A Retrospective: David's Contributions to Organizational Economics

By Hideshi Itoh, September 2016

It was July 1984 when David was invited to give a talk at the Second Mitsubishi Bank Foundation Conference on Technology and Business Strategy held at Ito City, Japan. He wrote and presented a new paper that was translated into Japanese and first appeared in the conference volume published in Japanese from Nihon Keizai Shinbunsha Press, 1986. The paper was later published in English in Alt and Shepsle (eds.), *Perspectives on Positive Political Economy*, Cambridge University Press, 1990, with the same title as that of his presentation at the conference, "Corporate Culture and Economic Theory" (Kreps, 1990). Searching Google Scholar shows us that the number of citations is nearly 3,000, and it is the fourth most cited of all the publications whose title includes "corporate culture", and the sixth most cited publication of "David Kreps." Among twenty-seven chapters of *Handbook of Organizational Economics* (2013), that exclude the chapter by Baron and Kreps (2013), seven chapters cite David's work and six of them cite Kreps (1990).

Let me briefly summarize his theory of corporate culture. Consider a long-term employment relationship between an employer and an employee. Since it is too costly or even impossible to specify all contingencies in advance (i.e., there are *unforeseen contingencies*) in a formal contract, exact terms of trade, such as the precise tasks to be performed by the employee, decisions to adapt to environmental uncertainty, and so on, are determined only as time passes and contingencies arise. In typical ongoing employment relationships, one of the parties has most of the authority to determine how contingencies will be met, who is often the employer who has better information and an ability to do so as well as a greater incentive to preserve reputation to treat employees fairly (i.e., not to abuse the decision rights). In this sense, the governance form is *hierarchical*. The relationship works fine in equilibrium if the employee is willing to trust the employer to act fairly, and the employer, even if short-lived, continues to have vested interest in keeping valuable reputation for fair dealing.

However, unforeseen contingencies make it difficult not only to specify all contingencies in a formal contract but also to have so clear and shared understandings concerning what should be done and whether or not the employer has acted fairly, after observing a particular contingency, that the reputation keeps the relationship alive. *Corporate culture* is a set of focal point principles that can deal with unforeseen contingencies and achieve such understandings. Let me cite his definition (Kreps, 1990, pp.93-94):

> "I interpret corporate culture as partly the principle itself (or, more realistically, the interrelated principles that the organization employs) and partly the means by which the principle is communicated to hierarchical inferiors (so they can monitor its application) and hierarchical superiors (so they can apply it faithfully). It says how things are done,and how they are meant to be done in the organization. Because it will be designed through time to meet unforeseen contingencies as they arise, it will be the product of evolution inside the organization and will be influenced by the organization's history."

Kreps (1990) is a seminal contribution to economic research on corporate culture. It has convinced many economists that corporate culture is an important determinant of firm performance and is worth studying (see Hermalin, 2013 for a recent survey). I think, however, that its more fundamental contribution is to show us the importance of informal, relational aspects of organizations: a firm as organization is a bearer of reputation, and corporate culture gives an identity to the firm.

Note that the firm must be long-lived in his theory. According to Kreps (1996, p.566), long-horizon relational contracts were at that time "less well known than the short-horizon models" and "of underestimated importance in exchange generally, because they form the basis for most of the most important form of incomplete-contract exchange; viz., employment." For example, the property-right theory of the firm (PRT) by Grossman and Hart (1986), Hart and Moore (1990), and Hart (1995) defines the firm as a collection of non-human assets and explains ownership patterns (integration or non-integration) for particular transactions with relatively short horizons. Since then literature on relational incentive contracts has been growing and studying not only employment relationships but also various decisions and practices in organizations (see Malcomson, 2013, for a recent survey). Baker et al. (2002) introduces asset ownership into repeated relationships and studies relational contracts both within and between firms. Gibbons and Henderson (2013) argue that one reason why good management practices associated with persistent performance differences do not diffuse is in implementation difficulties---"managers know they are behind, they know what to do, and they are trying hard to do it, but they nonetheless cannot get the organization to get it done"---in particular, the problem due to lack of unambiguous and shared understandings pointed out by Kreps.

I should also note that Kreps (1990) is very explicit about not individuals but the *firm* bearing reputation (and hence *corporate* culture). In his theory the firm is an intangible name, and it has a role only if a sequence of short-lived employers make decisions in the firm's name and have vested interest in the firm's keeping a good reputation. See Tadelis (1999) for a formal analysis along this line. In contrast, as is pointed out by Kreps himself and Holmstrom (1999) among others, PRT does not directly answer why firms rather than individuals own most of the productive non-human assets.

It is true that David's theory does not directly distinguish between transactions within firms and those between firms. Two parties engaged in a transaction, employer and employee, can instead be a manufacturer (e.g., Toyota) and a parts supplier (Denso). While he is more concerned about "organizational efficiency" than firm boundaries, one can view that his relational transactions correspond to "transactions of the middle kind" (or hybrid modes), which Williamson (1985, pp. 83-84) argues are much more common than he earlier thought. In this sense, I think his theory complements those theories of firm boundaries that focus on formal distinction between integration and non-integration.

