

The intermediary role of transnational municipal networks in governance by diffusion

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Author's note

This paper is an early draft of a journal submission planned for autumn 2015. At this stage, the paper presents several themes yet - as it is a draft - there are significant gaps in the analysis. Much work remains and the author welcomes comments, feedback and proposals on how to improve the structure and coherence of the analysis, as well as suggestions for supporting literature.

Abstract

This paper examines the role of Transnational Municipal Networks (TMNs) in processes of “governance by diffusion” (Hakelberg, 2014; Feldman, 2012; Román, 2010). Feldman (2012) suggests the “three vital functions” of TMNs are knowledge creation and diffusion; policy evaluation; and enabling local action. In a similar vein, Bouteligier (2013) categorises the main services of TMNs as knowledge transfer; capacity-building; and representation. A typical function of TMNs is thus to facilitate understanding and integration of “outside-in” influences, whilst supporting members in their “inside-out” actions (Porter and Reinhardt, 2008); that is, to provide services that enhance the quality of processes within member municipal organisations, whilst increasing members’ access to and awareness of relevant generic or specific practices of other municipalities, thereby enabling members to think and work “beyond city limits” (Seitzinger et al., 2012).

In many instances, TMNs act as intermediaries in wider processes of knowledge transfer, translating or adapting experiences from one context to another (Fenton, 2014a; Hamann and April, 2012). Literature from the field of organisational studies provides further insights into this role (see e.g. Langstrand, 2012; Lillrank 1995), as does recent literature on benchmarking and interorganisational learning in local government (Ammons and Roenigk, 2015). However, whilst there is considerable focus on the type of translation process (i.e. its intended purpose and focus), its nature as explicit or tacit knowledge, and the “translatability” of practices (Røvik, 2007; see also Langstrand, 2012; Lillrank, 1995), less attention has been paid to those factors influencing actors during translation. Fenton (2014b) introduces five factors informing and supporting strategic planning processes for urban sustainability in municipalities. This paper questions if and how this conceptual framework may contribute to supporting the role of TMNs in their role during processes of translation and “governance by diffusion”.

Introduction/ Aims

Urban sustainability is considered an important part of the transition to sustainable development. The role of municipal organisations in developing strategies and policies aiming to increase urban sustainability has been the subject of considerable attention in recent literature, with numerous authors highlighting the importance of governance processes to enable stakeholder participation and increase legitimacy for such strategic initiatives (Rydin, 2010; van der Heijden, 2014). Governance of (and within) the municipal zone is no longer understood as the primary objective of local government, but rather of diverse coalitions of actors representing interests both within and outside the municipal zone.

In a recent thesis, Fenton (2014b) introduces a new conceptual framework that aims to inform and support strategic planning processes for urban sustainability in municipalities – the five factors. The five factors emerge from the synthesis of three papers, two of which concern studies of the processes to develop energy and climate strategies in Swedish municipalities (Fenton et al. 2014a; 2014b). These two articles focus on (a) the organisation of processes; and the (b) involvement and experiences of participating stakeholders in such processes. The third paper presents analysis of a multidisciplinary sample of academic journal articles addressing “urban sustainability” to consider how urban sustainability is practiced, observed and represented in academic literature (Fenton, 2014b). Together, the three papers highlight a number of issues that influence the development of municipalities’ strategic work for urban sustainability – the five factors.

The five factors concern the *capacity* of municipal organisations and other stakeholders to act for urban sustainability; their *mandate* to do so; the *resources* available to them; the *scope* of their processes and intended outcomes; and their *will*, individually and collectively, to pursue urban sustainability. The five factors concept may aid future analysis of urban sustainability processes, both in planning and implementation, yet the concept needs development. Thus, in order to develop the conceptual framework in more detail, this paper presents results from a study of similar approaches in the field of organisation studies, and considers: how are similar approaches used in both theory and practice to influence strategy in organisations? Is it possible to identify other approaches and methods that may enable strategic deployment of the five factors conceptual framework in practical and theoretical contexts? Can the five factors be mobilised to support governance processes and strategy development for urban sustainability in municipal organisations?

The paper proceeds with a presentation of the five factors and discussion of state of related theory, followed by the presentation and discussion of similar approaches from the field of management studies. Following reflection on the use of similar approaches, the author proposes organisational change theory as providing a conceptual framework for diffusion - and transnational municipal networks an organisational vector for diffusion - that may enable practical mobilisation of the five factors in municipal organisations to support strategic processes for urban sustainability.

