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From Diffusion to Translation and Back. Disembedding-Re-embedding and Re-invention in Sociological Studies of Diffusion

Abstract: This paper reviews and parallels the thesis of disembedding–re-embedding of ideas, objects and practices in the translation paradigm (\hat{a} la Scandinavian institutionalism) with the discussion of reinvention in the diffusion of innovations theory (as put forward by Everett M. Rogers). The main inquiry to be answered is the extent to which these two propositions might be taken as theoretical allomorphs of a generic treatment of the dialectics of circulation of ideas. The analysis of the two assumptions makes use of Djelic's (2008) classification of three main framing types within sociological studies of diffusion: diffusion as epidemiology, diffusion as encounter with embeddedness, and diffusion as mediation and construction. The main input of the article is that it shows that the re-invention hypothesis links the diffusion of innovations theory with the diffusion as encounter with embeddedness model, while the disembedding–re-embedding of ideas perspective associates the translation paradigm with the diffusion as mediation and construction model. The paper further discusses the dynamics as well as the theoretical implications of these theoretical affinities for the Scandinavian translation stream.

Keywords: diffusion, translation, disembedding-re-embedding of ideas, re-invention of innovations, Scandinavian institutionalism

This paper compares the assumption of the *disembedding–re-embedding of ideas, objects and practices* advanced by the translation stream in Scandinavian institutionalism (Czarniawska 2008a, 2008b, 2010; Czarniawska and Joerges 1996, Sahlin-Andersson 1996, Sahlin and Wedlin 2008) with the treatment of *re-invention* in the diffusion of innovations theory, as depicted by Rogers (2003). It investigates whether the disembedding–re-embedding and re-invention propositions constitute so-called theoretical allomorphs within the sociological studies of diffusion. In relation to the subject under inquiry, allomorphism depicts the phenomenon that variations of the same theoretical practice, which are consistent with the logic of particular sociological strands, circulate under distinct names (i.e., disembedding–reimbedding and re-invention) which seem legitimate in these fields (i.e., translation paradigm and diffusion of innovations theory).

The task of answering this question is undertaken with two purposes in mind. First, the comparison of disembedding–re-imbedding and re-invention perspectives gives a window of opportunity to enrich the conceptual scheme of translation theory by learning from complementary framing. Second, irrespective of the results of the comparison (yes, we are dealing with a case of theoretical allomorphism in sociological

studies of diffusion versus the contrary), the position commonly encountered in translation studies picturing the translation and diffusion theories in contrast will be certainly relativized. Much of the appeal of the translation perspective finds its cues in the fact that it was built in opposition to the diffusion model. This was done according to an original critique previously defined by Latour (1986: 266–269) where he exploited Michel Serres' notion of translation (Boxenbaum and Strandgaard Pedersen 2009, Czarniawska 2008b, 2010; Sahlin and Wedlin 2008).

Still, besides the reference to Latour's criticism and sporadically dismissing footnotes to Rogers' (2003) work, there is no real discussion of the diffusion of innovations theory by Scandinavian institutionalists and authors associated with them. A notable exception—which might be taken to confirm the rule though—is Czarniawska's (2006, 2008b, 2010) incursion in the genealogy of the diffusion idea. It is this generic limitation in the theoretical framing of the diffusion of innovations theory that the present paper takes issue with.

Diffusion Models, Diffusion Theories

Probably one of the clearest expositions of diffusion models is Djelic's (2008) classification of three main framing types: "diffusion as epidemiology, diffusion as encounter with embeddedness and diffusion as mediation and construction."

According to Djelic, diffusion as epidemiology conceptualizes diffusion as spread of ideas; diffusion as encounter with embeddedness depicts it as translation (in the sense of adaptation and transformation), while diffusion as mediation and construction views it as translation (in the sense of mediation, construction, adaptation and transformation). This distinction between two understandings of translation—as local adaptation and transformation on the one hand, and as mediation, construction and transformation on the other—is fully exploited in this paper. Employing Djelic's classification, classical studies in diffusion of innovations belong to the category of diffusion as epidemiology, while the translation strand in Scandinavian institutionalism is relevant for the model of diffusion as mediation, construction and transformation. In the following, the main assumptions of these two theories are explored.

The diffusion of innovations theory and the diffusion model (the generic sociological one) are most strongly associated with Rogers' (1962, 1983, 2003; Rogers and Shoemaker 1971) *Diffusion of Innovations*. As a matter of fact, it is quite hard to attribute a clear status to this book. It emerged as both a particular theory and a theoretical guide to studies of diffusion that is constantly updating its references. When it was first published, it synthesized research and put forward a theory of diffusion generally understood as the *adoption* of innovation. It listed four main elements that influence the diffusion process: innovation, communication channels, time, and social system. The innovation was depicted as a sequential process (à la linear model)—i.e., the advancement of innovation presupposed the completion of clearly delimitated phases (such as invention, production, commercialization) and the moving forward (Elbanna 2007; Godin 2006).

