A Third AJE:M Article

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Still pursuing my apparent obsession with the most recent issue of the *American Economic Journal: Microeconomics,* this post looks at a third article, "Behavioral Economics and the Atheoretical Style". Perhaps surprisingly, I very much liked Ran Spiegler's piece. It is a worthwhile contribution to the methodological literature.

Professor Spiegler describes his article as follows: "Behavioral economics is widely perceived to be part of the profession's shift away from a culture that places abstract theory at its center. I present a critical discussion of the atheoretical style with which 'behavioral' themes are often disseminated: a purely anecdotal style in popular expositions, simplistic cost-benefit modeling in pieces that target a wide audience of academic economists, and the practice of capturing psychological forces by distorting familiar functional forms. I argue that the subject of 'psychology and economics' is intrinsically foundational, and that a heavier dose of abstract theorizing is essential for it to realize its transformative potential."

Readers of this Blog know that the GEM Project concurs with Spiegler's call for a paradigm shift that roots behavioral economics in the fundamental theoretic tenets of optimization and equilibrium. The Project's keystone contribution to such modeling is its rigorous analysis of employee behavior when restricted by costly asymmetric workplace information. Given its signature generalization of rational price-mediated exchange from the marketplace to the workplace, the Project notably advances Spiegler's agenda, subjecting a fundamental building block of behavioral economics – the strong preference for fair treatment – to a heavy "dose of abstract theorizing". The findings of numerous ultimatum-game and related experiments are firmly embedded in a model of rational exchange organized by general decision-rule equilibrium.

The GEM narrative. The Project argues that the strong preference for equity and the desire for redress of unfair treatment, identified by behavioral theorists, are well on their way to being accepted as axiomatic. The preference is increasingly recognized as an outcome of evolutionary biology that was embedded in neural networks as our distant ancestors adapted to survival advantages available from group cooperation. From a prominent neuroscientist Read Montague (2006, p.186): "Our instincts for sensing and responding to fair exchange evolved in a social environment where tit for tat was king. What you did to me today was coming back to you tomorrow in kind." In another notable example, Arthur Robson (2001) came to the hard-wired conclusion in his review of the literature on the biological basis of economic behavior

Guided by the idea that natural selection has embedded a preference for fair treatment in human neural mechanisms, modern brain research has been exploring the biochemistry of decision-making, producing critical information on proper axioms for use in economic modeling. The findings are remarkably consistent across cultures, providing direction that serious economic theorists cannot ignore. For early examples of this work, see Camerer, Lowenstein, and Prelec (2005). The behavioral theorists' conclusions are pleasingly consistent with Gary Becker's (1996) intuition that the roots of stable preferences are to be found in biology.

The GEM rational model. The weekly GEM Blog provides insufficient space to effectively summarize the Project's rigorous model of the universal preference for equity. For elaboration, see Chapter 2 in the website's e-book. You will find a careful analysis that features three classes of reference standards (interpersonal, intertemporal, and market-opportunity), denoted by $\mathbb{K}$. The worker's fair-treatment preference is shown to be satisfied by W^n =sup $\mathbb{K}$, where W^n is the efficiency wage. The class of reference standards that calibrate the employee's preference for fair treatment are named *specific workplace human capital*. Investment in that category of human capital occurs during on-the-job interactions (often involving informal training) as veteran workers inculcate new hires with a particular calibration for their inherent preference for equity.

Readers of this Blog recall that baseline workplace equilibrium is the phase of the dynamic micro-coherent generalized-exchange model during which $\mathbb{K}$ is rationally unchanged. In the third chapter of the e-book, the GEM theory is extended to endogenous $\mathbb{K}$, demonstrating how continuous-equilibrium $\mathbb{K}$ rationally varies, after inherently long lags, in response to changing product-market circumstances. The baseline analysis can be thought of as modeling business cycles, while endogenous-$\mathbb{K}$ dynamics helps explain longer-term trends.

The Project's rigorous reworking of behavioral theorists' ultimatum-game findings informs a useful instantaneous employee utility function: max $U(C,L^o,W/W^n)$, where C is consumption, L is leisure, and W is the

wage received. In baseline analysis, the reference wage is given, implying fixed consumption (C^o) unless the firm attempts to reduce rents by cutting compensation from W^n. Employee dissatisfaction with that inequitable change would then be reinforced by his or her preference for more to less consumption. Workers maximize momentary utility on the job at $W_j/W^n_j=1$

Employees, occupying an inherently subordinate position in the firm's hierarchy of authority, prefer fair treatment, define that preference along three dimensions, and formulate optimizing workplace decision rules accordingly. Worker equilibrium is understood as a rest period in the space of those decision rules. If established reference standards are violated, the now dissatisfied employee is in disequilibrium with respect to on-the-job behavior. Moreover, if the nature of the workplace does not permit the establishment of interpersonal and intertemporal standards, the operative reference system collapses to the market-opportunity comparison (W^a), making the reference wage equivalent to the worker's market opportunity cost (sup $\mathbb{K}=W^a=W^m$). Employees, no longer earning wage rents from endogenous OJB, return to their neoclassical labor-supply schedule and their optimization of work-leisure choice rather than on-the-job behavior.

Recall that Professor Spiegler asserts that a heavy "dose of abstract theorizing is essential for [behavioral economics] to realize its transformative potential". He should be pleased that the keystone finding of behavioral theorists has been grounded in optimizing general-equilibrium modeling. It is then used to transform the pricing and use of labor from stabilization irrelevancy to be uniquely consistent with the broad range of evidence produced by highly specialized economies. It is a big deal.

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