available online resources.

4.2 Limitations

This thesis uses practitioner perceptions as the primary data source. These are by their very nature biased, and perhaps even inaccurate. The assumption is that the respondents speak honestly and have a good grasp of the dynamics within their TI, but it must be acknowledged that some answers might have been different if they had come from a neutral observer or even another individual from the same TI. Furthermore, the perspectives of respondents regarding relationships and collaborations with other organizations are necessarily one-sided. Given the relational nature of the TRANSIT theory, future researchers might like to explore the perspectives of the collaborating agencies, for example, asking how municipalities view TIs and their efforts at collaboration.

Canadian TIs are very dynamic, and it must be remembered that this study is, at best, a snapshot in time, and results should not be generalized across time nor to other individual TIs.

In hindsight, choosing to use previous studies, although both recent, was perhaps not the best choice for determining which TIs are the most active. However, the only existing registry for Canadian TIs (on the TN website) gives no indication at all as to whether groups are active or inactive. My research shows that simply looking for active websites and Facebook pages is also not an accurate method for determining the activity level or general health of a TI, since five of the seven TIs which self-identified as inactive in my study continue to maintain a presence on both platforms (of which only two gave an indication of their current hibernation). Thus, a fair degree of investigation and direct communication is required to accurately determine the current status of TIs -- a fact which should be taken into account by future researchers.

Finally, another limitation arises as a result of choosing TRANSIT as my theoretical framework. It is entirely possible that I have not fully understood or have distorted elements of the theory, since robust critique, which often serves to clarify conceptualizations, is not yet available.

5 Analysis

The following analysis provides an overview of the challenges facing Canadian TIs. After a preliminary look at the overall status of the Transition movement in Canada, the analysis is structured around Dumitru et al.'s (2016) prerequisites for transformative change. Section 5.2 deals with the first prerequisite (Loop 1 of Figure 4), and Section 5.3 refers to the second (Loop 2 of Figure 4). As noted above, each loop relates to a portion of my RQ1. Following that, in Section 5.4, I compile a list of characteristics common to the most successful TIs, answering my RQ2.

5.1 Status of the Transition movement in Canada

In light of the importance that TRANSIT researchers place on longevity (Haxeltine, Avelino, Pel, Dumitru, et al., 2016), I would like to give the analysis additional context up front by highlighting one of my early and most surprising findings: fully half of the TIs selected for this study, based on previously reported high activity levels and/or longevity, had become inactive by the time I contacted them in February 2017. This finding spurred me to conduct further research about the Canadian Transition movement as a whole. The official TN website displays only 68 Canadian TIs as of April 2017, which represents more than a 20% reduction from the 86 registered there in April 2016, as reported by (Poland et al., forthcoming). Taking this one step further, I looked for evidence of current activity, and found that only half of the Canadian TIs listed on the Transition Network website appear to be still functioning (based on whether or not they have a current web presence). Although not conclusive, these numbers give cause for concern.

5.2 Building initiatives that attract & maintain membership (Loop 1)

5.2.1 Attracting members

In order to form a TI initially, there has to be an adequate core of people who believe in the 'mission'. These people are drawn to the group out of a desire to change current systems and "create space for alternative ones" (Haxeltine, Jørgensen, et al., 2016, p. 7). Reasons given by respondents for TI formation stress the building of community resilience through economic localization and a reduced dependence on fossil fuels, along with a desire to bring people together through hands-on, practical projects. Participants feel they are filling a gap, as only about one third of respondents report a strong resilience movement in their community apart from Transition.

Unfortunately, attrition is unavoidable within all organizations. The two most common reasons given by respondents for the departure of volunteers are changes in personal circumstances resulting in less time to volunteer and people moving away, both factors outside of the control of the TI. Thus, TIs must attract new volunteers on an ongoing basis to avoid overburdening existing volunteers.

Several different data points confirm the difficulty that TIs are experiencing attracting members. All respondents cite some form of insufficient human resources as the greatest challenge to the ongoing operation of the TI. Only one third consider their TI successful in attracting and maintaining members, but, even more tellingly, not a single one of 15 respondents indicated agreement with the following statement on the questionnaire: "We have enough active volunteers to fill all roles without burning anyone out". Burnout is listed as the third most common reason for the departure of volunteers, and is specifically linked to a decline in activities. While all TIs report ebb and flow in their activity levels over time, active TIs who rank themselves lowest in terms of activity levels cite a lack of volunteers as the primary limiting factor. Training in volunteer recruitment is also the most popular choice among a selection of potential topics for training, demonstrating an awareness that this is a weak spot. This comment is typical:

> Excerpt 1 (TI#5): "We are slowly attracting new volunteers but not quickly enough nor with the skills required to backfill the 1-4 key members who do the heavy lifting and are steeped in and committed to Transition."

Of equal concern is the heavy reliance on one or two key members, a trend reported by all but one of the TIs. Only a small minority report having additional people who could step up to fill key roles if necessary.

> Excerpt 2 (TI#12): "If we lose [a key volunteer] to a full-time job, I think there's a possibility that the Transition meetings would collapse. He is the glue that binds us right now, and I don't see anybody in the wings picking it up."

As has been noted in other contexts (Bergman et al., 2010; Pel et al., 2015; Wells, 2011), the impending retirement of a founder is viewed with great trepidation and associated with a significant loss of momentum and decreased activities.

> Excerpt 3 (TI#5): "Because of losing [our founder's] high-powered sales ability (his revenue-generating skills), our level of activity will decrease in the next year. […] Replacing him is a huge challenge. The organization will change."

Reasons given by inactive TIs for their dissolution revolve mainly around the lack of volunteers willing to take on leadership roles, perceived as a lack of support from the larger community.

> Excerpt 4 (TI#4): "No meaningful interest in the community beyond the committed 6 to 8 remaining members, even after years of activity and promotion.

Respondents linked greater ease in attracting volunteers to two factors: successful projects which draw in new people, and world events which create a sense of urgency around Transition:

> Excerpt 5 (TI#14): "It was great when oil prices were high. Interest slumped as more oil was discovered (dissolving peak oil fears) and prices went down. Considerable upswing in interest since recent US elections ...!"

In summary, the data confirms that all TIs are having difficulty recruiting new volunteers. Surprisingly, that generally doesn't translate into specific plans to address the situation. To wit, only five of the 15 TIs report having developed and implemented specific strategies to attract new members, part of a trend which will be explored further.

5.2.2 Fulfillment of psychological needs

What are the conditions required to maintain momentum among TI members? TRANSIT states that members are "motivated to persist in their involvement when being a member of the initiative provides satisfaction of the basic psychological needs for autonomy, relatedness and competence" (Haxeltine, Jørgensen, et al., 2016, p. 7).

