Path Dependence Versus Institutionalization: Similarities and Discrepancies at Stake

Olivier Berthod
Freie Universität Berlin
Doctoral Program – Research on Organizational Paths
olivier.berthod@fu-berlin.de

FIRST DRAFT

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Introduction

This article reports on the common ground and differences of two concepts widely used in organization theory: processes of institutionalization and of path dependence. Several research efforts on institutional resistances to change in and among organizations mentioned the idea of path dependence as a driver of radical inertial forces (see e.g. Powell 1991; Holm 1995; Garud et al. 2002). But a recurrent critic claims that path dependence as a theoretical construct is being used somehow loosely; at least far away from its initial theoretical formulations. For example Sydow and his colleagues (2009) recently published a plea for more seriousness in organizational path research in which they offer a precise model for processual analysis of path constitution in organizations.

Loose conception of path dependence may be found in the branch of institutional analysis of organizations as well. This branch, by its interest in processes of diffusion of institutionalized instances, comes close to the concept of path dependence. But institutionalization does not equate any phenomena of social patterns (Jepperson 1991). Indeed more and more articles propose institutional analysis mixed up with path dependent arguments; more often for illustrative and rhetoric purposes than real theoretical articulations. But is institutionalization a path dependent phenomenon? Are paths the mere product of institutionalization? The confusion is easily done. Both path dependence and institutionalization often focus on situations "in which actors do not see or are prevented from pursuing their interests" (Holm 1995: 398). Both concepts often present traces of constraining forces, of historicity, of potential inefficiency, of resistance to change, and are fed by repetition and reinforcement effects.

Those similarities suggests several questions. Indeed, should we consider path dependent instances as the result of a broader theory of institutionalization, or should path dependent instances be strictly differentiated from institutionalized ones? More provocatively: are we, in our efforts to understand path dependence, reinventing the wheel, or do we uncover radical social forms of inertia, distinct from any others?

This work is by no means an exhaustive review of the literature but rather an attempt to trigger a discussion on the issue. I offer a brief review of a set of works that are considered seminal to both theories and try to summarize the assumptions that underlie both concepts. In so doing I locate similarities and differences (see Table 1). In a concluding section I suggest that institutionalization does not imperatively present the characteristics of path-dependent instances, and that path dependence alone does not shape institutions. Instead I suggest that path dependence theory and institutionalization could learn from one an other, towards even better analysis of institutionalizing processes. Eventually I deliver three suggestions for reconciliation of the two perspectives toward mutual learning.

Theoretical Frame(s)

Institutional Theory

Institutional approaches in organization theories are far from building a homogeneous body. A discussion covering all different approaches in a single section is not conceivable. Hence, and without denigrating any other approaches, I will focus this discussion on the one branch that received most of the academic attention in the recent decades: the so-called neo-institutional analysis of organizations.

Back in the late 70's and early 80's, largely influenced by the work of Berger and Luckmannn (1966), a set of papers renewed the attention to institutional influence on organizations by looking at the way with which persisting beliefs, myths of rationalization, and rules, constrain the choices for formal structures in organizations, thus driving a certain homogeneous rationalization in society (Meyer, Rowan 1977; Zucker 1977; DiMaggio, Powell 1983). If the analytical focus eventually largely moved from macro structures toward agency and actors (cf. Greenwood et al. 2008 for a review), the early formulations of this theory build on a view where

persisting and widely distributed social instances are the result of an institutionalizing process resulting in the constitution of 'institutions'. Institutions represent formal and informal "patterns of activity through which humans conduct their material life in time and space, and symbolic systems through which they categorize that activity and infuse it with meaning" (Friedland, Alford 1991: 232). From that perspective, those "institutionalized beliefs, rules, and roles, symbolic elements [are] capable of affecting organizational forms independent of resource flows and technical requirements" (Scott 1991: 165) and hereby reduce the perceived set of choices. Indeed relying on institutions is the mean by which organizations reduce uncertainty and increase both the predictability and intelligibility of their actions. Organizations are tempted to follow the rationale of institutions structuring their field to gain legitimacy and hereby optimize their access to the resources necessary for their survival (Meyer, Rowan 1977; DiMaggio, Powell 1983; DiMaggio, Powell 1991). Thus institutionalization further leads to strategies of mimicry and isomorphism, reinforcing the 'taken-for-grantedness' of the instance among actors. This drives hegemony among formal and informal organizational structures and explains why organizations of a same field may become very similar (Meyer, Rowan 1977; DiMaggio, Powell 1983; Scott 1987; Baum, Oliver 1991; DiMaggio, Powell 1991).