After the earlier contributions (Kreps, 1990, 1992, 1996), he has mostly been working in the field of HRM, in particular, motivation (Kreps, 1997, 2010, 2014, 2016), sometimes with Jim Baron (Baron and Kreps, 1999, 2013). He continues to emphasize the dynamic, ongoing nature of (employment) relationships as the underlying framework, based on transaction cost economics a la Williamson and its precursor Simon (1951), and asks, "How should an organization...motivate the people who work for it, to get the best possible results (Kreps, 2016)?" David answers to the general question about how to motivate people as follows:

> "The problem is that there is no single best answer to the question....it can be bad idea to look for the best answer, because motivation is but one of a larger set of human resource management (HRM) issues, all of which tie together in complex ways." (Kreps, 2016)

> "To understand the management of human resources, we must reach back to the basic economic, social, psychological, and legal forces that impinge on employment.... We also aim to enlist all three of economics, psychology, and sociology....we believe that all three are important to a full understanding of HRM, and that the three are complementary---each improves rather than competes with the others." (Baron and Kreps, 1999, pp.6-8)

Kreps (2014) asks, "What is the best way to motivate *consummate* effort undertaken beyond perfunctory performance?" He argues that motivating employees is becoming more important and more difficult partly because the share of "type-K jobs" (for Knowledge), characterized by multi-tasking, task ambiguity, creativity, cooperation, autonomy, and so on, is increasing. The economic theories of incentives, a.k.a. principal-agent theories, teach us that for these kinds of jobs, the optimal incentives should be lower-powered than for jobs without these features. Social psychology provides alternative motivational channels such as intrinsic motivation. "Why are some promises not secured with compensatory damage payments?" is the question asked in Kreps (2010). He carefully examines "the meme that Extrinsic incentives drive out intrinsic motivation", the "ready answer from the discipline of psychology".

David also argues that the basic framework of the long-term employment relationships should be extended from the single transaction studied in isolation to a bundle of transactions analyzed simultaneously. He writes as follows:

> "Because employment is simultaneously an economic and social relationship, one cannot profitably study it as one or the other in isolation. To understand employment relationships requires taking into account both economic and social-psychological dimensions of their content and context and, especially, how economic and social forces interact." (Baron and Kreps, 2013, p.315)

Just as he is among the microeconomics theorists who take Williamson most seriously, David takes theories outside standard economics, in particular, social-psychological theories of motivation more seriously than other economists. He argues that psychology and economics tend to be complements, and incorporates psychological perspectives into economics to better understand diverse motivational mechanisms and channels utilized by different organizations in similar situations.

Furthermore, he takes one prominent feature of psychological theories that goes beyond standard economics very seriously, which is the notion that individual preferences can change and be malleable. Orthodox economics assumes that tastes of individuals are fixed and invariant, and tends to explain the diversity of what motivate employees across different organizations by screening rather than changing tastes.

David is not afraid of extending his arguments beyond standard economics even in his earlier work in organizational economics (Kreps, 1990, 1996). Unforeseen contingencies and focal points are outside orthodox economic theory at least at that time, but play critical roles in his theory of corporate culture. And he writes about bounded rationality as follows:

> "If Markets and Hierarchies has been translated into game theory using notions from information economics, it is a very poor translation....In particular, mathematics-based theory still lacks the language needed to capture essential ideas of bounded rationality, which are central to Williamson's concepts of transaction costs and contractual form. Anyone who relies on the translations alone misses large and valuable chunks of the original." (Kreps, 1996, p.562)

While he has often gone beyond orthodox economics, David never leaves economics behind. "I reaffirm my faith in models in which individuals maximize (albeit as best they can) and admit that my objective is to convert the heathens to economics by mild cooption. (Kreps, 1996, p.593)"

Responding to Kreps (1990), he himself develops a formal, although static, decision-theoretic model of unforeseen contingencies by identifying preferences for flexibility with them, and it is further extended by Dekel, Lipman, and Rustichini (2001). As for the notion that an individual's desires can change and be changed, he argues that it "should become part of economic orthodoxy (Kreps, 2014, p.2)."

> "Talk of "unchanging preferences" concerns dynamic choice behavior, and while additional properties can be found that knit together choices made at different points in time and that then guarantee that dynamic choices are *as if* the agent had unchanging preferences, those additional properties are even less reasonable empirically than the properties that give utility-maximization as an as-if model for static choice."

So he argues that not only seeing whether or not a model of changing tastes is good but also seeing which of sophisticated choice and naive choice models of dynamic choice is more appropriate.

Let me conclude. David contributes to organizational economics by (i) bringing the informal, relational nature of organizations on stage; (ii) going beyond standard economics without leaving it behind; and (iii) persuading us to realize the crucial importance of these subjects to understand firm performance and motivation.

Finally, I cannot help mentioning his contribution as a great educator for students in organizational economics. I believe many doctoral students have learned transaction cost economics (for the first time?) and its connection to formal models from his microeconomics textbook (1990). His MBA textbook (Baron and Kreps, 1999) and trade book manuscript (Kreps, 2016) propose an interdisciplinary framework and offer rich sources of academic research. He always encourages us to develop formal models further rather than develop them by himself, and he himself focuses on fundamental, methodological issues.

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