5.2.2.1 Autonomy

Autonomy refers to the ability to set one's own course, making decisions in alignment with personal values & priorities (Haxeltine, Jørgensen, et al., 2016). For TIs, members need to feel that they are in charge of their organization, and that their own values are reflected in its activities. Autonomy is shown to be present in Canadian TIs via the decisions they make, perhaps most foundationally in how they define their goals. By choosing to adjust their goals over time, members are demonstrating ongoing autonomy. Notable is the fact that the evolved goals describe a narrower, more local focus and greater realism in terms of achievability, a factor linked by Cretney, Thomas, and Bond (2016) to greater success. For examples of how TIs goals have evolved over time, see Appendix D.

Autonomy is also demonstrated by the wide variety in the choices made by TIs in terms of organizational structures, activities, fundraising, partnerships, etc., evident throughout the responses. More indirectly, the TIs studied show evidence of autonomy through “narrative experimentation” (Wittmayer, 2015, p. 16) -- deciding which portions of the larger Transition narrative to 'foreground' based on the interests and attitudes of their audience. None of the data indicates that participants feel a lack of autonomy, although it should be noted that most are or were key members of their organizations, and therefore likely to wield consider influence in decision-making.

5.2.2.3 Relatedness

Relatedness refers to the connection that people working together in a TI feel towards each other: the degree to which they bond and share a sense of joint identity through the organization (Haxeltine, Jørgensen, et al., 2016). My research showed that members feel generally valued through participative and non-hierarchical decision-making, and there is evidence of group bonding through informal social events.

> Excerpt 6 (TI#3): "I will say one thing that I've found very important, and that is […] providing space for people to connect. I've found that the more people are able to connect and get to know one another before they actually engage in a project, the more likely they are to be successful.”

Relatedness can also be gauged by the degree of attachment felt to other Transition groups. Only a third of the TIs report regular communication with other Transition groups, the same number which report feeling a connection to a larger (informal) national or regional network. Twice as many report a strong connection to the global Transition movement. The potential for increased feelings of relatedness through contact with the wider Transition community are highlighted in the following comment:

> Excerpt 7 (TI#14): "When we started, we invited in leaders of other local transition groups and ... wow - that was great! Some drove many hours to be together. This has given us a sense of camaraderie with other groups from the get go."

Although less positive in itself, the frequent mention of burnout could also serve as a proxy for relatedness in that it could be interpreted to indicate extremely high commitment on the part of participants to the individual TI and/or the Transition movement. Overall, the data gives no indication of difficulties with relatedness, although it must be noted that respondents are mainly veteran core members, i.e. the members who are most likely to feel a strong sense of relatedness.

5.2.2.2 Competence

Competence refers to participants' perceptions of their capacity to overcome obstacles and create change within their context (Dumitru & Lema-Blanco, 2017). Part of feeling competent is the ability to establish a structure, organize it internally, and access resources (Haxeltine, Jørgensen, et al., 2016). The TIs surveyed perceive little difficulty establishing effective internal governance. The overwhelming majority report satisfaction with group processes such as planning and decision-making. However, respondents also point out areas where they feel unable to make necessary internal improvements due to a lack of resources. The above-mentioned inability to attract sufficient volunteers to prevent burnout reduces feelings of competence. Opinions regarding financial resources are divided. While some feel confident that they can cover costs as needed and demonstrate considerable ingenuity in applying a combination of strategies (e.g. membership fees, social enterprise, grants, crowdfunding), overall only half are in agreement that they have been able to access sufficient funds to carry out their plans. For one third of respondents, finding money for basics like website hosting and photocopying is an ongoing struggle.

A key aspect of competence relates to perception of external impacts: whether participants feel they are actually gaining ground in terms of creating change in their communities (Dumitru & Lema-Blanco, 2017). The respondents are divided on this, but less than a third feel that the Transition movement is gaining momentum in their communities, demonstrating feelings of low competence. This is in alignment with findings of low perceived impact by Poland et al. (forthcoming). Furthermore, only about a third feel that their community is headed in the right direction in terms of building resilience and ensuring a better future, which is the goal of Transition. This also indicates a predominantly negative perception of the socio-material context – participants perceive themselves as swimming against the current.

Surprisingly, although seeing progress toward one's own goals can build a sense of competence, only about one third of the groups studied state that they regularly evaluate their progress in a structured way, a trend which I'll expand upon later. Despite this, many TIs can cite accomplishments in their community, such as projects that have become institutionalized. For example, one municipality now includes film plastic in the municipal recycling stream, and allows backyard chickens in residential areas, both results of direct Transition involvement. These tangible impacts are clearly sources of pride and motivation.

Recognition from others also builds feelings of competence (Dumitru & Lema-Blanco, 2017). My research examined relationships and collaborations with four specific groups: municipalities, other 'green' groups, community agencies with a health/social focus, and the business community. TIs perceive a high level of familiarity with their work on the part of municipalities and other 'green' groups, lower for businesses and lowest for organizations with a health or social focus. Most TIs feel that their contributions are respected and appreciated by those groups, although there is less confidence about how their work is viewed by other health/social organizations, perhaps due to a lower degree of interaction with them.

Thus, the answer to the first part of RQ1 is that TIs are currently only moderately successful at building and maintaining initiatives that attract and maintain membership. All 15 participating TIs struggle with attracting sufficient volunteers, and this is the chief cause of dissolution cited by the seven inactive respondents. The TIs appear to have little difficulty in fulfilling psychological needs for autonomy and relatedness, but struggle with competence, as they are acutely aware of their limited resources, and unsure of their impact.

5.3 Developing effective strategies to engage with different elements in the community (Loop 2)

5.3.1 Social learning and system knowledge

This first element in Loop 2 stipulates that TIs must understand what they are up against in attempting to create broad societal change. They need to "acquire specific knowledge about how particular institutions and systems work and how they perpetuate values and practices that are not desirable" (Dumitru & Lema-Blanco, 2017, p. 7). Dumitru et al. (2016) describe how social learning plays a key role in this, enabling TIs to select appropriate intervention points based on a thorough understanding of the "other actors, ideas, institutions and existing relations of power" which surround them (p. 9).

The information provided by the TN on its website and through resources like the Transition Companion (Hopkins, 2011) provide an excellent starting point for both understanding the current 'big picture' and envisioning an alternative. Many of activities reported represent not only a desire to foster greater awareness of how existing resource use patterns are affecting the planet (e.g. film nights), but also direct attempts to engage the community in countering unsustainable trends. Examples of prefigurative actions cited by respondents include community gardens, local seed banks, timebanks,

re-skilling workshops, zero-waste programs, as well as economic relocalization efforts such as 'buy local' campaigns and community currencies.