Path Dependence Theory

The catch-phrase 'history matters' often accompanies path-dependence concerns and provides an intuitive feeling for the essence of the theory. The concept of path dependence was initially formulated as a critique of the neo-classical model in economics (David 1985; Arthur 1989). Rather than accepting the postulate that markets shift toward the most efficient solutions, David and Arthur show how an economy may follow standards of inferior quality and eventually stick to them, hence reducing dramatically the span of options[1]. David and Arthur regard these lock-

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1   This idea received harsh critiques from neo-classical economists (Liebowitz, Margolis 1995) who attacked

in phenomena as results of dynamic processes, coined as 'paths'. Paths are initiated by small events, often a random decision, and further evolve along self-reinforcing dynamics to reach the lock-in of a market. Such phenomena may concern e.g. technologies, industry locations, and patterns of behaviors (Arthur 1994), but also societal conventions (North 1990; David 1994) or organizational processes and patterns of decisions (Koch 2008; Sydow et al. 2009).

Path dependence research has often been linked to institutional analysis to account for the development and evolution of institutions and their impact on the set of options available to actors (e.g. North 1990; Powell 1991; Mahoney 2000; Crouch, Farrell 2004; Zukowski 2004; Djelic, Quack 2007). But the neo-institutional analysis of organizations did not fully catch the challenge yet. Yet Thornton and her colleagues propose that the "accumulation of events can result in a path-dependent process in which shifts in the symbolic interpretation of events are locked-in in place by simultaneous shifts in resources" (2005: 130). To those authors, "[s]uch sequencing produces more events that reinforce or erode the dominance of the incumbent logic" (2005: 130). Holm enjoins us to "allow for the possibility of positive feedback and path dependence. A seemingly insignificant event can set off chain reactions and generate cumulative effects" (1995: 401). But if those prominent examples cite path dependence theory, they still come closer to the classical idea of unanticipated consequences of purposive actions (Merton 1936), thus suggesting the need for more path dependence theory instead of actually implementing it in their analysis (but see Schneiberg (2007) and Powell et al. (2009) for notable exceptions).

We note here that a potential exists for path dependent arguments in neo-institutional analysis of organizations, and that both notions of institutionalization and of path creation prepare the analysis to different results. Garud et al. (2002: 196) suggest it when they consider that "conformity to institutionalized rules may generate path dependence leading to specific ways of

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the idea of inefficient lock-in of markets. Their work triggered numerous debates within economics that are beyond the agenda of this paper. Indeed, as Paul Pierson argues (2000: 256): "it is wise to leave those issues to economists."

thinking and doing". Powell goes even further as he writes (1991: 189) on outcomes that "must be explained as the product of previous choices that were shaped by institutional conventions and capabilities". Indeed, to Powell, "path-dependent arguments hold considerable promise for the explanation of institutional persistence" (1991: 194). Social patterns may offer characteristics that are similar to technological standards: stability, lack of adaptation while facing changes in the environment, while being "magnified by positive feedback" (Powell 1991: 193). Applying this approach to the analysis of institutionalization could contribute to explain persistences of inefficient macro structures and their impact on organizations. But to do so it remains necessary to break from metaphorical use when talking of path dependence in institutional analysis.

Similarities in Institutionalizing and Path-Dependent Processes

Hence if a potential for mutual learning between both theories exists, it remains important to clarify when we may use the concept of institutionalization or of path dependence to account for persistences of social and organizational instances, and when we may use both. I propose that a misuse is easily done, i.e. by using the concept of path dependence or of institutionalization when they are not applicable, since the two conceptions build on similar effects in a first place. I review here those similarities.