Critical voices within the sociology of diffusion took the diffusion perspective as illustrative of linear framings of innovation. The promotion of alternatives to this model in the last two decades—the translation perspective being a case in point—should be understood in the context of a more general turn toward non-linearity within the sociology of innovation (Akrich, Calllon and Latour 2002a, 2002b; Mica 2011). Without doubt, the diffusion of innovations theory suffered depreciation as a result of the reconsiderations introduced by the non-linear turn in the innovation studies (Hall 2006). Still, there are elements of the classical diffusion perspective that could be successfully exploited in non-linear approaches. Limiting the discussion just to the area of interest of the present paper, I would point to the proclivity of the classical diffusion perspective to perceive various circulation patterns if it comes to the diffusion of objects or ideas across large populations. Furthermore, a consensus is also foreseeable among translation theorists who place the potential of the diffusion model in dealing with a large number of cases (Djelic 2008: 546–548, Tatnall 2009: 74).

When it comes to the translation stream, a comparable status to *Diffusion of Innovations* (Rogers 2003) seems to be enjoyed by Czarniawska and Sevón's (1996a) edited volume *Translating Organizational Change* (see Boxenbaum and Strandgaard Pedersen 2009: 194, Czarniawska 2008b: 770, Sahlin and Wedlin 2008: 221). It was with this book that the term "Scandinavian institutionalism" came into use in the field of organizational institutionalism. The designation refers mainly to organization scholars studying individual organizations, decision processes and reforms in public organizations, with a focus on the "practice of organizing," understood as a very much embedded phenomenon. There are several respects in which their research diverges from the North-American tradition and which seem to boil down to the fact that "Scandinavian research answers the need for micro-studies of institutions, as formulated by Renate Meyer" (Czarniawska 2008b: 773; see Boxenbaum and Jonsson 2008: 91–93, Boxenbaum and Strandgaard Pedersen 2009, Sahlin and Wedlin 2008: 220–222). With regards to the translation stream, this field stands out because of its focus on the dynamic aspects of circulating ideas, and not on their diffusion paths.

Within the Scandinavian institutionalists' vocabulary, the diffusion notion has been replaced with one of imitation and translation. The relation between imitation and translation was depicted by Czarniawska and Sevón (2005b, see Czarniawska 2006, 2008b, 2010) in the formula: "translation is a vehicle, imitation its motor, and fashion sits at the wheel." In the following, I focus on the translation part because—as the name translation model suggests—it is here where the conceptual battle with the diffusion model has been fought.

According to Boxenbaum and Strandgaard Pedersen (2009: 190–192), there are two generations focusing on translation in Scandinavian institutionalism. The first usually associated with Czarniawska and Joerges (1996), Sahlin-Andersson (1996) and Røvik (1996) researches translation processes of ideas being implemented in new organizational contexts. The second investigates actors' awareness of alternative frames of interpretation and translation of ideas in new organizational settings, along with their strategic choosing of one construction over the others. In this latter case, the authors reveal the strategic component in the translation and interpretation processes.

The disembedding–re-embedding dialectic is representative for the first translation stream, and this is addressed by Czarniawska and Joerges (1996, see Czarniawska 2008a), and authors associated with Sahlin-Andersson (1996; see Sahlin and Wedlin 2008).

The Disembedding-Re-embedding Dialectics

Abrahamson's (2006: 514) review of Czarniawska and Sevón's (2005a) Global Ideas: How Ideas, Objects, and Practices Travel in the Global Economy concluded regarding the diffusion and translation models of innovation: "Clearly, therefore, this book puts innovation-diffusion and translative-imitation on a collision course. What an opportunity for a perfect intellectual storm!" Despite, or maybe because of the obvious dramatization, this statement does a good job illustrating the perspective being encountered in the studies subscribing to the translation framing—an almost ideal contrast between diffusion and translation models of circulation of ideas. Observably, the so-called "diffusion model" (identified in the review with the North-American classical studies of diffusion of innovations) was given here the status of a "stooge" prototype, set up in order to foreground the characteristics of the translation one.

To make a long story short, within the translation stream, the diffusion model is usually identified either with institutional isomorphism theory (see Sahlin-Andersson 1996, Lippi 2000) or with the diffusion of innovations theory (see Powell, Gammal and Simard 2005). The model is usually reproached for taking at face value the attributes involved in the physicalist metaphor of diffusion, and—specifically—for ignoring the changes brought to the idea during its implementation in local contexts (see Czarniawska and Sevón 1996b, Czarniawska and Sevón 2005b: 7). Paraphrasing Granovetter (1985), it might be stated that the diffusion model failed to come to terms with the "problem of (re)-embedding" ideas, objects and practices in local contexts.

