What’s the Problem with Complexity?

Authors:

Frank Meier; SOCIUM, University of Bremen
Mary-Somerville-Str. 9, 28359 Bremen, frank.meier@uni-bremen.de

Uli Meyer; Munich Center for Technology in Society (MCTS), Technische Universität München
Arcisstr. 21, 80333 München, Germany, uli.meyer@tum.de

Abstract:

Interest in institutional complexity has again gained momentum with the rise of the institutional logics approach. In this paper we argue that the literature has developed a rather narrow perspective on institutional complexity. It is limited in at least two ways: In a very general way, it is reduced to “organizational responses” and in addition only perceives complexity as a problem. We argue that a more precise perspective on institutional complexity can help to illuminate important aspects of the relation between organizations and their environment.

DOI: 10.14459/2016md1335722

1 The „Nano-Papers: Institution - Organization - Society“ are produced by the DFG (German Research Foundation)-supported scientific network „Das ungenutzte Potential des Neo-Institutionalismus. Theoretische Herausforderungen und empirische Forschungsperspektiven“ (http://gepris.dfg.de/gepris/projekt/251753753) and are published by the coordinators of the network: Dr. Stefan Kirchner, Dr. Anne K. Krüger, Dr. Frank Meier and Dr. Uli Meyer.
Institutional theory's focus on heterogeneity as a problem

Institutional heterogeneity has been central to the institutional literature right from the outset (Meyer/Rowan 1977; Brunnsson 1989) but this interest has again gained momentum with the rise of the institutional logics approach (Friedland/Alford 1991; Thornton/Ocasio/Lounsbury 2012). Within this framework, research increasingly conceives of heterogeneity in terms of tensions, challenges, conflicts and problems. The central theoretical concept in the problem-centered newer discussion is that of institutional complexity. In the definition of Greenwood et al. (2011: 318):

“[o]rganizations face institutional complexity whenever they confront incompatible prescriptions from multiple institutional logics”.

There are good reasons, why “complexity” gained much prominence in a short period of time. One very general achievement of the “complexity” debate is, that is brings organizations back into the picture. Several authors noticed that organization theory as a whole somehow lost sight of what was supposedly its central object (Walgenbach 2011, Kirchner et al. 2015). So redirecting attention to organizations may in itself be a merit of the complexity discourse. More specifically the key concern of the “complexity debate” is one that once has been the core of institutional theory: the relation between organizations and their (institutional) environment. So the notion of complexity could have triggered a fruitful debate on the foundations of the theory.

However, in the existing literature the question of the relation between organizations and their environments is truncated in different ways. In a very general way, it is often reduced to “organizational responses. The literature on institutional complexity and related perspectives have developed a specific and quite narrow perspective on institutional pluralism, which is sometimes strongly reminiscent of the supposedly dead contingency theory: It is looking for situational variables that determine how organizations respond to given complexity. But environments do not simply happen to organizations, and neither does complexity. Situational variables do not determine responses. Such a perspective neglects long-standing traditions in organization studies which analyze how organizations choose their environment (Thompson 1967), how powerful organizations (more or less successfully try to) shape their environment (Meyer/Rowan 1977: 348f.), and how organizations make sense and enact their environment (Weick 1995). This contingency theory trap is (still) a very common one and has already been criticized by many others on many occasions over the last decades (e.g. Child 1972, Perrow 1986). Nevertheless, in many cases, organizations react to changes in their environment: they are neither omnipotent nor are they able to influence every aspect of their environment in their interest. So the perspective on organizational responses is not wrong per se but it is incomplete.

Another truncation of the complexity perspective is more specific: In a one-sided way heterogeneity is perceived as a problem (“incompatible prescriptions” in the definition of complexity). We think it is worthwhile unpacking this more specific assumption to gain a broader perspective on the relation between organizations and environment.

The problem with heterogeneity as a problem

Limiting heterogeneity to being a problem ignores important aspects of the relation between organizations and environment already broadly discussed in organization theory:

a) Heterogeneity is a much more common phenomenon than the complexity-literature suggests. Or to put it categorically: Organizations are always situated in heterogeneous environments. Each and every organization faces demands from different segments of the environment, e.g. it has to somehow reproduce its economic capacities, deal with specific educations of employees and comply with certain legal or professional standards. Many, if not most organizations are quite successful in this respect and deal quite smoothly with the pluralism. That is not to say, that pluralism is scientifically not interesting when it does not cause problems.