Shared, socially constructed instances

Both institutionalization and processes of path dependence refer to shared, socially constructed instances. In their seminal book on the social construction of reality, Berger and Luckmann (1966: 69) question the rise of an "empirically existing stability of human order". They consider this order as the subjective perception of a human product, the emergence, maintenance

and transmission of which lie in a theory of institutionalization. To Jepperson, institutions correspond at first sight to "stable designs for chronically repeated activity sequences" (1991: 145). Such a diagnosis comes very close to the notion of those path-dependent decision patterns observable in organizations (Sydow et al. 2009). Jepperson further qualifies institutions as organized and established procedures (1991: 143) that may play at any level. A primary level, be it an organizational policy, a legislation or an institutional logic, like the one of capitalism, can operate as institution to secondary level like employees, organizations or national agencies. Institutionalized instances hence enable activities at given levels, and further control for the way with which those activities are done. Hence the "outcome of an instance of institutionalization is an institutionalized practice, rule, technology, or combination of those in the form of a regime or dominant rhetoric" (Lawrence et al. 2001: 627). In a similar vein, path-dependent instances may concern the spread of given technologies as they are accepted as the main standard by users, e.g. the QWERTY study by David (1985), but also the unquestioned acceptance of given locations for particular industry clusters (Powell et al. 2009), the transformation of economic systems (Zukowski 2004), or the logic of business models (Koch 2008). Path-dependent instances provide with enough stability to elaborate actions, thus providing the group with positive feedbacks in the short run (Schreyögg, Kliesch-Eberl 2008; Sydow et al. 2009).

Historicity

The idea of repetition lies at the core of both institutionalizing and path-dependent processes. Path dependence implies an evolution along a path of decisions over time. Small or big events, critical junctures, and self-reinforcing magnificence over time are the drivers of path-dependent instances. Now if history clearly comes to one's mind when talking about path dependence, historicity remains also a component of institutionalizing processes. Indeed "institutionalization occurs whenever there is a reciprocal typification of habitualized actions by

types of actors. [...] any such typification is an institution" (Berger, Luckmannn 1966: 72). Iterations over time hence feed the process of institutionalization, and studying such processes often implies resorting to historical material to uncover "a history of negotiations that lead to 'shared typifications' or generalized expectations and interpretations of behaviour" (Barley, Tolbert 1997: 94).

Mechanism-based process

Both processes of institutionalization and path dependence are fed by mechanisms. To Berger and Luckmannn (1966) mechanisms of transmission to future generations are crucial during institutionalization. Institutions are not only reproduced by action. Instead, procedures of support, sanctions, and reproduction are at stake. Institutionalization in the neo-institutionalism also builds on processes (Barley, Tolbert 1997) and mechanisms of diverse nature have been put to the fore to account for institutionalization and enforcement of institutions. As we saw in an earlier section, the diffusion of path-dependent instances builds on a processual, mechanism-based thinking as well. Organizations are following mechanisms and are fed with positive feedback, e.g. an increased understanding of the technology they use, or a routinization of some procedures. This makes them particularly reluctant to leave the path-dependent instance for an other option when they have to.

Inefficiency

The notion of potential inefficiency makes both theories particularly appealing. Indeed path dependence theory suggests that markets or societies may shift toward instances of inferior quality, driven by the mechanisms at play. An explosive idea in economics. The average understanding of the neo-institutional arguments shows similar reception in organization theory. When they conceive of efficiency and rationality as socially-constructed myths, institutionalists reject, at least partially, efficiency as an independent variable in the choice of organizations' formal structures (Meyer, Rowan 1977; DiMaggio, Powell 1983). It is thus commonly accepted that both institutionalized and

path-dependent instances may potentially lead to inefficient solutions, or at least to suboptimal arrangements in the long run.

Relation to environmental change

Both institutionalized and path-dependent instances imply a certain degree of resistance to change when the social instance under scrutiny is being challenged. Upon wide institutionalization, an instance reaches a stable state and may even lead to its own demise if environmental changes disrupt the system in which it is nested, as it happened to the monarchy in France during the revolution. Institutions are often depicted as carriers of resistances when facing with innovations (Hargadon, Douglas 2001; Holm 1995). Indeed there will always be some actors who work for maintenance of the institutional status quo (Stinchcombe 1997; Lawrence, Suddaby 2006). A similar concern is expressed by path dependence theory. The rooting process of the path-dependent instance in the organization makes it very difficult, yes, sometimes impossible, for other standards to penetrate.