When recalling Czarniawska and Joerges' (1996: 26; see Czarniawska 2008a: 94) theoretization of the gardening metaphor of "disembedding and re-embedding" in relation to the travel of ideas, we see that, indeed, the translation theory succeeded where the one of diffusion purportedly failed. That is: to treat the disembedding and re-embedding of ideas, objects and practices occurring during their movement from one context to the other. As suggested by Czarniawska and Joerges, disembedding and re-embedding processes emerged as the sociological essence of the travel of ideas. This is a similar argument to the one made by Callon's (1998) disentanglement–entanglement dialectical process making the circulation of goods possible and (also) traceable. Seemingly, these two treatments constitute parallel conceptualizations of the same dialectics advanced by what Czarniawska (2006) inspiringly depicted as the "non-identical twins" within the broader translation paradigm: the actor-network theory and the action net respectively.

Two things could be remarked on the framing of disembedding-re-embedding processes by the Scandinavian translation stream. First, it emerged as one of the main theoretical assumptions explicating the circulation of ideas, objects and practices

and their implementation in local contexts (Czarniawska 2008b: 770–773, Djelic and Sahlin-Andersson 2008: 16–18, Lippi 2000: 459, Sahlin and Wedlin 2008). There are at least two clear concretizations of this thesis. One is Czarniawska and Joerges' (1996: 24–26, Czarniawska 2008a: 93–96) already mentioned model, which was developed in reference to Giddens' (1992: 21–29) disembedding and the gardening metaphor of disembedding and re-embedding. The other comprises the editing rules of the recontextualization process of "experiences and models" elaborated by Sahlin-Andersson (1996) and Sahlin and Wedlin (2008).

Second, the translation strand does not address similar theoretical developments that occurred within sociological studies of diffusion. Such a rival framing for the disembedding–re-embedding perspective would be the re-invention notion advanced within the diffusion of innovations theory. The overlooking of theoretization of re-invention within this field may find its cues in the observable fact that Scandinavian translators do not differentiate, or do not care to differentiate between the "diffusion model" (as particular framing of diffusion qua physical propagation) and the "diffusion of innovations theory" (as sets of studies within one paradigm studying diffusion). The former stands for the theoretical perspective researching diffusion paths where these are depicted as the dissemination of ideas and objects across large populations—with no transformation occurring while diffused—i.e., diffusion as epidemiology (Djelic 2008: 546–548). Whereas the latter encompasses classical studies of diffusion of innovations theory commonly associated with the school led by Rogers and studies building on this tradition (Rogers 1962, 1983, 2003; Rogers and Shoemaker 1971).

As shown by Rogers (2003: 17), the diffusion of innovations theory grew up in symbiosis with the diffusion model where "it was assumed that an innovation was an invariant quality that did not change as it diffused." Still, beginning with the 1970s—and this should be of interest to translation theorists—"diffusion scholars began to study the concept of *re-invention*" and the diffusion perspective changed (Rogers 2003: 17). In today's perspective, it seems as though the diffusion of innovations theory moved closer to the translation model than to the diffusion one, which it is hastily and often associated with.

This makes one wonder whether the translation theory was not fighting outside the diffusion theory the same battle as the diffusion of innovations theorists fought inside of it.

Translation Theory: The Disembedding-Re-embedding of Ideas and Editing Rules

This section explores the assumption of the disembedding–re-embedding of ideas and objects within Scandinavian institutionalism. Two complementary manifestations are traced. The first is Czarniawska and Joerges' (1996; see Czarniawska 2008a) disembedding–re-embedding movement. Their argument is illustrated and accentuated by introducing Callon's (1998) process of the disentanglement and entanglement of

¹ The diffusion model is also known as the classical diffusion model. I am using the term "diffusion model" because it resonates with its denomination in the translation theory.

goods. The second reviews Sahlin-Andersson's (1996) and Sahlin and Wedlin's (2008) editing rules. The latter addressed aspects of the same dialectic process and should, therefore, be considered together.

The key to understanding the disembedding–re-embedding assumption is that it is not an idea or practice which is circulating or being transferred from one context to another per se, but the "accounts and materializations of a certain idea or practice" (Sahlin and Wedlin 2008: 225). For an idea or a practice to start circulating, it first must materialize; it must be translated into an object. The travel of ideas is an "ongoing process of materialization of ideas, of turning ideas into objects and actions and again into other ideas" (Czarniawska and Joerges 1996: 13, Czarniawska 2008a: 92–93). The possibility of this process rests in the potential to dispose of, and re-impose meaning and representations to ideas and practices during their travel.