As an "experimental, learning network" (Hopkins & Thomas, 2016, p. 9), the Transition movement offers what Haxeltine and Seyfang (2009) call "codified learning" (p. 11), exposing TIs to successful strategies without having to reinvent the wheel. However, the TIs studied do not seem to take full advantage of what they can learn from their colleagues around the world. Most do not communicate frequently with other TIs, share resources with them, nor frequently make use of TN resources. There is a low level of awareness of recent TN resources, such as HealthCheck, an online tool to help TIs analyze their own strengths and weaknesses. There is general agreement that more communication with other TIs would be helpful, and general appetite for training in various areas, but difficulty of access and a shortage of time are perceived as barriers. The absence of national or regional Transition hubs is pointed out as a shortcoming.

Since their scale of engagement is local, TIs must supplement what they can learn from the TN and other TIs with more context-specific knowledge. Networking with other local groups can enhance knowledge about the local context (Martiskainen, 2017; Seyfang, Hielscher, Hargreaves, Martiskainen, & Smith, 2014). All respondents agree that it is important to engage with other community groups, and most report strong connections with like-minded organizations. While almost all like the concept of functioning as a 'bridge' between like-minded groups, only half have made deliberate efforts in that direction, and only a third report success in this area.

The heavy dependence on one or two key members, particularly founders, makes the retention of knowledge within the group especially challenging, since the departure of one of these key volunteers means a loss of not only resources, but also local system knowledge. Distributed leadership would be another way of diffusing this essential knowledge, but only about half of the TIs studied employ models where leadership is distributed and rotates regularly among different people.

Perhaps one of the most important tool for TIs to gather information about their effectiveness is self-evaluation of past projects; "reflexive learning" is a primary method of social learning (Dumitru et al., 2016, p. 17). However, as previously noted, only one third regularly evaluate their progress in any structured way. The following comment is illustrative:

Excerpt 8 (TI#3): "We don't have a lot in terms of formal evaluation … I can't say we have a specific process or formal evaluation, but things have generally tended to work out well… Part of it might be just my influence: I love to just go out and do stuff, and I'm really bad at tracking."

Monitoring does seem to take place more at the individual project level, sometimes in response to grant program requirements, which often require tracking numbers of participants and feedback.

5.3.2 Engagement strategies

Most of the TIs studied were surprisingly informal about strategic planning, showing a preference for shorter-term project planning over longer-term strategic planning. While two thirds of respondents report that their TI "develops and implements strategies based on agreed-upon goals", only half indicate that their TI actually does goal-setting as a group at regular intervals, and only a very few develop annual plans guided by the goals of their organization.

The ways that the TIs studied choose to engage with their communities show great diversity:

- Awareness-raising activities such as festivals, workshops, lectures, film series, social media, and newsletters
- Social enterprises such as producing a magazine and selling native, bee-friendly seed collections
- Food sovereignty supports like seed banks and community gardens
- Sharing economy initiatives like tool libraries and time banks
- Economic localization through complementary currency projects and “go local” campaigns
- Environmental actions like tree-planting campaigns
- Social capital building events like shared community meals and potlucks
- Engagement with municipalities around planning

Although the Transition movement has been criticized for being too focused on bridge-building and being too non-confrontational to achieve its transformative aims (Bailey, Hopkins, & Wilson, 2010; Chatterton & Cutler, 2008), some of the TIs studied seemed to be in alignment with what appears to be a more recent trend (Barnes, 2016; Longhurst & Pataki, 2015) to become more political. About half the TIs studied reported that they get involved with local politics, although most avoid provincial and national-level politics. Only one third declared that they avoid getting involved in controversial local issues. The following excerpt is illustrative:

> Excerpt 9 (TI#7): "There was a time when (as advocated in the original Transition methodology) our initiative was strongly apolitical and non-partisan. This has changed somewhat both in the Transition movement and in our local initiative as well. There comes a time when government policy conflicts directly with the goals of Transition, and when that happens, we need to speak up. And we are."

Several comments note a power imbalance between TIs and the institutions that they hope to change, but others point out that opponents can usually be worked around, rather than confronted head on. Interestingly, one TI argued it was a mistake to call anyone an opponent, preferring to look for areas of common ground with all.

5.3.2.1 Partnerships

Collaboration with other actors, one of the key principles of the Transition movement (Hopkins & Thomas, 2016), is one of the primary ways TIs engage with their communities, and therefore deserves in-depth examination. My research confirmed that TIs fully embrace the concept of collaboration:

> Excerpt 10 (TI#3): "We love to partner. … It's a mix of looking for them in advance and just having them come up spontaneously. Some are quite passive, like us just consulting with them about what their neighbours, members, constituents might like to see us offer in that particular location. […] [Other partnerships are more active]."

Although the concept of collaboration is embraced, it is also not generally guided by a well-articulated strategic purpose. None of the TIs report having done specific analyses or community inventories to identify potential allies. Although all TIs agree that municipal collaborations are desirable, only half report having specific strategies to engage with the municipality. Strategies for engagement with health/social and business organizations were particularly uncommon. Indeed, partnerships with businesses are sometimes viewed with suspicion, causing frustration for those who see potential there.

While most TIs did not mention partnerships aimed specifically at gathering knowledge, one TI did report a university partnership studying local food systems to identify opportunities for economic relocalization. Difficulty in finding graduate students interested in local development (as opposed to sustainable development abroad) was cited as a limiting factor.

In addition to assisting with knowledge-gathering, collaborations are often perceived by TIs as a route to increase financial resources, e.g. grants. While some see grants as a trap, potentially reducing independence, others embrace them and the added benefits and responsibilities of active partners. Frequently mentioned drawbacks are that grants generally have very specific requirements which may push activities in a certain direction (limiting autonomy), and usually don't provide core funding, issues already noted by Seyfang and Smith (2007).

Delivering projects with partners is also viewed as an end in itself in terms of creating alignment and trust between organizations:

> Excerpt 11 (TI#8): "My experience has been that if you really want a strong relationship between [your TI] and another group, you have to deliver a project with them. […] To me, if you don't have a partner on a project, there is a dimension in which you are failing. So, I always want to work with other groups. They can help us, and it tightens the network of groups working together.

TIs show a tendency to work mainly with like-minded groups. Only a third report having attempted to engage non-traditional allies, i.e. those who may not share their perspective. Almost all TIs believe joint projects with their municipalities, 'green' groups, and health/social agencies could help advance the goals of the Transition movement. Only half felt that way about businesses. Relationships were by far the strongest with other 'green' groups, with only one third reporting strong positive relationships with municipalities, health/social agencies, or businesses. All TIs reported past collaborations with other 'green' groups, and most have also cooperated with municipalities, businesses, and health/social agencies (with frequency declining in that order). TIs also report collaborations with a host of other organizations, including universities, churches, schools, First Nations, libraries, food banks, farmers, artists, craft associations, neighbourhood organizations, seniors, and quasi-municipal groups like a poverty task force.