Inertia among actors

Both theories further build on the impact shared, social instances have on actors at a lower level. Organizations obeying the institutional dictate generally prove to be reluctant to change. Institutions are to reach almost every organization of the fields they structure. The influence of institutionalized instances encompasses a certain degree of 'taken-for-grantedness' which implies that actors concerned will seldom question the instance, and consider it an objective reality (Berger, Luckmann 1966). This very impact on organizations make them inertial, i.e. reluctant to change certain combinations of resources and routines. A complying conduct develops relations to other institutions and practices and further nests the organization in a system (Holm 1995). Similar conceptions are present in path dependence theory. An organization locked-in in a path-dependent

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instance encounters great problems when a rationality shift in the environment makes change a necessary option. It is generally considered extremely difficult for the organizations locked-in to leave the path-dependent instance for 'better' options. Positive returns have been drawn from the option for a given period of time and a collective mass sticks to the instance under scrutiny.

Reinforcing logic

Last but not least both theories draw on a logic of reinforcement of the instances in their contexts to account for their persistence and reproduction over time. For example Lawrence and his colleagues. (2001) make the influence of time on the reinforcement of institutionalization quite clear when they show how institutionalization may take different slope during the penetration in the population they structure. Berger and Luckmannn (1966) illustrate the increasing weight institutions do take as generations learn and further put them into practice. Similar conceptions are central to path dependence theory, where instances concerned are reinforced by multiple subsequent adoptions of the practice or technology, fostered by positive feedback enjoining other individuals or organizations to further do so.

Institutionalization and Path Dependence: Discrepancies at Stake

We saw in the preceding section how much similarities both conceptualizations share. In this section we draw on the identified similarities and proceed on a comparison of the foci of both theories. The analysis of the similarities and discrepancies is summarized in Table 1.

Similarities	Discrepancies	
	Institutionalization	**Path Dependence**
Shared, socially constructed Instances	« Institutions » at any level (societal, field, organizational), i.e. any kind of enabling, shared procedures that discursively characterize actions and actors	Technological standards, organizational routines, business models, practices, rules, etc.
	→ *path-dependent instances do not necessarily characterize actions and the actors as locked-in. Institutions are discursive forces*	
Historicity	Institutions as a product of its historical evolution, i.e. repeated typification of action transmitted between generations	Unpredictable process triggered by a small event in history, punctuated with critical junctures between theoretically well-defined phases. Observable dependencies are developed along the path as time goes by
	→ ≠ *foci: Sedimentation vs dynamic rooting process*	
Mechanism-based process	Focus on mechanisms of reproduction toward active diffusion and maintenance, e.g. societal, cultural, cognitive, power. Role of discourse	Focus on self-reinforcing mechanisms to explain the emergence of a path toward stability as compared to other alternatives
	→ ≠ *foci: Diffusion, maintenance vs positive feedback, self-reinforcement*	
Inefficiency	Not necessarily the case	Potential inefficient lock-in as end-state of path-dependent processes
	→ *path-dependent instances rely on inefficient lock-ins*	
Relation to change	Depending on the institutional effect: "institutional entrepreneurs" trigger smooth institutional evolutions; micro translations of institutions as cradle for variations; discourse as lever	Theoretically, very little potential for change
	→ *path-dependent instances do not leave room, or hardly any, for change*	
Sources of inertia	A reduction of the set of available options is driven by legitimacy-seeking behaviors	Paths as sets of dependencies: actions are bound to the path. Inertial forces are due to the course of action
	→ ≠ *foci: Legitimacy-based inertia versus dependencies*	
Reinforcing logic	Compliance as reproduction of the institutional arrangement; individual commitment to the resources involved in the reproduction	Repetition and increasing returns as drivers of dependencies
	→ ≠ *foci: Cognitive sunk-costs vs positive feedback-driven development of dependencies.*	