In Czarniawska and Joerges' (1996) and Czarniawska's (2008a) work, the disembedding-re-embedding movement was neither given much space to unpack the actual mechanisms of the process, nor was it linked to treatments of embeddedness of action or activity type that are representative for economic sociology—i.e., those which refer to social domains and social networks respectively (see Polanyi-Granovetter debate in Wilk 2009, Portes 2010). Importantly, the decoupling of the disembedding-re-embedding problem from related debates does not seem to emerge from organization scholars' ignorance or unfamiliarity with these. It appears as a quite cognizant choice to follow Giddens and to return to the original employment of disembedding-reembedding as a gardening metaphor (Czarniawska 2006). Czarniawska and Joerges presented their argument as part of a broader discussion of the travel of ideas, also touching upon globalization and local contexts. They analyzed local translations as part of translocalization, and the multiplication of alternatives to these paths. This globalization topic notwithstanding, the disembedding-re-embedding dialectics can be delineated as an autonomous treatment of the travel of ideas. It is also observable that the theoretical strength of the disembedding-re-embedding assumption reveals itself rather in the graphical depiction of travels of ideas (see fig. 1) than in the authors' globalization argument.

In order to highlight the links in the organization theorists' argument, I refer to two contributions in economic sociology. One is Portes' (2010) discussion of Polanyi's and Granovetter's understandings of market and market action embeddedness. This puts emphasis on the value in using the gerund and compound formula of *dis-embedding*, *re-embedding* and *de-embedding* in fig. 1. The second is Callon's (1998: 33) reinterpretation of disembeddedness and re-embeddedness of market action as the disentanglement and entanglement of objects during the "proliferation and dissemination of calculative agencies." The reference to Callon reveals why the disembedding–re-embedding moments are so necessary in the circulation of ideas.

According to Portes (2010: 221), for Polanyi embeddedness concerns power relations, whereas for Granovetter it pertains to social networks and structure. He compared the two angles and showed that "Polanyi's 'de-embedding' and 're-embedding' of markets and market actors can be readily examined, measured, and incorporated into explanatory propositions in ways that Granovetter's version is not" (Portes 2010:

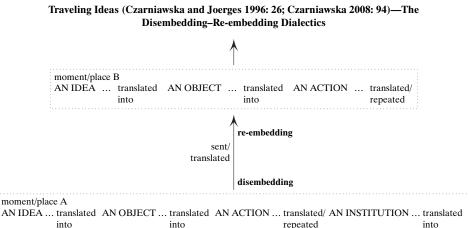


Fig. 1

225). Observably, there are some conceptual benefits in using the gerund and compound notions such as disembedding, re-embedding and de-embedding. First, this points to some sort of sequel to the Polanyi's initial treatment. Second, it has the quality of rendering the analysis more concrete and measurable.

stabilized

Going further to Callon (1998: 33), he reinterpreted the disembeddedness and re-embeddedness of market action as the disentanglement and entanglement of objects during the "proliferation and dissemination of calculative agencies." As shown by Krippner and Alvarez (2007: 229, Krippner 2001), Callon's dialectical notion has itself a strong Polanyian flavor by offering a reinterpretation of the disembeddednessembeddedness movement. Seemingly, we are constantly moving within the embeddedness strand in economic sociology as initially depicted by the Hungarian author.

As the space does not permit for a full exposition of Callon's theory, it is sufficient to say here that the disentanglement and entanglement dialectical process referred to the way in which objects are concurrently inserted into, and abstracted from social relations in order to make them available for market exchange (see Krippner and Alvarez 2007: 230-231). Callon's (1998: 38) inquiry, by and large, concerned the possibility of full disentanglement taking place, and thus of the "full generalization" of the market. He referred to two examples: Zelizer's circulation and ear-marking of money, and the case of organ transfer.

For the purposes of this paper, the gain of these references to economic sociology is that they confirm that the circulation of ideas, objects and practices is dependent upon the possibility and dynamics of perpetual disembedding and re-embedding of objects in new local contexts (see Callon). Furthermore, such processes of disembedding and re-embedding of innovations find their cues in power relations, regulation and framing mechanisms. Hence, they are applicable to examination and measurement to an extent that the general proposition of embeddedness of the travel of ideas in various domains is not (see Portes).

For diffusion studies, this opens an inquiry into the relation between the circulating processes of ideas and their possibility and permeability to disembedding and re-embedding (disentanglement and entanglement). Importantly, ideas and practices' applicability to these combinations does not constitute an intrinsic characteristic, but a variable which itself gets transformed during the circulation. Also, the modality of pursuing disembeddedness as a condition of the travel of ideas is sociologically remarkable. The case of the disentanglement of organs, for example—by way of "degifting" (Fox and Swazey in Callon 1998: 36–37)—indicates that for disentanglement to be perceived as successful, it has to conform to legitimacy and appropriateness logics. These observations link the inquiry into the forces structuring disembedding-re-embedding during the diffusion processes to the broader editing rules of circulating ideas and practices.