The most common topics for municipal collaborations were public education about sustainability or conservation issues and local food or gardening projects. Almost all TIs who have done joint project with their municipality rated the experience of collaboration as positive, with respondents noting greater openness to further collaboration, increased trust between the two parties and increased capacity on the part of the TIs as results. Commonly cited barriers to municipal collaborations include a lack of urgency or disbelief about the need to act on climate change on the part of municipal officials, and a lack of resources on the part of TIs. Regarding roles, TIs reported the most important functions

of municipalities in joint projects as publicizing events, providing venues at reduced cost, joint brainstorming and planning, and providing funding (in that order).

This section has highlighted missed opportunities regarding social learning, system knowledge, and strategic planning, specifically in the areas of shared leadership, networking, evaluation, and non-traditional partnerships. Thus, the answer to the second part of RQ1 must also be that TIs are only moderately successful in “developing effective strategies to engage with different elements” in their communities (Dumitru et al., 2016, p. 9).

5.4 Characteristics of successful Transition initiatives

The high number of inactive TIs documented by my research increases the urgency of studying the factors associated with success, the subject of my RQ2. The initial analysis showed that the factors which lead to the collapse of some TIs are not unique to them; on the contrary, all the TIs studied are swimming against a heavy current. Yet, some are managing to stay afloat and even thrive, while others bow out. What distinguishes the survivors?

To identify differences, I clustered the 15 participating TIs into two groups. **Group 1** consists of six active TIs with comparatively high numbers of active members, whereas **Group 2** consists of nine TIs which are either inactive or at high risk of becoming inactive due to extremely low numbers of active members. "Number of active members" reflects both the size of the 'core group' responsible for the ongoing operation of the TI as well as the number of 'extra' volunteers that can be counted on to help during special events. In light of the previously discussed finding that a shortage of active members is the primary cause for a TI to cease functioning, the underlying assumption here, supported by Feola (2016), is that the groups with larger pools of active volunteers are more likely to survive.

The purpose of comparing these two groups was to look for features which differentiate them. This comparison is merely intended as a catalyst for practitioners to reflect upon their own practices and as a starting point for further research, since causal relationships have not been established. Additionally, the importance of individual context must be emphasized (Barr & Pollard, 2017; Feola, 2016; Feola & Nunes, 2014; Wells, 2011).

With those caveats, I did find several factors which distinguish the two groups, as shown in Table 2. Not all factors apply to all individual TIs in Group 1; rather, these findings represent group trends.

Table 2: Characteristics which differentiate TIs in Group 1 from others (Source: own data).

Perceptions and attitudes
Group 1 is **more likely** to:
Mention cooperation with other groups and fit themselves into the local organizational landscape when describing both original and evolved goals
Rate their communities as having a stronger resilience movement (apart from Transition) than others
See the Transition movement as gaining momentum in their community
Feel a stronger connection to the global Transition movement
Agree that increased communication with other TIs would be helpful
Feel financial pressure less acutely
Report that others, including municipalities, 'green groups', health/social organizations, and businesses are familiar with their work and respect their contributions to the community
Group 1 is **less likely** to:
Lose volunteers for the following reasons: losing interest in the subject of Transition, feeling that their volunteer time would be better spent elsewhere, feeling that the group has insufficient impact, finding processes & decision-making frustrating, not enjoying spending time with other people in group, or disappointment at slow pace of change in community
Internal practices
Group 1 is **more likely** to:
Describe group leadership as distributed and rotating
Feel capable of dealing well with occasional in-group conflicts
Be satisfied with planning and decision-making processes
Set goals as a group at regular intervals
Develop & implement strategies based on agreed-upon goals
Evaluate progress in a structured way
Regularly discuss group dynamics
Engagement practices
Group 1 is **more likely** to:
Develop and implement specific strategies to attract new members
Employ a greater diversity of recruitment approaches
Reach out to those who may not share their views
Function as a "bridge" among like-minded groups
View all other groups, including municipalities, 'green groups, health/social organizations, and businesses as allies in the quest to build a resilient community
View collaborations with all other groups as desirable
Have specific strategies to engage with all other groups
Have initiated joint projects in the past with all other groups
Claim a stronger relationship with the municipality, particularly council representatives
Group 1 is **less likely** to:
Be concerned about dilution of their own messages through partnerships

Note that some of these differences are within the control of the TIs, while others are not. For example, being in community with a strong resilience movement outside of Transition is not a variable TIs can expect to change, at least not in the short term. However, the list does include many factors which theoretically can be impacted by the actions of the individual TIs. For example, the questionnaire

showed that both Group 1 and Group 2 promote volunteer opportunities at TI or community events, via website articles, on social media (e.g. Facebook), and through posters. In addition, however, the TIs in Group 2 provided a substantial combined list of supplementary methods: newsletter or magazine articles, online job sites, using timebanks, direct advertising, being part of a collaboration hub, hosting 'meet-ups' open to the public, and promotion via partner organizations, demonstrating greater a much greater diversity of methods.

The findings paint a picture of the more successful TIs as being more open to others, defining themselves in relation to the surrounding context. This aligns with what Feola and Nunes (2014) labelled “a tendency to look inwardly” among the less successful TIs (p. 247). Regarding the importance of strong connections and frequent collaborations with other local actors, particularly municipalities, my findings echo previous research by Feola (2016); Feola and Nunes (2014); Forrest and Wiek (2015); Middlemiss and Parrish (2010) and Wells (2011). My results regarding monitoring and strategic planning are similar to those of Forrest and Wiek (2015); the influence of a supportive milieu was also documented by Feola (2016); Forrest and Wiek (2015) and Longhurst (2015a).

Generally speaking, the differences between Groups 1 and 2, and the answer to RQ2, can be summarized thus: the more successful TIs rate their community as more supportive of their goals (i.e. a more sympathetic milieu), employ more distributed leadership and diverse recruitment strategies, demonstrate a more reflective stance by doing more self-evaluation, set goals and plan more strategically, have stronger relationships with other elements in the community as well as the global Transition movement, and are more open to and active in collaborations with all other groups (not just natural allies).

6 Discussion

The preceding analysis of the data provides an overview in terms of how successfully the 15 selected Canadian TIs are meeting Dumitru et al.'s (2016) two prerequisites for transformative change. TRANSIT theory has proven helpful in identifying the different elements which impact the empowerment of SI-initiatives and hence their ability to contribute to transformative change.