Table 1 – Similarities and Discrepancies

Shared, socially constructed instances and characterizing power

We saw that both theories look at shared, socially constructed instances. But the focus of institutionalization is different from the one of path dependence theory. Paths opens the doors to a diversity of instances, technologies, standards, organizational routines, business models, practices, rules, and consider them path-dependent when they answer such criteria as potential inefficiency, exclusion of rival options, self-reinforced in a process punctuated with positive feedback for the organizations (Sydow et al. 2009). Whereas institutionalization consider those instances, which, at any level, discursively characterize actions and actors at lower levels (Berger, Luckmann 1966; Jepperson 1991; Barley, Tolbert 1997), and make them intelligible to the group (Meyer, Rowan 1977; DiMaggio, Powell 1983). path-dependent instances, if uncovered according to path dependence theory, do not imperatively characterize actions and actors locked-in. Also discourse has seldom been a focus in studies of path dependence creation. Hence a first difference is here appearing if one is to consider the path dependence of institutions, or the institutionalization of path-dependent instances.

Historicity: The weight of irreversibility

As any other processes, both path-dependent and institutionalizing processes are touched by time as an independent variable. A process, be it institutionalizing or constitutive of path dependence in a society, market, or organization, is most likely punctuated by junctures, events, stories, dramas. But as Jepperson (1991) precises it, it is important not to equate the term institution with other historical effect without questioning this relation. Institutions are clearly the product of history, since institutions are seldom created from scratch, and manifest the result of a longstanding evolution across generations. But institutionalization looks differently at history as path dependence theory does. It searches for those events that form a chain of reaction (Mahoney 2000) to reach the observed state. Whereas path dependence theory develops a much more precise conception of how

time and history impact the process (Sydow et al. 2009). An instance is path-dependent if it has been triggered by a small event in history, if it followed dynamics of positive feedback to reach a congealed state that was not predictable ex-ante. The analytical foci are different: institutionalization looks primarily at sedimentation processes (Berger, Luckmann 1966), i.e. how an instance becomes taken for granted and evolves over time, whereas path dependence looks at a more dynamic rooting process, showing how the instance enters different stages during its historical development, making the results irreversible, hence excluding other options still accessible.

Mechanism-based process: Enforcement versus positive feedback

What makes institutionalization a different process from path dependent ones are the mechanisms at stake. More precisely, Jepperson (1991) suggests that 'action' and institutionalization may sometimes provide similar effects, I.e. the diffusion of a standard among a population of organizations, but adopting a standard does not make it an institution, it just makes it one more standard. To dig further in the mechanisms, DiMaggio and Powell (1983) write on those coercive, mimetic, and normative mechanisms that lead to institutionalized isomorphism. Scott (1991) highlights the weight of the carriers of institutions, building on cognitive, regulative, and normative mechanisms. Finally, Lawrence and his colleagues (2001) put power-based mechanisms to the fore and introduce 'influence', 'force', 'discipline', and 'domination' as main mechanisms. Institutions are 'out there', they are value-loaded, and characterizes the organizations which comply with them. Hence compliance and agency are the mechanisms enforcing institutionalization. In path dependence theory mechanisms are conceived as 'self-reinforcing', i.e. an increase in the variable leads to a subsequent increase of this same variable. Such mechanisms are well-depicted in examples such as network effects, learn effects, or habituation. We are confronted here with different kinds of mechanisms. Institutionalization focuses on those mechanisms that are agency-based, enforcing the diffusion and the maintenance, whereas path dependence hits much higher in

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the dramatic of the story. path-dependent instances are led by self-reinforcing mechanisms. The idea that everything is happening behind the back of the organizations, blinded by the positive returns they experience in the short run, make the congealed state of path-dependent instances particularly salient. Hence here again, both theories propose different analytical foci: agency versus self-reinforcement.

Inefficiency

Their relation to inefficiency is an appealing way to advertise for both theories. Path dependence theory initially saw the inefficiency as one of the ingredients necessary to construct the theoretical puzzles from which it draws, e.g. the inefficiency of QWERTY, although the market tipped for this alternative and no other. In its application to the broader social sciences, path dependence becomes more subtle and considers inefficiency at least as 'potentially present' (Sydow et al. 2009). To exclude inefficiency from the analysis would erode the power of the theory, namely to account for the resistance bound to past decisions and prior successes. In institutional analysis, inefficiency is no compulsory ingredients (Powell 1991). To conceive institutions as the carriers of inefficient arrangements is actually a popular misuse of the theory (Greenwood et al. 2008). Instead, early formulations (Meyer, Rowan 1977; DiMaggio, Powell 1983) argued that efficiency is not the primary criteria for organizational design. This does not imply that inefficient solutions take imperatively the lead. Here again we face two different foci.