Five Factors supporting strategic planning

Introducing the Five Factors for urban sustainability

The five factors conceptual framework aims to inform and support strategic planning processes for urban sustainability in municipalities (Fenton, 2014b). The five factors are proposed as generalisable factors of importance influencing the approaches used by municipalities to develop energy and climate strategies and wider urban sustainability initiatives. Each of the factors has been discussed in other literature, albeit in a fragmented way. Fenton (2014b) identifies and links the five factors, thereby providing a conceptual framework for analysis of urban sustainability processes in municipalities.

The five factors are *capacity*, *mandate*, *resources*, *scope* and *will*. These factors are understood to interact and, in the absence of a defined methodological basis for assessing their relative strengths or weaknesses of each factor, may also be considered interdependent or inseparable. Each factor can be considered multi-dimensional, dynamic and context-dependent, operating as an umbrella under which a variety of other related influences may find space. The following short examples provide examples intended to facilitate understanding of the five factors:

- *Capacity* is a much-discussed factor in literature on the role of municipalities in urban sustainability (see e.g. Aguilar and Santos, 2011; or Lindholm and Behrends, 2012). *Capacity* concerns the ability of stakeholders to participate and act in processes and subsequent implementation. *Capacity* may relate to group or individual competencies or capabilities, in terms of knowledge and understanding, yet may also relate to whether such groups or individuals have the opportunity to participate. Whilst the former point may to some extent interact with *will*, the latter is clearly related to *resources*, which may determine capacity. Empirical data from case studies shows that *capacity* may be cited as both a defence for inaction and a reason for action by different municipalities (Fenton, 2014b).
- *Mandate* has multiple meanings and may relate to legal, political or social/ethical norms or regulations influencing the perceived or defined *scope* for action (Trisolini and Zasloff, 2009). In its various forms, *mandate* provides the entitlement to act, and is closely linked to the issue of legitimacy. *Mandate* also has an impact upon the internal processes of organisations.
- *Resources* - both in terms of actual resources and perceptions about resources - influence processes in numerous ways (Jacobi and Besen, 2011). For example, time, budget, personnel and information may all be considered as *resources*. As with *capacity*, the availability of *resources* may be used as a justification of both action and inaction (Fenton, 2014b).
- *Scope* is, like *Mandate*, related to the legal, institutional, constitutional and organisation contexts framing a process. Whereas *Mandate* is a means of providing

entitlement and claiming legitimacy, *scope* relates to the *opportunity* to act and the *extent* of action. As such, *scope* interacts with other factors, such as *capacity*, to influence the scale and direction of a process. *Scope* is a critical issue in the field of urban sustainability (see e.g. Ceron Castano and Wadley, 2012; Chester et al, 2012; Seto et al, 2012), and municipalities make use of different approaches and reasoning to justify the scope of their processes (Fenton, 2014b).

- *Will* relates partly to the desire of individuals and groups to address the challenge of urban sustainability, and within this, to determine *how* to do so. *Will* is thus closely related to *scope* and *mandate*, as it influences the extent to which both may be challenged; e.g. by determining the extent to which people are willing to change or modify systems, regulations or norms that pose barriers to actions; and the extent to which people understand the impacts of their actions and are willing to embrace new ideas or substantial changes to the status quo (Fenton and Gustafsson, 2015).

In essence, the five factors represent points of leverage which, depending on the extent to which they are mobilised, influence the extent of strategic action in municipalities. Fenton (2014b) considers that actors determined to maximise the potential of their strategic processes may find utility in the five factor framework. Moreover, use of the five factors as an analytical tool may help researchers and practitioners increase their understanding of the underlying structural conditions that influence and shape sustainable development in municipalities (and perhaps also other organisations). This may enable a more nuanced understanding of municipal organisations and municipal processes to develop, and contribute to the emergence of new debates on implications of current municipal approaches.