If we go back to the two loops of the (dis)empowerment cycle (Figure 4), we can see that there are areas of success and areas of concern in each loop; thus, the answer to RQ1 is that the TIs studied are only moderately successful on both sides of the cycle. The most notable single finding is, of course, that half of this group (originally selected for having been identified as the most active and/or long-standing in recent studies) is no longer active, mainly due to difficulties in attracting new members. Thus, for many TIs, the cycle has indeed become one of disempowerment, leading to dissolution. Others, however, continue to thrive (albeit with the same stressors), and the analysis has offered explicit insights into factors which correlate with greater success on the part of Canadian TIs (RQ2): a more hospitable community context, more diverse recruitment strategies, more self-evaluation, more strategic goal-setting and planning, stronger relationships both within the community and with the global Transition movement, and more collaborations with all other groups.

In the following sections, I take a deeper look at these findings within the larger context of Transition, and explore opportunities for improving outcomes.

6.1 Context

Due to constant interaction with the surrounding context, whether a TI succeeds in the long term or not is not always up to the participants themselves. As noted by Haxeltine and Kemp (2017), and supported by my analysis, the ability to achieve change is also dependent on whether "the conditions, the place and the timing, is right in the societal context" (p. 21).

Participants note that interest in TIs varies according to world events, and a decrease in the rate of Transition start-ups in Italy, France, Great Britain and Germany (Feola & Him 2016) points to a declining sense of public urgency on Transition issues beyond the Canadian context. Within Canada, a parallel trend seems to be occurring: the number of people who describe themselves as "very concerned about climate change" dropped from 46% in 2008 to 37% in 2016 (Lyle, 2016). Similarly, the findings of Feola and Butt (2017) regarding the benefits of a progressive local political culture would also appear to work

against Canadian TIs, where the dominant political context leans well to the right of their European counterparts (Korpi & Palme, 1998). Furthermore, Canada's large size and low-density population patterns create great distances between most individual TIs, discouraging physical networking, a factor correlated with success by Feola and Nunes (2014) and Mulugetta et al. (2010). Canada has no national or regional Transition hub, putting Canadian TIs at a distinct disadvantage to their counterparts in 24 other countries. Combined, these factors lend support to the negative perception of their context expressed by participating TIs.

Finding people to support projects which run counter to dominant social values is always going to be a challenge. Thoughtfully framing and communicating the narrative according to local context, being sensitive to and ready to take advantage of potential game-changers (Avelino et al., 2014), and system knowledge-sharing are critical. Although some of these practices are currently happening, they can all be enhanced by specific training, none of which is currently available specifically for the Canadian context.

The TN's Strategic Plan makes frequent reference to the increasingly important role of national hubs (Transition Network, 2014), and I argue that such a hub would significantly enhance the context for Canadian TIs. Hubs can provide inspiration, support, training, resources, and facilitate networking for knowledge-sharing. An analysis of the potential benefits and the costs of establishing a Canadian Transition hub (perhaps in association with Transition US), including a study of funding mechanisms used in other countries and potential funders in Canada, is a key next step in research. If the Canadian Transition movement is to find success beyond a few isolated pockets, more training and support will be needed.

6.2 The connection between monitoring, resources and strategic planning

My findings regarding monitoring and evaluation (M&E) mirror those of Kemp et al. (2015), who stated that "monitoring is mostly done as an informal, ad hoc activity among the social innovations" (p. 22). Tensions in grassroots innovations regarding monitoring revolve around whether it is a good use of resources versus an unnecessary administrative burden (as noted by some respondents), and important debates around what should be monitored and for whose purposes (Kemp et al., 2015; Nicholls, 2015).

Despite the time and skill required for regular M&E, there are two reasons why TIs should make them a higher priority. Firstly, documenting positive contributions to the community is a gateway to increased resources, both in terms of motivated volunteers and external supports, including grants (Bailey et al., 2010; Bergman et al., 2010; Kemp et al., 2015). Whether as simple as tracking the number of attendees at film screenings, or as ambitious as an annual analysis of the economic impact of a local currency, numbers provide a tangible way for TIs to demonstrate to themselves and to the rest of the world that they are making a difference.

The second reason for M&E is the critical role they play in social learning and strategic planning (Kemp et al., 2015; Nicholls, 2015). By examining their results, TIs can adjust their strategies to be more targeted, effective, and aligned with their agreed-upon goals. Without this reflection, TIs tend to continue with the same events each year, whether they be sustainability festivals or community gardens or composting workshops, based on 'this is what we do' rather than 'this is currently the best way to meet our goals'. Social innovation agents need to capitalize on global and local developments which are favourable to their goals (Haxeltine, Jørgensen, et al., 2016); as the circumstances around them are constantly changing, there is a need for periodic reflection to ensure that “windows of opportunity” (Haxeltine, Jørgensen, et al., 2016, p. 31) are not lost.

An additional benefit of M&E would be the diffusion of valuable system knowledge to the larger group from a few key members. This would decrease the heavy dependence on individuals and simultaneously allow new recruits to learn from veterans, a practice which Bradbury and Middlemiss (2015) identify as a contributing factor to the sustainability of grassroots organizations. While increasing M&E will result in a higher degree of institutionalization on the part of the initiative, the flat hierarchical structure and participatory decision-making favoured by Transitioners can be maintained and perhaps even reinforced through more equitable knowledge-sharing.

Several of the TIs studied have Boards of Directors, separate from their Steering Committees, and TIs might benefit from a deeper examination of how these Boards can be most useful. Although their role was not explored in depth during my study, they may represent unexploited potential in terms of providing higher-level strategic direction, complementing the project-oriented focus of Steering Committee members. One TI has instituted a requirement for Board members to dedicate ten hours per month to activities which specifically increase organizational capacity – food for thought.

Not every group of volunteers can be expected to possess skills in evaluation and strategic planning at the outset (Kemp et al., 2015), yet there is very little available for TIs in terms of training materials or other resources in this area. Although TIs are encouraged to "reflect and celebrate" (Hopkins & Thomas, 2016, p. 41), the words 'monitor' and 'evaluate' are absent from the guidebook, and there is no mention of how to develop a strategic plan. The TN should provide training resources for TIs in these key areas because social learning through self-evaluation can lead to "changes in behaviours and strategies for action" (Dumitru et al., 2016, p. 17). If Canadian TIs are to make progress swimming against the currents of the dominant 'growth-and-consumption' paradigm, they need to be encouraged and supported to evaluate their work and incorporate strategic planning more systematically[4].

6.3 Engagement, cooperation and co-option

Transformative change, according to TRANSIT, requires effective engagement with the community (Dumitru et al., 2016), yet 'engagement' can take different forms, accompanied by varying degrees of institutional resistance. Transition literature stresses bridge-building and collaboration over overt confrontation (Hopkins, 2011), yet debates continue about how directly TIs should confront systems of power (Barnes, 2014, 2016; Connors & McDonald, 2011; North & Longhurst, 2013; Stevenson, 2012; Trainer, 2015).