Quite to the contrary: The focus on problematic cases distracts the attention from the much more important mundane ways that organizations routinely handle pluralism. As a result, the literature underestimates both the ubiquity of the problems and the astonishing capacity of organizations to handle it.

b) One obvious reason why organizations can deal with pluralism quite smoothly is that in many situations working solutions are easily available. This can be observed on different levels. Very fundamentally, one can conceive of the basic elements of organizing like hierarchy or compartmentalization as solutions to problems of heterogeneity (Besi and Meyer 2015). But also on the level of organizational types working solutions are readily available: The "professional organization" (Mintzberg 1979) or the "university" obviously incorporate heterogeneity and come with templates for attenuating institutional tensions. Expanding on this point, one thing that institutional theory can learn from French pragmatism (Boltanski/Thévenot 2007) is that these readily available institutionalized patterns of organizing are often in themselves compromises. If this is an accurate description, the "problem" arising from a "new institutional logic" in a given field may not be the contradictions between a new (e.g. market) logic and
an old (e.g. professional) logic but rather that new demands destabilize existing compromises between several institutional demands which are already in place.

c) Often, heterogeneity is not a problem but rather a resource that organizations can use. This becomes most obvious when heterogeneity itself is the raison d’être of an organization, as in the case of organizations that are intentionally designed in order to enable coordination across heterogeneous institutional settings, like technology transfer offices, or scientific advisory boards. „Organization” is arguably one of the most important mechanisms for this kind of coordination in modern society (Meier/Schimank 2012). Indeed, what you probably will do if you are facing some kind of institutional heterogeneity is founding an organization.

In some settings pluralism itself is treated as highly legitimate and even desirable, as in science, art, or politics. Especially in these contexts many organizations are highly skilled at exploiting institutional pluralism and even conflict for gaining legitimacy (Brunsson 1989). At the same time, pluralism is often an important source of productive irritation and thus of innovation and adaptive capacities in changing environments (Stark 2009). So, many organizations introduce specific formal structures (like heterogeneously comprised boards or panels) that are deliberately designed in order to produce and ensure pluralism. Against this backdrop it is not surprising, that some authors see the loss of pluralism associated with the rise of neo-liberalism as highly problematic (Lamont 2012).

In sum, the existing literature on complexity provides us with a one-sided view of the consequences of institutional heterogeneity.

Surprisingly enough, a strong argument for the useful aspects of heterogeneity for organizations as well as for other actors is made in the foundational article for the institutional logics debate (Friedland and Alford 1991). Institutional logics was used as a concept to highlight not only the problematic aspects of different institutional contexts existing at the same time, but also their potential as a resource: “Under some conditions [people] are artful in the mobilization of different institutional logics to serve their purposes” (254). Only later the concept was reduced to the problems, heterogeneity can pose.

We need to understand the structure of the problem

Of course, heterogeneity can and does cause problems for organizations. Incompatibilities do exist and do have consequences. Surprisingly however, the literature is – despite some scattered remarks e.g. on different “degrees” of compatibility (Greenwood et al. 2011: 332f.) – rather silent on the actual nature of incompatibilities itself. This means, the debate on complexity not only excludes aspects of heterogeneity as a resource but it also does not take seriously the heterogeneity of problems they claim to analyze.

Incompatibility can refer to very different problems on very different levels of analysis. What we think is necessary is to develop a perspective which allows us to be much more specific and to distinguish between different forms of heterogeneity and their different consequences for organizations. In the way it is used in the complexity debate, the term heterogeneity itself addresses a wide range of heterogeneous phenomena on different levels of analysis.

To be able to productively understand what the problem with complexity actually is, different questions need to be answered. For example: (a) Who observes the problem? (b) For whom does the conflict cause problems? (c) What is the specific source of the conflict? (d) And what are the consequences of this?