Sahlin-Andersson's (1996: 71) and Sahlin and Wedlin's (2008) discussion of "editing rules that restrict and direct the translation in each phase of the circulation of prototypes" is another chapter in the broader critique of the diffusion model in the institutional literature. In comparison with the treatments of Czarniawska and Joerges (1996) and Czarniawska and Sevón (1996b), their discussion explicitly targeted the diffusion perspective that developed within the institutional analysis of organizations. Then again, as in the case of other authors, the diffusion perspective was taken as generalized and somehow self-evident, in the sense that Sahlin and Wedlin directly built on its criticism. The reference to the work of DiMaggio and Powel (1983, 1991) was rather ceremonial and clearly dismissive, rather than interpretative.

Editing indicates two things. First, that the "editing process is a process of translation" (Sahlin-Andersson 1996: 70)—a process of contextualizing and reformulating the accounts of ideas and practices to befit the local contexts. Second, it means that the editing process is subjected to social control. It is this aspect of social control that constitutes the novelty of the editing approach in comparison to the traditional understanding of translation as transformation—i.e., the original Latourian understanding.

By using the term "editing," I want to emphasize that the models are told and retold in various situations and told differently in each situation. In this sense, the concept of editing approaches the same connotation as the model of translation that Latour [...] has described. [...] However, it is just as clear that it is a process characterized by social control. Unlike Latour's concept of translation, editing is also a process of social control, conformism and traditionalism (Sahlin-Andersson 1996: 82).

Three sets of editing rules were identified: editing rules concerning context, editing rules concerning formulation and editing rules concerning logic (see Sahlin-Andersson 1996: 82–88, Sahlin and Wedlin 2008: 224–227). Of particular relevance for the disembedding–re-embedding assumption is the first category. They facilitate the implementation in new settings when contextualization and re-embedding occur. Hence, these rules might be viewed as restatements of Giddens' (1992) disembedding–re-embedding argument.

To conclude this first part of the investigation, the disembedding–re-embedding assumption emerged as a strong argument made by Scandinavian translators in their theoretical dispute with the diffusion model. Sahlin-Andersson's (1996) treatment of

editing rules refined the original Latourian understanding of translation by taking it to a whole new level. This confirms Djelic's (2008: 550) finding that, in the case of these authors, the meaning of translation was enlarged. In addition to the traditional sense of local adaptation and transformation it also comprises mediation and construction. By implication, the disembedding–re-embedding argument is linked to the third model in Djelic's classification of diffusion studies: diffusion as mediation and construction. While, the original Latourian treatment—at least in the way it is perceived (translated) by Scandinavian institutionalists—seems associable with the second model: diffusion as encounter with embeddedness.

The next section clarifies the place of the re-invention assumption in Djelic's classification, as well as its relation with the disembedding–re-embedding framing.

Diffusion of Innovations Theory: The Re-invention of Ideas

Regarding the re-invention of ideas, the investigation relies on Rogers' (1962, 1983, 2003; Rogers and Shoemaker 1971) *Diffusion of Innovations*. As already stated, this book synthesized and integrated the contributions regarding the diffusion of innovations in one theoretical apparatus. This means that after tracing the major revisions brought to it with the subsequent editions, one should have a pretty good idea of how the diffusion theory evolved and which parts were progressively reconsidered. In addition, the narrative of the book is quite unitary and well organized. On the one hand, these are elements that contribute to the smoothening of the sociological analysis of the diffusion of innovations theory. On the other, it cannot escape notice that they also work in its detriment because they encourage the identification of the diffusion model and the diffusion of innovations theory with this book.

This tendency is quite manifest (Fougère and Harding 2012: 17). Also noticeable is that the references are rather made to the book's earlier editions. For instance, Czarniawska (2008: 87, 2010: 250), Czarniawska and Joerges (1996: 23) as well as Djelic (2008: 547) cited the first edition (Rogers 1962), while Sahlin and Wedlin (2008) referred to the third (Rogers 1983). In addition, authors building on Scandinavian institutionalism seem inclined "to repeat the same mistake" (see Abrahamson 1983, Powell, Grammal and Simard 2005: 233).

The first and fifth editions of Rogers' book were published in 1962 and 2003 respectively. During this forty-one year period, parts that were initially less developed gained consistency, new parts were added, while previous statements were sometimes completely reformulated (see, for example, the treatment of consequences of innovations in Mica 2011, Fougère and Harding 2012). Although quite consistent, the revisiting of previous assumptions by this theory is an element easily overlooked in critical references which do not take into account the updating and refurbishing of the conceptual framing that was brought with the subsequent editions.