SI-actors can become 'marginalized' if they remain too radical, yet they are in danger of being co-opted by more mainstream forces if they move too close to the status quo in their thinking & activities (Kemp et al., 2015; Pel & Bauler, 2014; Pel et al., 2015; Adrian Smith, Fressoli, & Thomas, 2014). TSI involves the institutionalization of changes in relations, yet 'capture' is a more common outcome than 'transformation' (Haxeltine, Jørgensen, et al., 2016). To avoid being neutralized through capture, Haxeltine and Kemp (2017) suggest that SI-initiatives employ "a portfolio of different strategies towards existing institutions that may include: complying, irritating, avoiding, resisting, compromising, hijacking, exploiting institutional pressures etc." (p. 21). Further complicating the matter, Pel (2016) suggests that co-option is not necessarily nor exclusively negative, making the argument that capture is just one moment in time, and struggles continue in the newly evolved relationship.

[4] An aside in defense of the TIs studied: they are far from alone in their preference for action, rather than reflection and planning. Indeed, the first Strategic Plan for the Transition Network was created in 2014, a full seven years after its inception (Transition Network, 2014).

TRANSIT researchers maintain that because it involves a change in "dominant institutions and power structures", TSI is "inherently political" (Haxeltine, Jørgensen, et al., 2016, p. 20), and that deep societal change cannot be achieved without resistance from established interests (Pel et al., 2015). However, activities along the full continuum, from cooperation to opposition, are needed: "Anti-establishment groups may challenge and de-legitimate existing systems and practices; those more willing to cooperate may act constructively with government and incumbents to build more legitimate systems" (Kemp et al., 2015, p. 19).

TIs hoping to create transformational change must find their own 'sweet spot', keeping in mind their local context and being prepared to change tack frequently. Most TIs in my study heartily endorse non-confrontational engagement and place a high value on harmonious relations, especially with the municipality. They provided multiple examples of 'low-resistance' actions (such as community gardens and seed banks). Yet, there were examples of TIs who are highly critical of their municipality's lack of understanding of sustainability issues and openly oppose local projects which they perceive as furthering the status quo, pro-growth, globalization agenda. These are more likely to be engaged in actions that directly challenge existing systems (such as complementary currencies or campaigns to reduce consumption/economic growth).

Are river bank clean-ups and collecting food for the needy (activities reported by participating TIs) creating pressure for system change? Are those who protest pipeline projects burning too many bridges? Are TI members who sit on municipal planning committees reinforcing the very system they hope to change? These questions can only be answered by the TIs involved, who obviously understand their context best. However, I argue that these decisions need to be made consciously with an awareness of the 'big picture', and it is here that a structured approach and resources are once again lacking.

The difficulty of changing the current regime while having to work within it is a conundrum for which there are no easy solutions (Alloun & Alexander, 2014; Barnes, 2014; Barr & Pollard, 2017; Chatterton & Pickerill, 2010; A. Smith, 2007; Amanda Smith, 2011; Adrian Smith et al., 2014). Given the acknowledged power imbalance between grassroots social innovation initiatives and established interests (Haxeltine, Avelino, Pel, Kemp, et al., 2016; Seyfang & Smith, 2007), TIs need to become better armed. Strategic decision-making regarding engagement would be strengthened by a solid understanding of how change happens, which is another topic conspicuously absent within the TN, the most logical delivery vehicle for such information. More could be done to help TIs develop a deeper

understanding of the hurdles and pitfalls involved, i.e. theories of change. TRANSIT researchers, already committed to co-creating their theory with practitioners, could develop such resources. The series of TRANSIT Practice Briefs is an excellent starting point for helping groups to assess the most promising intervention points in their communities, but more interactive resources are needed.

6.4 Strategic partnerships

The study found that TIs focus on partnerships with like-minded actors and municipalities. While these collaborations can be very beneficial, they are not the only options. My research shows that greater collaboration between TIs and four other groups is desirable. The first is health and social agencies, an opportunity also noted by Patrick, Dooris, and Poland (2016). This relationship holds tremendous potential since both groups have similar goals regarding community health and wellness, sustainable mobility, air quality, and social capital. Some examples of joint projects already exist, e.g. the Building Resilient Neighbourhoods Project in Victoria, but there is much room to build on these.

Academic partnerships could be a second area of particular fruitfulness for TIs, given that academics often have skills in the areas of monitoring, evaluation and knowledge-gathering which complement those of Transitioners (Seyfang & Smith, 2007). Employing a transdisciplinary approach which values academic and non-academic knowledge could "ensure the scientific rigor, practical legitimacy and usability of the results" (Polk, 2014, p. 442). Incentives for encouraging such collaborations, such as having universities set aside some graduate research funding for domestic sustainability challenges, also need study.

Thirdly, activities aimed at changing the economic system may represent more fertile ground for TIs than environmental issues (Barr & Devine-Wright, 2012; Transition Network, 2014), as inequality in Canada grows and more people are negatively affected by the existing system (Brzozowski, Gervais, Klein, & Suzuki, 2010). This would involve greater cooperation with the business community on projects such as community currencies and buy local campaigns. Although such projects require a high level of resources and specific skills to implement, there are obvious incentives for the local business community to become active partners and contribute resources. Also, the TN points out that increasing the economic focus of their work may also give TIs more financial independence (Transition Network, 2014). Establishing revenue-generating social enterprises has indeed given a very few of the Canadian TIs studied a degree of financial independence – a strategy that could prove beneficial if replicated by others, making knowledge-sharing in this area particularly important.

Finally, a comment on the relationship between TIs and government. Kemp et al. (2015) note that municipalities are beginning to recognize the value of SI-initiatives, but I argue that municipalities themselves need to play a more active role in facilitating these collaborations, whether through financial support or active endorsement of local Transition groups (often the most fervent supporters of municipal sustainability plans). Municipalities exert a high degree of influence over new development, transportation infrastructure, water and energy infrastructure, and many other areas which affect their sustainability. Their decisions are dependent upon public acceptance, and this is where Transition groups can play a role through awareness-raising and prefigurative action.

On a related note, Bergman et al. (2010) suggests that current inadequate SI-impact evaluation systems constrain support from all levels of government. Thus, the development of appropriate measurement tools specifically designed for SI-initiatives would facilitate support (Bergman et al., 2010; Patton, 2011). This area must become a priority for future SI research, something which TRANSIT researchers are already investigating (R. Kemp, personal communication, May 14, 2017). As Westley et al. (2011) points out, "financial and political support is required to create such spaces for safe-fail experiments in communities worldwide" (p. 776).