Building a case for Five Factors

As noted above, each of the factors has been the subject of fragmented discussion in previous studies, with some studies presenting constellations of factors and others emphasising particular factors. For example, the factors *will*, *resources* and *capacity* are identified as critical by Anderton (2012), who notes the existence of “strategic capacity gaps” (i.e. resources, competence) and “strategy action deficits” (in which ambitions are not translated into deliverable policies) in a study of sub-national government in four countries. In a similar vein, Blake (1999) addresses the need for redefinition of roles, responsibilities and concepts when discussing the “value-action gap” in urban sustainability. Concerning *scope*, Seto et al (2012) apply the theoretical concept of teleconnections to urban sustainability, as a way of conceptualising out-of-sight “quantum” effects of unsustainable development, and Seitzinger et al (2012) propose thinking and working “beyond city limits” to extend the scope of municipal processes.

In the field of management, Porter and Reinhardt (2007) published a short article on the topic of climate change and company strategy. Together, they argued that climate change “is best addressed with the tools of the strategist” and claim that companies that fail to reduce their climate impacts are “operationally ineffective”. Porter and Reinhardt suggest that “implementing best practices in climate-related costs is the minimum required to remain competitive”, but some companies “can go beyond operational effectiveness and become

strategic” by reconfiguring their activities (Porter and Reinhardt, 2007). To achieve this, Porter and Reinhardt suggest companies adopt two perspectives (first proposed by Porter and Kramer, 2006) that emphasise *scope*:

“to look ‘inside out’ to understand the impact of the firm’s activities on the climate and ‘outside in’ at how changing climate (in both its physical and regulatory manifestations) may affect the business environment in which the firm operates” (Porter and Reinhardt, 2007).

An “inside out” perspective involves organisations attempting to understand the full impacts of up- and downstream effects, thereby extending the scope of their analysis (e.g. environmentally, geographically, temporally, but also in terms of partnerships, production and end-use). In contrast, an “outside in” perspective involves considering the unstable, dynamic operating context and implications of external forces on not only the organisation’s scope or mandate to act, but also its willingness, capacity and resources to act. Porter and Reinhardt note that “firms can address outside-in effects strategically if they can manage them in ways that competitors cannot readily match” (Porter and Reinhardt, 2007, p. 26).

From a municipal perspective, this reasoning suggests that municipal organisations should attempt to adopt a strategic approach to urban sustainability and success in doing so will provide competitive advantages, as well as environmental benefits. Municipalities compete in many ways, most obviously on economic or resource-based issues such as labour or energy, yet also in terms of profile, branding and quality of life (DiGaetano and Strom, 2003; Hodson and Marvin, 2010; Timms, 2011). In recent years, the increasing importance of sustainable development – both in planetary terms, and as a vector for attractive, sustainable urban settlements – has manifested itself in a proliferation of city rankings and indexes (Bulu, 2011). Although there is considerable evidence of cooperation between municipalities on themes related urban sustainability (see e.g. Keiner and Kim, 2007), there is also strong consensus that the transition to sustainable urban settlements requires new governance mechanisms to withstand pressures that counteract urban sustainability (Hodson and Marvin, 2010).

The five factors are proposed as possible means of conceptualising governance to enable sustainability transitions in municipalities. However, awareness of the five factor framework is unlikely to enhance processes in all contexts. An actor such as a municipal organisation may choose to employ very narrow or very broad conceptualisations of each or some factors, yet may do so in an inconsistent manner between - and even within - processes, depending on their agendas and objectives. Moreover, municipalities have multiple and varying roles, which sometimes co-exist or cause conflicts (Kern and Alber, 2009). The five factors highlight the need to improve understanding of municipal processes and the decision-making processes of individuals and groups, both those participating in municipal processes and the wider community.

Moving forward: mobilising the five factors

If the five factors offer insight into governance, the question remains: how can the five factors be mobilised in governance and strategy? In other words, is it possible to identify approaches and methods that may enable strategic deployment of the conceptual framework in practical and theoretical contexts? The proponents of “inside out” and “outside in” perspectives, Porter and Reinhardt have developed similar conceptual frameworks to the five factors, addressing strategists and managers respectively. Indeed, core tenets of the strategic approach to climate change proposed in Porter and Reinhardt (2007) are evident in Porter (2008) and Reinhardt (1999). Considering these approaches may thus provide insights into the potential utility of the five factors framework.