By investigating the re-invention assumption in diffusion of innovations studies as presented by Rogers, the present paper seems to surround to the same temptation to reduce the diffusion of innovations theory to this author's synthesis—even though it

is an updated one. Unfortunately, due to space limits, this is a risk that this article has to assume.

According to Rogers (2003: 17), the issue of re-invention came to the attention of diffusion researchers in the 1970s. It was then defined as "the degree to which an innovation is changed or modified by a user in the process of adoption and implementation." This theoretical finding questioned the perspective that reduced the innovation adoption to the passive implementation of a "standard template of the new idea." Besides pointing to the transformation occurring during the implementation process, it was also shown that the pace of diffusion and the support for adoption were heightened by the perceived potential of re-invention enjoyed by the adopters.

Rogers indicated Charters and Pellegrin (1972) the first scholars to inform about re-invention in their study of differentiated stuffing in four schools over a one-year period. He showed that research had evolved ever since. Two major reasons for the ignorance of re-invention in diffusion studies were elaborated upon: the *pro-innovation bias of diffusion research* and the precedent focus on the *decision stage* (and not the *implementation stage*) when measuring innovation.

The pro-innovation bias of diffusion research is the first in a list comprising also of: the individual-blame bias, the recall problem and the issue of equality in the diffusion of innovations. It is the assumption that an innovation should be adopted throughout and diffused rapidly within the social system and that it should not undergo re-invention, rejection or discontinuance in adoption. The pro-innovation bias was traced, among other things, to the empirical debut of diffusion research in relation to profitable agricultural innovations. It was considered to have favored successful and rapid diffusion paths in the detriment of re-invention, rejection or discontinuance of innovations, and of "antidiffusion programs designed to prevent the spread of 'bad' innovations" (Rogers 2003: 106–118).

The above incursion in the re-invention problem already suggests some theoretical correspondence with the translation stream. This affinity is also supported by the methodological directions indicated by Rogers in order to overcome the innovation bias. These concern the study of diffusion during the diffusion process, the research of the context and motivations of adoption (also prestige like), and the attention to re-invention processes. Furthermore, Rogers (2003: 181) indicated that the study of re-invention implies that the investigation focuses on adoption at the implementation stage ("how it actually occurred"), and not, as previously conducted, at the decision stage ("as a stated intention to adopt") solely. The author's findings were articulated in the "generalizations" regarding re-invention within diffusion theory. These basically state that the perceived potential of re-invention is an asset in the circulation of innovations:

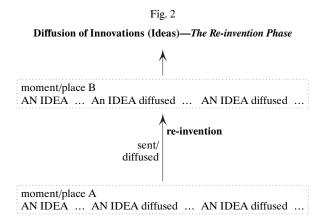
Generalization 5-8 states: "Re-invention occurs at the implementation stage for many innovations and for many adopters [...]"

Generalization 5-9 states: "A higher degree of re-invention leads to a faster rate of adoption of an innovation [...]"

Generalization 5-10 states: "A higher degree of re-invention leads to a higher degree of sustainability of an innovation" (Rogers 2003: 183).

In addition to these points, Rogers extended the analysis of reasons for the occurrence of re-invention, and substantiated some of the insights with regard to the diffusion of innovations in organizations. This is one more reason to view the tentative to theoretically conciliate the translation and diffusion theories with optimism.

While this eagerness is understandable in light of the general aim of this paper, it cannot escape notice that the re-invention term in the diffusion theory—according at least to the definition given by Rogers—only depicts the problem of local adaptation and transformation. Rogers was predominantly interested in the re-invention aspect (see fig. 2). He did not reflect upon the disembedding process in the manner that the Scandinavian institutionalists, following Giddens, did (see fig. 2).



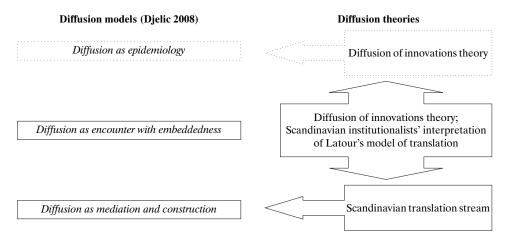
In reference to Djelic's (2008) classification, it can be concluded that the diffusion of innovations theory overcame the diffusion as epidemiology model, and it should be more accurate to associate it with a milder form of translation. The focus on transformation suggests that while the diffusion of innovations theory moved towards depicting diffusion as local adaptation and transformation, it did not yet incorporate the dimensions of mediation and construction—not to the extent that the translation paradigm did. Therefore, the diffusion of innovations theory should be associated with diffusion as encounter with embeddedness, whereas the Scandinavian translation stream with diffusion as mediation and construction (see fig. 3).