6.5 Lifecycles

Change is not a linear process (Unger, 2015), and most SI attempts do not succeed in creating transformative change (Bergman et al., 2010; Haxeltine, Jørgensen, et al., 2016; Mulgan, 2006). Permission to fail is an integral aspect of Transition culture (Hopkins & Thomas, 2016), enabling new ideas and practices to be tried out (Haxeltine & Kemp, 2017). Yet it would be a mistake to assume that the investment of effort was wasted or that the energy has simply disappeared when a TI dissolves. Often, it signals the beginning of something else, as was evident in several of the comments. Many volunteers simply move on to different organizations after the demise of a TI, and one of the now inactive TIs has morphed into a Resilient Neighbourhoods project. The impact of SI-initiatives, at all stages, in expanding the conversation around sustainable behaviour remains unmeasured, due to inadequate tools (Antadze & Westley, 2012).

That being said, research on TI lifecycles requires accurate historical data regarding start-ups and dissolutions. The difficulty of monitoring activity levels is compounded by the absence of reporting requirements on the part of the TN itself. Groups or even individuals simply sign up online, thus

becoming part of the database; there is no requirement to de-register if the TI becomes inactive. This complicates the task of establishing the trajectory of the movement in terms of diffusion and vibrancy immensely (Feola, 2016). This difficulty could be addressed, at least partially, if the TN were to require regular profile updates, or the regular use and submission of its HealthCheck tool. The latter would simultaneously provide accurate statistics to the TN and afford practitioners a chance to reflect on their own areas of strength and weakness. For accurate statistics regarding lifespans and survival rates of TIs across different geographic areas, further research is required.

7 Conclusion

Current patterns of resource use are unsustainable in terms of planetary limits (Rockström et al., 2009; Steffen et al., 2015), and community-based sustainability initiatives like Transition towns can contribute significantly to the required shift (Forrest & Wiek, 2015; Mulgan, 2006; Ornetzeder & Rohracher, 2013; Seyfang & Smith, 2007). However, data is lacking about their level of success (Feola & Nunes, 2014; Forrest & Wiek, 2014). This thesis contributed to filling that gap by employing TRANSIT concepts to examine how successfully selected Canadian TIs are meeting the two prerequisites for transformative change set out by Dumitru et al. (2016): building initiatives that attract and maintain members, and developing effective engagement strategies (RQ1).

The answer to RQ1 is that on both counts, the TIs are only faring moderately well, due to difficulty in recruiting volunteers (the main cause of dissolution). Many Canadian TIs are struggling to survive, let along create transformative change. They appear to have little difficulty in fulfilling psychological needs for autonomy and relatedness, but struggle with competence, as they are acutely aware of their limited resources, and unsure of their impact. In addition, opportunities for social learning, system knowledge, and strategic planning, specifically in the areas of shared leadership, networking, monitoring and evaluation, and non-traditional partnerships are not being maximized.

An additional aim of the thesis was to identify characteristics of those TIs which are most successful (RQ2), shedding light on "the internal dynamics and external factors that limit and enable success" ((Mulugetta et al., 2010, p. 7544). The list of what distinguishes the most successful TIs is a almost a mirror image of the answer to RQ1, above: the most successful rate their community as more supportive of their goals (i.e. a more sympathetic milieu), employ more distributed leadership and diverse recruitment strategies, demonstrate a more reflective stance by doing more self-evaluation, set goals and plan more strategically, have stronger relationships with other elements in the community as well as the global Transition movement, and are more open to and active in collaborations with all other groups (not just natural allies).

Canadian TIs are not having an easy time staying afloat, as evidenced by the high number of initiatives that have disappeared. Over the past decade, the Transition movement in Canada has seen ebbs and flows, but a cohesive network of TIs has never emerged. The reduction in the number of Canadian TIs registered on the TN website could indicate the beginning of a downward trend. Additional training and resources on evaluation, strategic planning and the dynamics of social change could enhance their success. Perhaps most importantly, survival rates could be improved by the development of a more

supportive context, possibly through the establishment of a Canadian Transition hub. Combined, these actions could enable TIs to better withstand the resistance that they meet in trying to go against the dominant paradigm of continuous growth and globalization. Without a higher level of interconnectedness and support, Canadian TIs will remain largely isolated and dependent on finding the right mix of resources locally – a formidable challenge which places the overall sustainability of the Canadian movement in doubt.

As Unger (2015) stated, “We live under a dictatorship of no alternatives: only a small and inadequate set of ways of organising different fields of social life is on offer in the world. The goal of the social innovation movement … is to help overthrow that dictatorship” (p. 237). Given the challenges facing the planet, the work of Transitioners willing to engage in making system change is more important than ever.

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Appendix A: Key Definitions in Transformative Social Innovation Theory

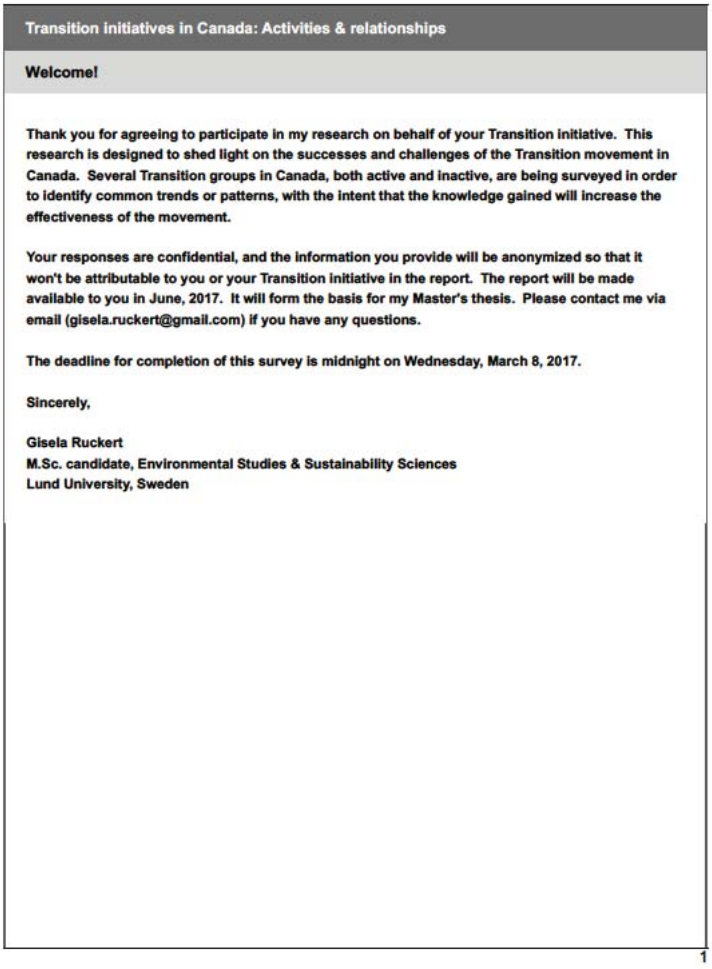
Co-evolution	When developments in different subsystems are interlinked *and* partially independent. Co-evolution is a special type of interdependency: *A* influences but not determines *B* and *C*, which in turn influence but not determine *A*, although A, B and C all change irreversibly.
(Dis)Empowerment	Process in which SI-agents gain (or lose) the ability to act on goals that matter to them through the (un)fulfillment of psychological needs for autonomy, competence & relatedness.
Game-changers	Macro trends in society. Both real and constructed developments that function as drivers and barriers for transformative social innovation.
Narratives of change	Sets of ideas, concepts, metaphors, discourses or story-lines about (transformative) change and innovation.
Social innovation (SI)	Changes in social relations, involving new ways of doing, organising, framing and/or knowing.
Social innovation agents (SI-agents)	Individuals, initiatives, networks and/or 'fields' (see below) that engage in social innovation.
Social innovation field (often abbreviated to "**field**")	Within the context, the web of constantly changing agents and social and material relations through which a social innovation takes place.
Social innovation initiative (SI-initiative)	A collective of people working on ideas, objects and/or activities that are socially innovative.
Social innovation network (SI-network)	A network of initiatives working on ideas, objects and/or activities that are socially innovative.