Five Forces for Strategists

Porter (2008) is an updated and extended version of a seminal paper written in 1979 focusing on corporate strategy and competitive forces. Porter (2008) aims to widen the perspective of conventional studies of corporate strategy to improve understanding of the role of strategists and provide a clear picture of the five underlying forces he claims define competition and market structures (see Table 1). In his eyes, “managers define competition too narrowly, as if it occurred only among today’s direct competitors” (Porter, 2008, 79). Extending the perspective from the temporal context means including other influential forces too, including “customers, suppliers, potential entrants and substitute products” (Porter, 2008, 79). In other words, Porter advocates a dramatic extension of the scope of strategies, implying a considerable process of learning is required to overcome existing conventions and psychological barriers.

Porter claims the five forces are important, because, “by considering all five forces, a strategist keeps overall structure in mind instead of gravitating to any one element”. This enables the strategist to “remain focused on structural conditions rather than on fleeting factors”, and thus “avoid the common pitfall of mistaking certain visible attributes of an industry for its underlying structure” (Porter, 2008, 86). Porter goes on to warn that “a narrow focus on growth is one of the major causes of bad strategy decisions” and that “mundane” industries may represent more attractive investments than “sexy” ones.

Moreover, Porter emphasises the role of government “at multiple levels and through many different policies, each of which will affect structure in different ways” (Porter, 2008, 86). In other words, a strategist should adopt a systems perspective, consider underlying conditions, avoid over-emphasising single objectives or parameters, critically assess what may be considered essential vs. transient/optional, and consider how government influences the five forces. Additionally, Porter raises the issue of complementary products or services, synergies which “affect profitability through the way they influence the five forces” (Porter, 2008, 86); the strategist should also aim to identify these.

Porter claims that his approach is valid for any sector or industry and that “understanding the competitive forces, and their underlying causes” provides “a framework for anticipating and influencing competition (and profitability) over time” (Porter, 2008, 80). As such, Porter’s

analytical framework provides a foundation for understanding and shaping strategies that improve the relative competitive advantage of any given entity, including municipal organisations. Porter says the framework does not aim to assess the relative performance of industries but rather assess the underlying conditions influencing competition from a systems perspective (Porter, 2008, 87).

Table 1. Examples of similar frameworks

	Porter (2008) Five Forces	Reinhardt (1999) Five Approaches	Goel et al (2010) Five Success Factors	Fenton (2014b) Five Factors
1	Threat of Entry	Differentiating products	Protecting and exploiting intellectual capital,	Capacity
2	The Power of Suppliers	Managing competitors	Developing brands	Mandate
3	The Power of Buyers	Saving Costs	Access to capital	Resources
4	Threat of Substitutes	Managing Environmental Risk	Creative promotion	Scope
5	Rivalry among Existing Competitors	Redefining Markets	Maintaining artist relationships	Will
Sector	Business	Business	Media	Public sector (municipalities)
"User groups"	Corporate Strategists	Business Managers	Media Strategists	Politicians, Strategists, Civil Servants, Stakeholders

Five Approaches for Managers

Reinhardt (1999) makes a case for environmental investments to be treated in the same way as other business decisions, in order to enable increases in shareholder value and environmental performance. In Reinhardt’s analysis, the responsibility for investment decisions falls principally on the manager, whereas Porter expressly focuses on the role of the strategist in assessing and influencing competition. Nonetheless, Reinhardt emphasises the strategic nature of such decisions, saying “the right policy depends on the circumstances confronting the company and the strategy it has chosen” (Reinhardt, 1999, 150).

Reinhardt warns that costs and environmental problems are likely to be intensified by “wishful or insular thinking”, making it important to accept scientific evidence and retain perspective about business interests, be open-minded, flexible and reject static views of development in favour of dynamic ones (Reinhardt, 1999, 151-2). To counter such tendencies and ease the integration of environmental considerations into business thinking, Reinhardt proposes five approaches (see Table 1). In contrast to Porter’s five forces, which aim to

facilitate strategic planning, Reinhardt's five approaches focus more on implementation and the ways in which companies respond to different challenges (Reinhardt, 1999, 150).

Reinhardt's approach implies the need for managers to adopt a more systemic view about the nature of competition. In a similar way to Porter, Reinhardt advocates the five approaches by arguing against an overly strong focus on economic growth, claiming that "as with other business problems, the environmental strategy that maximises short-term cash flow is probably not the one that positions the company optimally for the long run". Like Porter, Reinhardt also warns against short-termism, noting that "the appeal of the five approaches will depend on the time horizon over which they are evaluated" (Reinhardt, 1999, 150). This seems to imply that the five approaches are of limited relevance if the temporal scope of analysis is too short.