Fougère and Harding's (2012: 17) review of nuances in the titles of the subsequent editions of *Diffusion of Innovations* show indirect support for the identification of the diffusion of innovations theory with a milder translation approach. The authors discussed the second edition—*Communication of Innovations: A Cross-Cultural Approach* (Rogers and Shoemaker 1971)—and found that this temporary modification of designation within the series suggests that a window of opportunity occurred at some point in order to give up *diffusion* for a more "agentive" concept, i.e. *communication*.

When consulting the following editions (Rogers 1983: xvii, 2003), it emerges that the term diffusion indeed underwent a shift in meaning subsequent to its definition as "information exchange among participants in a communication process" (see Birnberg and Shields 2012). Progressively, Rogers (1983: xviii) pointed out that it is not

Fig. 3

Diffusion Models and Diffusion Theories



a linear model of communication, but a convergence one. Furthermore, starting with the second edition, he highlighted that the "classical diffusion model" (this would be Djelic's diffusion as epidemiology)—which worked for the empirical reality of the United States and European industrialized nations—was challenged and subsequently modified by the case studies conducted in the developing nations of Latin America, Africa and Asia. Here, the exchange, negotiated (sometimes even failed) and transformation components were more obvious.

This change of perspective indicates that the framing of the diffusion of innovations by various theoretical schools is institutionally, spatially and temporally embedded. The more "central" location of the North-American school encouraged the framing of diffusion as dissemination from a center, while the more "peripheral" position of the Scandinavian one focused the attention on the translation aspect (see Fougère and Harding 2012).

Conclusions

The foregoing analysis highlighted several aspects regarding the Scandinavian institutionalism and the diffusion of innovations theories. First, the theoretical backup of the translators' treatment of the circulation of ideas is based both on the critical assessment of the diffusion model (in reference to the critique advanced by Latour), and on the upgrading of Latour's own understanding of translation, including the dimensions of mediation and construction. It is essential to understand this theoretical double movement in order to grasp the relevance and novelty of the disembedding–re-embedding assumption.

This framing explains the logistics of the circulation of ideas while also pointing out that full disembeddedness is never achieved. In reference to Callon's (1998) money as "variable compromises between disentanglement and entanglement," and

paraphrasing Pawlak's (2011: 361) discussion of the "continuum of institutional compromises," it seems more appropriate to talk about a continuum of compromises between the disembedded and re-embedded states than about fully disembedded and re-embedded ideas, objects and practices. Then again, the fact that full disembeddedness is hardly achieved—if ever—is what makes the circulation and tracing of the circulation of ideas, objects and practices possible. Furthermore, translation theorists indicated that disembedding–re-embedding processes are subject to social control, and are hence subject to some sort of "embedded dependence."

Second, from the embeddedness-embedding perspective, the re-invention problem, advanced by the diffusion of innovations theory, focuses on re-embeddedness solely. In comparison, the disembedding-re-embedding treatment investigates both disembedding and re-embedding in terms of practice (the gerund form is employed). This means that by focusing on re-invention, the diffusion of innovations theory looks mainly at the aspect of the transformation of ideas in the implementation phase, whereas the Scandinavian translation stream also embraces the matter of circulating ideas, objects and practices. This shows how this is possible, somehow patterned and traceable.

Such theoretical problems were not yet contemplated by diffusion of innovations theorists—not according to the state-of-the-art depicted by Rogers at least. Their theoretical interest only went as far as to indicate that the pace of diffusion and the support for adoption are heightened by the potential of re-invention perceived by adopters. On the other hand, such theoretical framing might not come as a surprise given this paradigm's tradition in researching diffusion paths. Noteworthy, only a part of the studies linked to the diffusion of innovations theory researched the modification of the content of ideas while traveling, whereas the translation theory—as its title suggests—listed this transformation as one of its main concerns.

Third, viewed from the embeddedness/embedding perspective, the translation and diffusion theories, with their focus on re-invention and disembedding-re-embedding processes respectively, should be perceived as "situated knowledges" (Haraway 1991: 183–201). This indicates that the distinction between the diffusion and translation perspectives may be successfully de-essentialized by conceiving them as more or less distanced approaches to one phenomenon, which reveal and put emphasis on different aspects.

This statement, although not elaborated in the content of the paper, is supported by Djelic's (2008) classification of diffusion studies. Her presentation of the three models could be "translated" as particular treatments of the embedding—disembedding—reembedding of ideas, objects and practices. Furthermore—and this might be counted as an indirect argument—Boxenbaum and Strandgaard Pedersen (2009: 196) used the "situated knowledge" metaphor in order to position the methodological orientation of Scandinavian institutionalism, with its focus on organizational variation, within the new broader institutional field concerned with isomorphism and standardization.