Socio-material context (often abbreviated to "**context**")	The larger setting: the sum total of all actors and the different social and material relations between them, as well as the institutional arrangements with which a social innovation interacts.
Transformative ambition	When an initiative or network holds a vision or ambition to achieve/contribute to an identified transformative change.
Transformative change (TC)	Change that challenges, alters and/or replaces established (and/or dominant) institutions in (parts of) the social-material context. These changes represent persistent adjustments in societal values, outlooks and behaviours of sufficient 'width and depth' to alter any preceding situation.
Transformative social innovation (TSI)	Process through which social innovations challenge, alter and/or replace established (and/or dominant) institutions in the social-material context.
TSI-agency	Capacity of SI-agents to contribute to transformative change. Agency relies on the capacity for purposive action and the capacity to imagine new ways of being, new relationships and new ways of doing.
TSI-strategies	The strategic actions of SI-agents towards transformative change.
Compiled from Avelino et al. (2014); Haxeltine, Avelino, Pel, Dumitru, et al. (2016); Haxeltine, Avelino, Pel, Kemp, et al. (2016); Haxeltine and Kemp (2017)	

Appendix B: Questionnaire

Use this link to access the full 38-page questionnaire online:

https://1drv.ms/b/s!AiNnyYub5g4NiOQfDf18-xaOzIc6Dw



Transition initiatives in Canada: Activities & relationships

Welcome!

Thank you for agreeing to participate in my research on behalf of your Transition initiative. This research is designed to shed light on the successes and challenges of the Transition movement in Canada. Several Transition groups in Canada, both active and inactive, are being surveyed in order to identify common trends or patterns, with the intent that the knowledge gained will increase the effectiveness of the movement.

Your responses are confidential, and the information you provide will be anonymized so that it won't be attributable to you or your Transition initiative in the report. The report will be made available to you in June, 2017. It will form the basis for my Master's thesis. Please contact me via email (gisela.ruckert@gmail.com) if you have any questions.

The deadline for completion of this survey is midnight on Wednesday, March 8, 2017.

Sincerely,

Gisela Ruckert
M.Sc. candidate, Environmental Studies & Sustainability Sciences
Lund University, Sweden

1

Appendix C: Interview template

Thank participant
Ask permission to record interview

1. You reported the following challenges in the survey:_____. Can you tell me more about that?
    - Prompts re responses to challenges.

2. Tell me about what your organizational structure looks like.

3. Tell me about your strategic planning process.
    - Regularly scheduled? (annual plan, etc.)?
    - Written plan? (referred to during meetings?)
    - Do you do any strategic analysis of the specific context in your community? E.g. a SWOT analysis?

4. Do you deliberately identify potential opportunities for possible partnerships, etc.?

    - If you have specific plans to engage with muni, what does that look like?
        - Are you involved with the community plan updating process in your municipality at all? How formal is that involvement?

5. Do you engage in self-evaluation at regular intervals (what's going well, what isn't, whether you achieved specific goals or not...)? What does that process look like?
    - Do you ever go back and look at the past year's strategic plan and evaluate how you carried out those goals?
    - Have you heard of the HealthCheck tool available from Transition Network? If yes, does your group use it annually?

6. How do you actually use the TN's resources? How do you interact?
    - Do you get the TN newsletter (or are you aware that someone in your group gets it?)
    - Have you read the new Transition Strategy (2014)?
    - Ideas for activities, reports from other groups…

7. In terms of people doing the "hard work", the "heavy lifting" (the day to day organizing for your TI), is new member recruitment currently keeping up to member losses through attrition?

8. Any paid staff? Sources of revenue. Grants?

9. Future outlook: In your opinion, is it most likely that your TI will significantly increase its activities, stay the same, or become less active in 1 year? 5 years? Why?

10. Response to analytical framework based on a new theory of social innovation?
    - Read two prerequisites and ask for response.

11. Any other items you would like to discuss re your TI?

12. Thank you. Will distribute thesis to participants in June 2017.

Appendix D: Evolution of goals

Asked to describe how the goals of their TI evolved over time, respondents described a narrower, more local focus and greater realism in terms of achievability. (Source: Own data)

Original goals	**How have goals evolved?**
TI 1: To build community resilience in response to the challenges of global warming and the destabilizing impacts of climate change, as well as in response to both global and local economic instability and inequity.	Our goals remain the same, and as there are many groups working locally on related projects (local food security, a local biodiesel co-op, etc.), over time we have focused more on connecting and working with other groups on shared goals while keeping the bigger picture of the need to build local resilience in the face of climate change in mind.
TI 8: Stop climate change.	We still want to stop climate change, but we now set more near-term and specific goals.
TI 9: To increase awareness in the community of the issues of peak oil and climate change. To bring people together to share initiatives and ways to move towards a sustainable future.	Less focus on peak oil and more focus on sustainable community.
TI 7: There were already a lot of initiatives in our community that dovetailed with the overall goals of transition, so we saw our first role as facilitating collaboration and cooperation among existing groups and organizations, and to "fill in the gaps" where there were possibilities for new initiatives that were not happening.	We now see our role as facilitating working groups, some of which have become semi-autonomous, and to build stronger community connections, getting people working together, getting neighbourhoods to develop their own collaborative projects (community gardens, for example) and building connections between communities.