Potential for change and departures versus lock-in

In both concepts we observe a perceived reduction of the available options. But if some studies tried to develop conceptual frame of 'path-breaking' (Garud, Karnoe 2001), path dependence theory does not propose any viable conceptual frame yet (Sydow et al. 2009). However, if persistence of institutional arrangements are to be observed, they are not seen as dead-end stages

anymore. Recent evolutions in institutional theory focus on the potential for change in highly institutionalized fields, hence answering the paradox of embedded agency (DiMaggio 1988). The analysis made the potential for change thus move from exogenous to endogenous forces (Dacin et al. 2002). Indeed the rather deterministic perception of organizational life in institutional theory was leaving little room for initiatives and freedom of thoughts to actors. Acknowledging this weakness, efforts of consolidation at the actor-level have been pursued, theoretically (e.g. Greenwood, Hinings 1996; Lawrence, Suddaby 2006; Powell, Colyvas 2008) as well as empirically (e.g. Holm 1995; Hoffman 1999; Hargadon, Douglas 2001; Munir, Phillips 2005). Research related to this conceptual turn looks at the organizational dynamics of entrepreneurship and change, in granting a broader account to the interplay of actions, meanings, institutions and actors (varyingly individuals and organizations), and regards change as a process instead of a finished state (Dacin et al. 2002).

Sources of inertia

Here both theories present again different foci. In path dependence, extreme degrees of inertia are often reigning among organizations locked-in. This is, in return, not imperatively the case concerning institutionalized instances. Organizations, at least most of them, do not question the institution, the institution being mostly taken for granted. The question in focus is: how to cope with it so as to develop legitimacy in the field or group of organizations in which one operates, or how to make the field moves so as to have my innovation accepted anyway. Breaking from compliance is considered an illegitimate conduct, and deviant organizations receive sanctions from the surrounding context (Hargadon, Douglas 2001). Inertia is here legitimacy-driven and not due to vested interests (DiMaggio, Powell 1991). It does not imperatively resemble a lock-in situation, in which actors are bound to a certain trajectory by a set of dependencies that are historically determined. No one would be considered illegitimate by using an other keyboard than the QWERTY one. The problem would lie more in the cost of learning the new configuration and of a

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system able to support such hardware.

Reinforcing logic: Sedimentation versus self-reinforcement

The reinforcing logics are rhetorically already differing from one another. While institutionalizing processes draw on compliance as a structure of reproduction, the drivers are either institutional sources as such, for example the State using its coercive power, or, at a micro-level, based on the cognitive sunk-costs which result from the process of compliance. Path dependence, in contrast, presents much more dynamics in the analysis. The reinforcement is not driven by the embedded nature of the arrangement in people's minds. Instead it draws on the repetitive magnificence of the process. The reinforcement is not a fatality coming from up there, but an iterative, self-reinforcing process of positive returns.

Three Proposals for Reconciliation Towards Mutual Learning

Should we strictly separate path-dependent from institutionalized instances? Yes, for path-dependent instances should not be systematically compared to institutionalized ones. The result of a path-dependent process does not correspond to the result of an institutionalizing process. Put differently, a path-dependent process (in its analytical focus at least) does not develop the features necessary for a social instance to be considered an institution. Neither do institutionalizing processes (in their analytical focus) systematically uncover the features that constitute path-dependent instances.

Now this argument does not exclude the fact that institutions may, from time to time, present path-dependent characteristics in the process of their institutionalization (e.g. Schneiberg 2007; Powell et al. 2009). It seems reasonable to conclude that so-called 'institutional paths' should be only considered as such when they are the result of a path-dependent process of institutionalization

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and not the mere product of random historical evolution. I conclude in formulating three suggestions for reconciliation that allow for a better usage of path dependence in processes of institutionalization.

