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An exchange of ideas about knowledge governance: seeking first principles and microfoundations

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10.1. Teppo Felin (Henceforth Teppo):

First, let me thank the Oxford University Press and the editors, Nicolai Foss and Snejina Michailova, for allowing us to engage in this informal, unusual, and we hope, informative interaction and exchange of ideas.

To get us going, let me propose a few points and positions that might be worth pursuing. These are informed by what Nicolai labels the ‘knowledge governance approach’ (KGA) (Foss 2007)—which I see as an attempt to focus on some fundamental issues in the area of knowledge management (KM); that is, issues which have heretofore received relatively little attention. So let me start with three ‘first principles’ that might anchor our discussion in KM more generally and the KGA in particular. These three points in essence represent areas of research that deserve more attention in knowledge-based arguments of the firm, and, the KGA may indeed provide a vehicle for addressing them.

First, ‘microfoundations’ are needed for knowledge-related arguments pertaining to organizations. By microfoundations I mean there is a need to understand various individual-level factors in knowledge creation and production: abilities, decision-making, actions, beliefs, expectations, interests, imagination, preferences, and so forth. Thus, rather than assume individuals are simply heavily socialized toward perceiving their environments in a certain way, the KM literature would benefit from starting out from lower-level notions and systematically building theory upwards to

understand how macro, knowledge-related outcomes emerge and form from these microlevel antecedents. This microfoundations program and intuition shares much with the social theory pioneered by James Coleman (1990, cf. Felin and Foss 2006).

Second, building on the above, the key microfoundations of organization and organizing—and KM—are individuals. That said, I recognize that JC has helped pioneer a version of KM that focuses quite heavily on collective issues, perhaps at the expense of individual-level factors or microfoundations (Spender 1996). The analysis that builds on JC's work, such as his widely used matrix of knowledge types (Spender 1993), seems to have continued along this heavily collectivist route (Felin and Hesterly 2007). But, it would seem that a natural, next step is to explicate the underlying microfoundations of KM. In other words, the natural progression of the KM field requires that it move toward understanding *the origins and sources* of where knowledge resides as well as toward an understanding of how knowledge develops and transfers. All this implies a renewed focus on the relevant microelements, of how these micro-, individual-level elements create and aggregate up to the macro-, organizational-level. It might be worth noting a similar progression in theoretical understanding, from the macro- to more microelements—generally seen as a shift from macro-explanatory variables to micro-explanatory variables—has also occurred in numerous other disciplines where progress has been made. Elster in fact argues that 'science progresses through reduction' (Elster 1989). I should note that the shift toward the microlevel is less a critique of the work that JC and others have pioneered, rather it is more of a natural and necessary next step in helping us understand the origins of the collective knowledge structures that have been posited.

The third point is that a focus on microfoundations scarcely precludes or denies the importance and existence of the social environment in which individuals are embedded. In other words, microfoundations ought also to be highly sensitive to the fact that individual-level activities (or preferences, interests, and so forth) are often necessarily pursued in collective settings, via collective action. That is, while individuals may have preferences, interests, and dreams that they hope to realize, the actualization or realization of these interests often can only happen via collective action, via an organization. In modern society, collective action and organization provide the key vehicles through which many meaningful, large-scale, innovative, and valuable activities are accomplished. A key point then is that individuals need to negotiate and interact with others to ensure that interests are aligned, that interests and preference cohere.

This type of 'political' negotiating and coalition building was important to the early Carnegie school (March 1962), but that intuition seems to have been lost in more recent theories of organization.

10.2. JC Spender (Henceforth JC):

OK Teppo, let's see if we are headed in the same direction here. You offer us three principles—first, a focus on microfoundations; second, the assumption that these are where individuals are, and third, that we need not leave the macrolevel behind. I cannot help but agree with these principles, but perhaps not in the way you want me to; so let me start in by responding to your first two points.

In the long tradition of methodological individualism (MI), for example, the Hayekian argument that economic and social theorizing needs to be grounded in the observable characteristics of human beings, there is much debate. It reflects a reductionist mode of explanation that goes back to Heraclitus and beyond. You, others, and Nicolai too, have written to this (Arrow 1994; Elster 1989; Felin and Foss 2005). The problem, of course, is that the supposedly universal characteristics of the individual are far from self-evident or undisputed. Most of the time those now appealing to MI are actually doing a 'bait and switch,' citing Hayek but actually suggesting the individual they have in mind is the familiar fully rational *homo economicus*. Since Hayek's time we have two substantial attacks on this poor chap. Simon's 'bounded rationality' (Foss 2003) and, more recently, 'behavioral economics' (Camerer 2003). So I need to know more about the putative individual underpinning your MI and why invoking her or him is going to clarify things.