(a) The problems caused by complexity may depend on who actually observes, anticipates or experiences it. Incompatibilities and contradictions are hardly objective characteristics. Rather they have to be perceived by an observer. In many studies, however, it is not clear who this observer might be. In some cases institutional demands may clash in open conflict in organizational decision-making bodies, in others incompatibilities are only perceived by relevant external audiences. Sometimes the incompatibilities may be observed by no one or only by the researchers themselves. So, we can think of at least four different types of observers: (1) the organization itself, (2) specific members of the organization, (3) parts of the organizations environment, or (4) the researcher(s). Of course, a conflict can be observed by more than one of these groups. Based on the answer to this question, a perceived problem may be very different in nature.

(b) The second dimension addresses the level on which problems occur. The incompatibilities can cause problems for the organization itself, but also on other levels: for members of the organization, for the environment or parts of the organizations environment. It can also cause problems for the researchers doing research on a specific organization. And maybe incompatibilities exist but simply do not cause problems for anybody. So, every analysis should be able to answer the question: For whom do the incompatibilities cause problems? The possible answers to this question are similar to the first dimension: (1) for the organization itself, (2) for members of the organization, (3) for (parts of) the organizations environment, (4) for researchers, and (5) for nobody. The observers of incompatibilities may not be affected by them themselves, nor are the affected entities necessarily able to link their problems to institutional contradictions.

(c) As we have shown, a variety of authors argue that organizations often use the heterogeneity in their environment to their advantage. So, the mere existence of heterogeneity is not enough to
cause problems. We need to understand, why it causes problems in specific situations. Quite recently some authors began to address this question. Besharov and Smith (2014) claimed that logic compatibility and logic centrality are two variables that affect the degree of internal conflict. Raynard (2016) assumed that the “challenges” resulting from complexity depend on three factors: logic incompatibility, unsettled field-prioritization, and jurisdictional overlap. However, even these papers conceive of incompatibility as a rather one-dimensional phenomenon. In contrast, we claim that incompatibility problems can have very different sources. Therefore, the third dimension one has to look at more carefully, is the sources of these problems. Institutional prescriptions may be incompatible on genuinely logical grounds. But a variety of possible other sources exists, that is because they are contradictory, but also because of situational constraints, e.g. when the resources at hand do not suffice to comply with all demands at the same time. There may be a negative causal dependence between different prescriptions (e.g. organizational slack vs. organizational efficiency). Or there could be the demand (by whom?) for exclusive commitment to one of the prescriptions (“thou shalt have no other gods before me”).

(d) The consequences of plurality can and do range from catastrophic to none at all. But also if the answer is “none” this can be a relevant starting point for an interesting research project. One question would be, why a theoretically assumed conflict does not have any impact on organizational practices. Incompatibilities observed only by a scientist may point to the fact that unproblematic solutions are already established. But, of course, they may also indicate an artifact in the theoretical construction of the problem.

Conclusion

Research following the lines indicated above can help to understand how organizations actively deal with heterogeneity and how organizational theory has to be refined to account for this. So, we do not argue that some combinations are worth scrutinizing and others are not. What we want to do is to show how productive it would be for authors to explicate the specifics of the complexity problem at hand.

If you look at a typical complexity paper, it (implicitly) works like that. The problem of complexity is (1.) observed by the researcher, (2.) observed problems are assumed to also be problems for the observed organization, (3.) sources of the problem are assumed to be contradictions (without further specifications). You can think of all different combinations. And looking at the specific combinations which exists, we think we can gain some insights, which are of great relevance for the analysis of the relation between organizations and their environment.

We think that such an analytical framework is necessary to achieve a more precise analysis of how institutional complexity affects organizations. In addition, we also think, the question of institutional complexity needs to be embedded in a larger discourse on the relation between organizations and their environment. Such a discourse should account for different relations between organizations and their environment in which organizational responses to problems caused by the environment account only for one aspect of this relationship.

References


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The Nano-Papers “Institution – Organization – Society” enable a pointed as well as profound examination of theoretical questions in the area of sociological Neo-Institutionalism. They thus serve both the exchange of theoretical ideas and the development of conceptual foundations. The goal of the short contributions is to present, critically examine and further develop theoretical concepts. The Nano-Papers, then, should not be understood as conclusive theoretical contributions, but rather as an invitation to exchange conceptual positions.

Authors of the Nano-Papers

Dr. Stefan Kirchner, University of Hamburg
Dr. Anne K. Krüger, Humboldt University of Berlin
Dr. Frank Meier, University of Bremen
Dr. Uli Meyer, Technische Universität München

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Place of publication: Technische Universität München, München