Institutional paths: The locked-in institution

In studies of institutionalization, I suggest to make use of the term 'path-dependent' with great precautions. Under this term one should favor the study of institutions that actually present path-dependent characteristics as they are defined in the theory. Such studies would provide the literature on institutions with better insights on those institutionalized instances that have become inefficient and that present the greatest resistances to change (for a similar plea see Powell 1991: 191). Now applying path dependence theory to institutionalizing processes, as both theories draw on different analytical foci, should be done by translating the essence of path dependence into institutional arguments. For example, one should consider the possibility to model legitimacy as a self-reinforcing mechanisms. Sastry (1998) already argued in this direction, saying that an increase in adopters subsequently increase the apparent legitimacy of an institutionalized arrangement, hence fostering new adoptions. Similar positive feedback loops may be envisaged in the concepts of mimicry, of coercion, or of professionalization. Now instead of focusing on what actors do to reinforce institutionalization in terms of coercion or how professionalization was settled by entrepreneurial actors, institutionalists could focus on the potential self-reinforcing logic of those mechanisms. This would bring new insights on the persistence and weight of institutionalized arrangements and, somehow, even more 'drama' to the story. Finally, and probably one of the crucial criteria, path-dependent analysis should talk of 'institutions' when the social instance under scrutiny presents a characterizing and discursive power that makes complying actors and their actions intelligible to other actors in their field.

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Organizational paths: Locked-in in the institution

In a second proposal I suggest looking at those organizations that potentially become path-dependent while articulating institutional pressures in their structures. Such an attempt is to be linked to the recent call for more micro-foundations for institutional theory (cf. Powell, Colyvas 2008). Indeed, could organizations develop dependencies while they translate institutional requirements in their practices? Could then such organizational dependencies account for resistances to change at both organizational and institutional levels? Very little research actually looked at the process of adopting institutional requirements. Instead most studies on adoption paced the speed of diffusion and the mechanisms that fostered diffusion using adoption as a dummy variable (Fligstein 1985; Beck, Walgenbach 2002 e.g.). Some more attention on what organizations experience while translating an institution into their practices would allow to explain why they stick to them after a while. Such studies would look at the way practices that are institutionalized in the field link to other in the organization, how the implementation of such practices develop accesses to resources that may become vital for the organization, and even become internally taken for granted, hence avoiding the acceptance of new options.

Institutionalized paths as conventions

Finally, in a third proposal, I suggest to account for path dependence in the study of conventions, a sub-theme of the broader 'institution' construct. Conventions, as defined in the literature, propose interesting similarities to path-dependent instances (e.g. David 1994) and could well offer a bridge to locate path-dependent instances in the broader study of institutions. Gomez and Jones (2000) show how actors rely on conventions to counter uncertainty and perform activities, if not more efficiently, more effectively. Conventions are the deep structure which link isolated elements in a set of formal relations, allowing actors to elaborate actions that are intelligible and to feel free from uncertainty when they do so. The essence of conventions is their arbitrary

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nature. Driving on the right or on the left side of the road is such a structural element, which society decided upon arbitrarily. Indeed, rationally speaking, contingency was high between both alternatives. Conventions bring high degrees of stability in groups and organizations, since the consequences of decisions would otherwise be difficult to calculate by isolated, single individuals. To those authors, conventions present high degrees of routinization. The dissonant aspect of alternative and competing conventions even reinforces the acceptance of the older convention. To Biggart and Beamish (2003) conventions may concern standards, but also habits. All this makes conventions particularly salient for path dependence analysis: contingency during settlement of the convention, routinization, habituation, positive feedback for users of the convention, and high stability.

To Conclude

There remains a lot to learn about institutionalizing and path-dependent processes. If a separation is clearly needed, articulating both theories together would provide with a great set of tools to expand our understanding of those social instances that predefine our way of doing the things we do, and, hopefully, to conceptualize ways to break out of them. Consider music-making as one extraordinary case of conventional stability in standards (how musical instruments look like and are to be built), practices (how to actually play the music) paced with tremendous innovations. Are great artists not those who manage to break out of codes and conventional thinking about how music should be done? We shall keep in mind that plugging-in the guitar and accelerating the blues made Elvis the King.

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