Second, I am concerned about KGA's problematic. What question is it targeting and hoping to answer? My assumption, based largely on my reading of Nicolai's considerable contribution, is that it heralds a new round in his wrestling match with formal economics as he attempts to develop a nontrivial theory of the firm—and here I would cite Demsetz's critical assessment of the discipline's situation (Demsetz 1991; Gibbons 2005). I am guessing Foss's interest in the KGA starts, first, from the Coasian intuition that organizations exist because they are home to or congenial to some knowledge phenomena untypical of markets, such as the exercise of hierarchical power, and, second, if we think about the various modes of organizational governance, accepting power as opposed

to letting individuals pursue their self-interest rationally, these seem more appropriate to managing such nonmarket phenomena.

This kind of distinction between free choice and power has long been present in Williamson's work (Williamson 1975, 1986) so it might be clarifying to talk about the differences between TCE and KGA. Are the KGA's alternative modes of governance not focused on cost? Does poor governance not lead to economic inefficiency? On the other hand, if cost is actually determinable, why the exercise of power, why not let actors choose, applying their rationality? Williamson would say that power is necessary because we see uncertainty colliding with guile—an assumed dimension of individuals, supplementing their rationality. So if the KGA sees there is more to it than optimizing cost, I suspect we need some clarification. I raise this point because I suspect the new theory of the firm we all have in mind here may well address the question last seriously framed, as far as I am aware, by Cyert and March. On page 16 of their classic (Cyert and March 1963), they suggest a viable theory of the firm—defined as one useful to practicing managers—would also bring microeconomics together with organization theory (OT). Hence, I hope the KGA's agenda is a move toward such a theory for I see OT today as an endangered discipline. On one flank the RBV advances its neo-economic reasoning against the ancient art of strategy, on the other, the survivors' retreat into organizational psychology and OB is cut off by economics's new behavioral analysis. Where are we to look for a defensible basis for OT?

To search in the knowledge management (KM) literature for some insight into how economic reasoning might explain the existence or clarify the operations of organizations may strike many as hopeless. After all, the KM discipline itself is also in parlous condition, increasingly unsure of its foundations and its objectives (Spender and Scherer 2007; Tsoukas 2005). As Nicolai's citation of Argote's work indicates (Argote 1999), the bulk of those working within KM treat knowledge as unproblematic; an objectifiable commodity, sometimes valuable but often costly to produce, that can be collected, stored, redistributed, and applied to produce value in the future. This defines organizational knowledge as a form of capital (Dean and Kretschmer 2007) and there is no obvious reason why it cannot then be handled by market-typical modes of choice and governance. If, on the other hand, knowledge is too sticky or slippery for markets to handle, 'tacit' perhaps or more a process of knowing, then other issues open up which may call for other ways of managing actors' choices. So I would ask about your notions of organizational knowledge and your confidence that

what economists mean by governance can actually impact its creation, flow, or application.

10.3. Teppo:

First, I do not see the attempt at microfoundations, nor the knowledge governance approach more specifically, as an attempt to smuggle in the old *homo economicus*. Scarcely so. Rather, a better conceptualization might be what Baker and Pollock recently label '*homo-multifacetus*' (2007). That is, it is evident that individuals seldom have all the answers given uncertainty, limited time, information processing capabilities, and local knowledge (cf. Hayek 1945), *but*, it is important to note individuals also have heterogeneous preferences, interests, expectations, and understandings about the types of actions that they consider valuable rather than assume these preferences emerge simply from social interaction, or socialization more broadly. So, the goal of a microfoundational approach is to specify the individual's nature and decision-making capabilities appropriately, and to understand how heterogeneous interests—thus, perhaps taking the existence of individual interests for granted—are negotiated and aggregated. And, importantly, evidence suggests that we can move forward with the presumption that individuals not only have their own independent preferences and interests, but also that human capabilities exist somewhere between the highly idealized, perfectly rational, agent of economics and the heavily bounded and socially determined agent of sociology. The attempt, in terms of microfoundations, is to expand the bounds of rationality, to recognize and theoretically account for, not only heterogeneous interests, preferences, and so forth, but more importantly to account for (or, be able to explain) the many correct and imaginative decisions that individuals make, something that Grandori has recently called 'epistemic rationality' (Grandori 2006).