Reactions and responses

A diverse range of literature refers to Porter and Reinhardt's frameworks and their utility in the field of corporate management. For example, Cummings and Daellenbach (2009) suggest that Porter's work has "served a purpose in changing the point of view away from the internal effectiveness and efficiency of planning toward analysing" and contributed toward the emergence of a more integrated, holistic view of strategy, "joining internal and external aspects". This "broader view" emphasises "knowledge and relationships" as "new sources of advantage" (Cummings and Daellenbach, 2009), a point supported by Coakes et al (2011), who argue that "innovation requires systems integration and networking" involving stakeholders in complex non-physical systems of networks (Coakes et al, 2011; see also e.g. Mostovicz et al, 2011).

In contrast, critics suggest the five forces and similar frameworks (see Table 1, for reference to Goel et al's (2010) use of the five forces to study the media industry and extend their analysis to identify five success factors influencing competition) are overly simplistic in their depiction of influences. For example, Ahuja and Yayavaram (2011) argue that the assumption that "firms have the choice to operate differently from their competitors", neglects the role of institutional and regulatory contexts that may decrease or increase "the strategy space available to firms".

With regard to sustainable development and related themes, authors including Boiral et al (2012), Haigh and Griffiths (2012), Sandhu (2010) suggest that the conceptual work of Porter and Reinhardt has contributed toward a re-examination of the philosophical frames influencing analysis of business and climate change, leading to greater recognition of the need to adopt proactive approaches that "move beyond regulatory compliance" and respond to the "far-reaching and revolutionary implications" of environmental challenges (Sandhu, 2010). Considering inside-out and outside-in linkages represents one means of conducting such analysis (McManus, 2008).

Polonsky et al (2011) note Porter and Reinhardt's emphasis on the importance and value of engaging civil society stakeholders in the development of climate change regulations. Polonsky et al (2011) and others (see e.g. Jukic et al, 2011; Valentine, 2010) argue that such

participation may enhance the impact of strategies and have catalysing effects in competitive relationships. Valentine argues “firms with poor environmental governance records are typically characterized by a lack of sufficient understanding regarding the financial and strategic value” of corporate environmental management (Valentine, 2012). Valentine develops a “green onion” framework for conceptualising “multiple strategic layers of influence” (Valentine, 2010) and, like Porter and Reinhardt, Valentine alludes to key factors influencing the form and scope of strategies, such as costs, competition, reporting, regulation and (poor) performance.

Other themes of interest include the issue of strategic alignment of strategies or policies with activities. Thornley (2012) argues that failure to achieve such alignment leads to inconsistent or non-implementation and is “one of the greatest threats to sustainability in any form”. Poor organisational performance is also attributed to inward-looking, myopic tendencies, short-termism, and lack of will or resources (Johnson and Macy, 2001). For Baines et al (2012), this makes it important that companies follow Reinhardt’s advice and adopt “an open, optimistic and forward looking strategic mindset” that incorporates dynamic, long-term, non-linear approaches (Baines et al, 2012). Systems theory, which “has as its central tenet, the principle that life’s systems are non-linear,” provides one mechanism for doing so (Borland, 2009).

Summary

This raises a number of interesting points concerning Porter and Reinhardt’s analytical frameworks. Generally, the five forces and five approaches are considered to provide useful frameworks for thinking about strategy and management in organisations. The two frameworks provide alternative perspectives, yet complementary insights, and highlight a number of shared points that have implications for the study and practice of strategic work in organisations.

A key point is that organisations should proactively expand the scope of analysis in strategic processes to better account for a multitude of factors, occurring dynamically and across different dimensions. Such expansive systems thinking will enable organisations to understand the structural conditions influencing their operations in a more holistic and strategic manner. Insular, constrained forms of planning focusing on short-term cost or competition are portrayed as undesirable, with broader, proactive, long-term perspectives preferred.

Strategic thinking from a systems perspective enables organisations to better understand, anticipate and respond to structural conditions in their respective industries. Considering both the ‘inside out’ and ‘outside in’ perspectives enables companies to develop dynamic strategic approaches and thus gain competitive advantages in the market, e.g. by increasing customers’ willingness to pay. This increases a company’s influence and enables them to capture hidden benefits in a variety of ways, such as synergies. Resource efficiency, organisational capacity, networking and corporate communications emerge as important concepts influencing competition, costs, the form and scope of strategies and (environmental) performance.