There are two more manifestations of the situated knowledge problem which should be mentioned. First, the framing of diffusion by various theoretical schools emerges as institutionally, spatially and temporarily embedded. Second, the "em-

beddedness/embedding level" of approaches to diffusion is a matter of "situated perception." When looking at *Diffusion of Innovations* from an economic and managerial—thus a rather disembedded—perspective, this appears as "drawing on an embedded rationality" in contrast with "the highly disembedded policy texts that always need to refer to knowledge characterized by 'value-neutral objectivity and impartiality" (Barbara Townley in Fougère and Harding 2012: 19–22, 33–34). When looking from a highly embedded angle, on the other hand, like that employed by the translators, the embeddedness approach in diffusion of innovations theory is less striking, to the extent that it might even be regarded insignificant.

Fourth, Scandinavian translators' theoretization of circulating processes (such as the disembedding–re-embedding movement) evolved while taking as a point of reference the so-called diffusion model, and not the recent advancements in the diffusion of innovations theory. The theoretical debate was fought and won with a model of diffusion that seems to have been already regarded anachronical by the field that advanced this model in the first place. As shown in the paper, there are several reasons that might explain such an idealized, atemporal and simplified perception. Furthermore, the translators considered earlier editions of Rogers' *Diffusion of Innovations* to represent diffusion literature. This state of affairs points to the necessity of extending the comparison of the two theories further than the disembedding–re-embedding dimension explored in this paper.

Fifth, the analysis of disembeddedness—re-embedding and re-invention theses revealed that the translation and diffusion theories are closer than the Scandinavian institutionalists imagined. In other words, the association between the diffusion theory and the diffusion model is indeed problematic in light of recent research progress in this field. In reference to Djelic's classification of diffusion studies, it was indeed confirmed that the disembedding—re-embedding framing in translation studies links the Scandinavian institutionalism field with the model of diffusion as mediation and construction. Still, the re-invention thesis moved the diffusion of innovations theory from diffusion as epidemiology (i.e., the diffusion model) to diffusion as encounter with embeddedness (i.e., a milder translation model depicting translation in the traditional sense of formal adaptation and transformation). The repositioning of the diffusion of innovations paradigm within Djelic's classification also means that it enjoys the same position as usually granted to Latour's original formulation of translation in the work of organization scholars (see fig. 3).

These five conclusions inform the answer to the question of whether or not the disembedding–re-imbedding and re-invention assumptions constitute theoretical allomorphs of one and the same problem within sociological studies of diffusion. The term theoretical allomorphism was inspired by Lippi's (2000: 460) notion of institutional allomorphism. This depicted a complementary movement to institutional isomorphism: "a second, bottom-up, process of diversification and local adaptation." Herein, the concept is employed with a certain variation in meaning from this initial formulation. It is closer to the dictionary definition of the phenomenon and it converges with Nicolini and Lippi's (2012) idea of allomorphism as "systematic heterogeneity." In this understanding, theoretical allomorphism indicates the phe-

nomenon that variations of the same theoretical practice, which are consistent with the logic of particular sociological strands, circulate under distinct names, which seem legitimate in these fields.

To return to the initial question: Do the disembedding-re-imbedding and re-invention assumptions constitute theoretical allomorphs of one and the same problem within sociological studies of diffusion? The answer, disappointing as it may sound, is: it depends. If we are interested in the analogousness of meaning, then the linking of disembedding-re-embedding and re-invention treatments to distinct understandings of translation shows that the answer is rather no. In this case, they do not stand for theoretical allomorphs of the same problem. The first, second and fifth conclusions are quite clear in this regard. These show that judging by the treatment of embedding-disembedding-re-embedding mechanisms, the two theories should be associated with distinct models in Djelic's classification of diffusion studies.

Still, if taking into account the element of systematic heterogeneity in the definition of theoretical allomorphism, then the answer is *maybe yes*. The third and fourth conclusions are decisive here. They point at the fact that these theories constitute "situated knowledges" of circulating processes, and that there is a superficial similarity between the disembedding–re-embedding and re-invention assumptions.

The translation and diffusion theories might be perceived as theoretical allomorphs because the manner of conceptualizing translation is dependent upon the institutional, spatial and temporal embeddedness of these paradigms—which, as pointed out in this paper is quite distinct. Nonetheless, the gain of the herein analysis does not stem in a clear-cut answer but in showing that the theoretical anti-model of translation theory has been somehow misplaced, and even edited. This certainly does not diminish the value of the disembedding—re-embedding dialectics, yet it makes one wonder about possible further refinements that could have been brought to it had the Scandinavian institutionalists addressed the diffusion theory according to its full potential.

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