Thus, as has been recently noted in social psychology as well (see Krueger and Funder 2005), there has been much too heavy a focus on incorrect, poor, and biased decision-making. While poor decision-making undoubtedly exists, as do biases, the social sciences, management science included, have not accounted adequately for much of the progress of the past century, and the associated *correct* and imaginative decision-making. This type of intuition is emerging in psychology (e.g., Gigerenzer et al. 1999; see McKenzie 2005 for an overview), so perhaps its diffusion into management science will take a while. That said, the organization sciences

should be at the forefront of understanding decision-making and associated actions and outcomes, as much of human activity and accomplishment and decision-making happens in collective, organizational settings.

Second, what is being advocated here can be construed as a need to understand some of the forgotten behavioral and social foundations of human and organizational action; these foundations indeed were originally embodied in the work of the Carnegie tradition (see Felin and Foss 2005, cf. Gavetti et al. 2007). That is, a need to focus on how individual preferences get negotiated in collective settings (March 1962), how organizational goals aggregate from individuals preferences and interests (Simon 1964), and so forth. This intuition has been lost as extant behavioral approaches focus heavily on the environmental aspects of organizational behavior (for a summary, see Greve 2005). So, rather than begin the analysis with a taken-for-granted environment, or taken-for-granted organization (cf. Coleman 1990), or taken-for-granted routine for that matter, all these collective constructs require further explanation, which microfoundations can indeed provide.

Third, you are reacting fairly negatively toward economic reasoning, wondering whether it can contribute anything to organization theory and the knowledge literature specifically. Economics absolutely has, and continues to, contributed to our understanding of organizations and knowledge. It is not that we need to import the full theoretical apparatus and assumptions of economics to understand organizations and knowledge; rather, I would suggest that a selective use of the logical and methodological intuition from economics can provide tremendous insights for organization theory and strategy. The logical and methodological intuition I am advocating here is not only embodied in economics, but an equally persuasive source of intuition comes from rational choice theory in sociology (cf. Boudon 2003; Coleman 1990). Both of these literatures assume—commensurate with recent evidence from psychology (cf. Stanovich 1999)—that individuals are rational and ‘prone’ to *correct* human decision-making and this intuition naturally lends itself to opening up the bounds of rationality, even warranting an assumption of a (more) rational agent (McKenzie 2004). Humans are not perfectly rational of course, but agents who do an admirable job of making decisions correctly with little information, little time, much uncertainty, and natural constraints to computation. Rationality for some reason appears to be a dirty word in management—thus the heavy emphasis on boundedness rather than rationality—but, I believe a rational choice model provides a promising future path for management science (Felin and Foss 2006).

Economic and rational choice reasoning and intuition will also help us unpack (open up the black box of) many of the collective constructs that are so readily taken for granted so in the organizational literature: whether it is the organization itself, or networks, culture, the environment, and so forth. Thus, methodological individualism adds some helpful analytical rigor and leads to a much-needed unpacking of various collective constructs. I should restate that my call for a rational choice program—and, I see KGA as one potential embodiment of it—should not be seen as a critique of extant work, rather, again, I see it as a natural progression for the field to begin to explicate underlying microfoundations, to make progress via reduction (Elster 1989).

10.4. JC:

Well, Teppo, I agree with you completely that the overarching project is to ‘specify human nature and decision-making capabilities appropriately’ hence I do not see what you find helpful in the work of Stanovich or Baker and Pollock or, indeed, in that of Krueger and Funder. As I read them, these authors seem to stand on some fundamental misunderstandings about the notion of rationality and what it means to attempt to modify or add to it. Frankly, I am not familiar with this literature or with their kind of psychologizing but I sense they are confusing some observational impressions—that people seem to exhibit characteristics they find difficult to capture using the notion of logicity—with some epistemological notions of rationality. So they feel driven to seek alternative forms of thought and/or explanation, unsure about whether these are empirically based or conceptual. In particular, Baker and Pollock’s notion of *homo-multifacetatus*, which I presume means ‘multifaceted man,’ is neither defined nor developed and seems more like a throwaway observation than a real theoretical proposition (Baker and Pollock 2007: 301). My immediate problem is that we are not told whether the ‘multi’ here is of the multiple goals which a fully rational person might pursue, or whether it implies something like a ‘tolerance for ambiguity,’ often associated with leadership, which finds some unspecified way of dealing with a truly heterogeneous goal-set. My reading is that ‘the facets’ are the different goals a single rational mind might be able to hold onto rather than some conceptually distinct mode of thought or action like intuition. Likewise you speak of ‘heterogeneous preferences, interests, expectations and understandings’ so I guess you see the facets as multiple goals, each