The language used by Porter and Reinhardt is directly aimed at companies and this may explain the seemingly limited use of the frameworks in studies of public organisations. However, globalisation - both economically and in terms of other influences, such as communication or environmental challenges - has increased municipalities' awareness of competitive forces and changed the way municipal organisations perceive their role and act in markets. In this context, the use of Porter and Reinhardt's analytical frameworks can contribute to understanding organisational practices and strategic planning approaches in municipalities, even if a different set of influences are required to conceptually frame such analysis – the five factors.

Nonetheless, whilst the review of Porter and Reinhardt's frameworks and related literature implies the relevance of the proposed five factors as a conceptual tool, the key questions of this paper remain unanswered. Despite their wide use as frames of analysis, scholars provide little guidance as to *how* these frameworks can be mobilised in practice. A general criticism is that loosely-defined conceptual frameworks are easily referred to in retrospective analysis, yet less easily applied proactively as a means of structuring processes to achieve desired changes. Thus, to develop understanding of how the five factors - and similar approaches - may influence change, it may be necessary to consider theoretical contributions from the field of organisational change theory on the process and content of change. In the next section, a conceptual model for diffusion of knowledge and practices, in which the five factors act as a framing tool, is proposed as being potentially valuable to intermediary organisations such as transnational municipal networks.

Five factors in framing action

Organisational change theory offers a diverse range of rich accounts that inform understanding of the particular characteristics of change processes in organisations. Studies of organisational change typically focus on the *what*, *why*, and *how* of change in organisations, which Pettigrew (1987) defines as *context*, *content* and *process*. This broad scope has enabled theorists to address issues including the temporal nature of change, the dynamics of change and the extent to which change is planned or emergent, the influences or intentions stimulating change, the role of leaders or change agents, or the semantics and concepts underpinning change. Such theories are often illustrated with examples from case studies of change processes in particular companies.

This paper does not aim to provide a comprehensive overview of such literature, but rather to harness the illustrative potential of the literature in relation to sustainable urban development and the potential contribution of the five factors to governance at the municipal level. To do so, the paper focuses particularly on the issues of *translation* and *mediation*, with specific reference to the role of transnational municipal networks and related intermediaries in iterative processes of change, learning and transition. Various authors have addressed this topic, including Cochrane and Ward (2012), McCann (2011), Rydin (2010), Bulkeley (2006) and Stone (2004). This paper extends such analysis by arguing that processes of translation and mediation are iteratively bound to the five factors, and this iteration of influences impacts upon, as much as it is impacted by, the “absorptive capacity” (Cohen and Levinthal, 1990) or “adaptive capacity” (see e.g. Smit and Wandel, 2006) of municipal organisations and other stakeholders participating in governance processes in municipalities.

The study of *translation* focuses on the process of change, as opposed to a rigid or static *transfer* of change (Langstrand, 2012; Lillrank, 2005). In other words, translation necessitates the adaption of concepts or practices through iterative processes of mediation, in contrast to processes of adoption, which assume replicability irrespective of context. Recent studies on knowledge transfer between municipalities have underlined the importance of translation through adaptive processes, both from a thematic perspective – in terms of e.g. urban sustainability (Mejía-Dugand, 2015) – but also in terms of organisational change and learning (Ammons and Roenigk, 2015). An increasing body of literature focuses on the role of intermediaries in such translation processes (an overview is provided by Howells, 2006).

For example, Hamann and April (2012) examine the role of collaborative intermediary organisations (CIOs) in local-level processes of network governance (see also Khan, 2013). CIOs may materialise in various forms, and may even be embedded within or closely linked to municipal organisations. Another manifestation of CIOs may be observed in the form of Transnational Municipal Networks (TMNs). TMNs are typically associations of members with shared thematic interests; these members join TMNs for different reasons, and the extent of their activity within TMNs may vary. In most cases, TMNs offer members a range of services that aim to reflect the varying levels of engagement of members and respond to their various needs. Feldman (2012) suggests the “three vital functions” of TMNs are knowledge

creation and diffusion; policy evaluation; and local action. In a similar vein, Bouteligier (2013) categorises the main services of TMNs as knowledge transfer; capacity-building; and representation.

A typical function of TMNs is thus to facilitate understanding and integration of “outside-in” influences, whilst supporting members in their “inside-out” actions; that is, to provide services that enhance the quality of processes within member municipal organisations, whilst increasing members’ access to and awareness of relevant generic or specific practices of other municipalities. In some cases, this means TMNs facilitate or participate in deeper processes of translation that aim to enable “governance by diffusion” of good practice between municipalities (Hakelberg, 2014; Feldman, 2012; Román, 2010). Translation may thus help municipalities to think and work “beyond city limits” to extend the scope of municipal processes (Seitzinger et al., 2012) and address the out-of-sight effects of unsustainable development that Seto et al (2012) call “teleconnections”.

Table 2. Overview of processes and interactions between municipalities (Fenton, 2014).

Process	Scope	Network governance (Khan, 2013)	Strategic perspective (Porter and Reinhardt, 2007; Porter and Kramer, 2006; see also Searchinger, 2008)
Intra-municipal	Within geographic zone	Municipality or CIO as facilitator of local network; TMN as a participant	Inside-out (attributional)
Inter-municipal	Between municipalities; Across borders	TMN or CIO as facilitator; municipalities as participants	Outside-in (consequential)

The extent to which TMNs play the intermediary’s “animateur” role of creating new possibilities and dynamism within a system” (Howells, 2006) or contribute to isomorphism (Ammons and Roenigk, 2015) is thus dynamic and iterative, contingent not just on the capacities of the TMN but also on its founding members and their varying forms of local process. It is here, then, that the five factors emerge as a potential framework that may guide CIOs, be they TMNs, local networks, municipalities or other participants in processes of network governance.

As stated above, the concept of translation elaborates on traditional theories of knowledge transfer. Rather than exemplifying cases or practices and expecting imitation or replication to result from such exemplification, translation demands a deeper process of reflection and de-contextualisation, thereby enabling adaptation across (or within) contexts. However, the act of translation offers limited insight into the factors influencing processes of translation; even if participants in a translation process have a good understanding of the *who*, *what*, and *why* of concepts or practices developed in location *A*, along with a similarly good understanding of the related situation in location *B*, they may require frames to guide their analysis. In this regard, the five factors may provide a complementary tool to practitioners and further inform

their understanding of the context of the process they are participating in. Moreover, the five factors may offer insights to theoreticians attempting to study such processes and the ways in which processes vary between and within cases. A crude illustration of this process is attempted in Figures 1-3. Figure 1 shows the iterative process of translation involving experiences from different (municipal) contexts and the mediating role of networks/CIOs (TMNs).

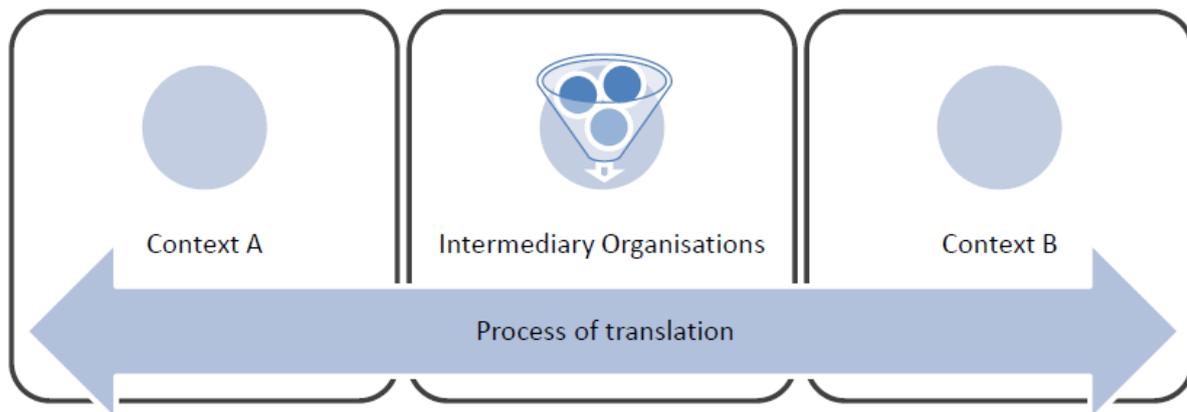


Figure 1. The translation process (see also Langstrand, 2012; Rydin, 2010; Lillrank, 1995)

However, the bidirectional arrow in Figure 1 indicating the process of translation provides little indication as to what influences translation, beyond the existence of contexts and intermediaries. The five factors complement our understanding by (in Figure 2) indicating the complex, multi-level nature of *scope* in similar terms to the “green onion” framework of Valentine (2010); and (in Figure 3) suggesting that the other four factors - capacity, mandate, resources and will – operate iteratively with each other, with *scope*, and *within* the bidirectional arrow of Figure 1.

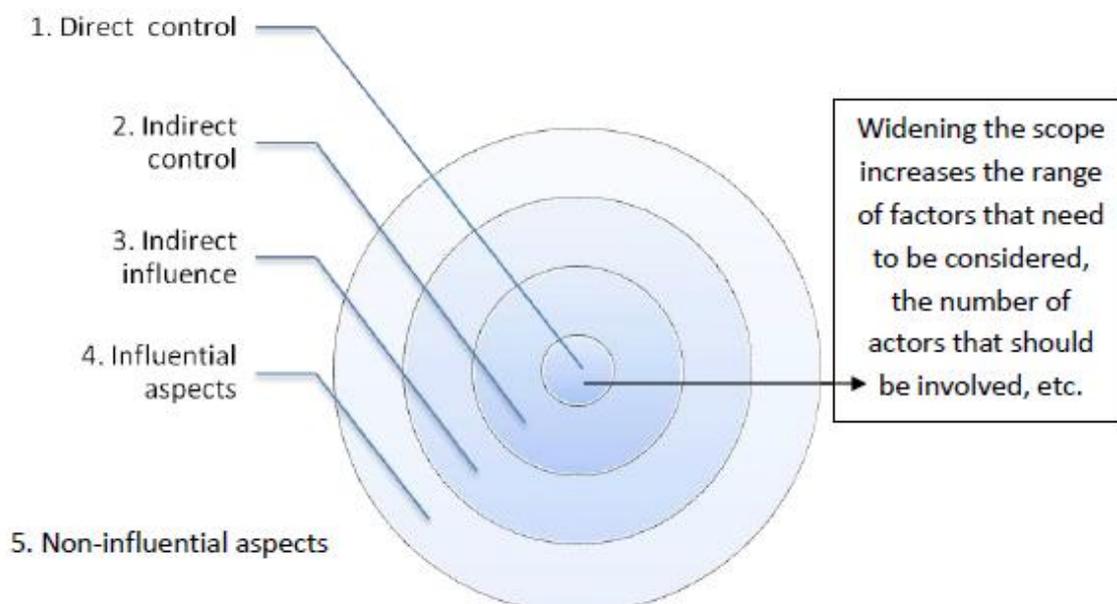


Figure 2. Different levels of scope influence the translation process (see Fenton, 2014).



Figure 3. Four factors operate iteratively, with each other, with scope (and thus within Figure 2) and within the bidirectional arrow of Figure 1.

By helping to focus on influences upon the internal dynamics of the process of translation, the five factors may thus enrich our understanding of such processes and their varying outcomes, as well as the role of intermediaries such as TMNs, who - as Cochrane and Ward (2012) note – participate into attempted re-translation of experiences “back into further circulation”. Cochrane and Ward contend that translation processes “inevitably mistranslates the lived experience” of places, yet it is possible to hope that, by adding nuance to our understanding of translation processes, the five factors may enhance the quality of translation or complement the translation skills of practitioners working on the challenging topic of urban sustainability.

Conclusions

This paper discusses five generalisable factors influencing of importance influencing municipal processes for urban sustainability, and considers how the five factors may be mobilised in governance and strategy. Related approaches from the field of management studies suggested such frameworks may provide valuable insights into strategic processes, yet revealed less about their mobilisation in practical settings. However, organisational change theory fills this gap, proposing an overall framework for adaptation through processes of translation, which in turn may be enriched by awareness of the five factors.

Moreover, translation processes may be conceived of as being local, intra-municipal processes, primarily addressing “inside-out” influences yet - depending on the extent to which the five factors are mobilised - may have a wider scope; or as trans-boundary, inter-municipal processes, highlighting “outside-in” influences whilst seeking to influence the intra-municipal sphere. The role of intermediaries - explored here with reference to TMNs - in iterative processes of translation and adaptation will thus vary from context to context, but in each context, the five factors may have resonance and potentially contribute to the quality of processes. Mobilisation of the five factors may thus support “governance by diffusion” and assist municipalities in responding more rapidly and comprehensively to the strategic challenges posed by unsustainable development.

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