Gintis: Marx, Smith, Bourdieu, Wright: The Fate of a Rational Economist

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Herbert Gintis was a star Marxian economist (socialist) back in early 1970s. The labor process was the fundamental field of distinction according to Gintis (and Samuel Bowles). Capitalist's power rule the labor process and make it another universe compared to any other transactional sphere containing exchange among equals. That was long time ago.

Gintis then became a staunch critique of Marxian economics, rather Marxian garbage in his satiric musings. Gintis and Bowles devoted the whole decade of 1990s on Post-Walrasian economics. Then came the era of evolutionary biology and evolutionary game theory.

1 Bounds of Reason and Many Worlds

Gintis became furious about the so called dialectical logic which was the deriving force of the Marxian economics in particular and Marxian social theory in general. For him dialectics signified a dead-end. Analytical rigour vested in mathematics should be the real deal.

The great vision of Gintis (2009) offered a 'unified methodology and theory' for the the basic social sciences: psychology, neurology, political sciences, economics and anthropology. One might ask? Why not history or philosophy? The fundamental block would be the rational action/actor model (RAM).

Gintis was aware of the fact that RAM was restrictive in macroscopic scale.

1.1 Bourdieu's Triad: Habitus, Field, Capital

The 'feel for the game' as Bourdieu calls derives from the past experiences and hence constructed beliefs. The codes of behaviour are reproduced in

'fields' embedded in habitus. Generally classes and locations in class networks shape and co-evolve with 'habitus' that structure the 'Rules of the Game' in a society. However at meso-scales 'fields' form the common understandings about the rules of the game, strategy profiles, actions and payoffs.

When Gintis (2010) agrees with Binmore (2010), he implicitly agrees on the central tenets of Bourdieu as well.

> "In complicated games, one can expect the massaging process to converge on the same common prior for all players only if their gut feelings are similar. But we can only expect the player to have similar gut feelings if they all share a common culture and so have a similar history of experience" (p. 136).

2 General Equilibrium, Statistical Mechanics, Entropy and Labor Theory of Value

This is the most juicy part.

Gintis (2007) is an attempt for a model of evolutionary general equilibrium theory of prices.

"Suppose we move to a Large World in which there is no auctioneer, so expected future prices are private information, consumers form price expectations through search in each period, producers adjust pricing and production parameters by imitating more successful firms, and individual workers? formulate wage offers by imitating other, more successful workers. In Gintis (2007), I presented an agent-based model of such an economy and found that the resulting dynamic had a globally stable stationary state using plausible parameters for economies that are unstable in the traditional tatonnment process."

Prices depend on price expectations. So in a sense the processes involve adaptive expectations rather than Bayesian updating (?). The prize question is of course where do the agents get their initial price expectations. They are random variables.

Well, Farjoun and Machover (1984) and later Wright(2010) derive general equilibrium theory of prices based on Labor Theory of Value (LTV) by doing exactly the same thing: Taking prices as random variables.

2.1 Entropy in Biology and Physics and Information

"In our version of the Walrasian model, demand is decentralised, each agent having a private utility function with individualised parameters (disutility of

labour and discount rate), giving rise to a supply of labour function reflecting an individual?s trade-off between income and the disutility of effort. Effort is visible to the firm, so an enforceable contract can be written specifying the wage paid and the effort received. Also, each agent is endowed with a fraction of the total capital stock from the rental of which the agent derives non-labour income. We include one centralised institution, which we call the Monetary Authority, whose existence is required by the fact that the economy must have a monetary system. Firms sell their product on markets in exchange for money and make monetary payments to factors of production that use the money to purchase products. The Monetary Authority has the power to create money but does so only under two conditions. First, a new firm is loaned enough money for one period of production and sales, and firms that lose money are loaned enough to continue in business until their poor performance leads to their dissolution through bankruptcy (in each reproduction period, the least well performing 5%of firms are forced into bankruptcy). Conversely, if a firm makes positive profits, this is taxed away by the Monetary Authority. Second, unemployed workers are given unemployment insurance by the Monetary Authority, although this is recouped by the excess profits tax and a tax on wages. Since the Monetary Authority is not obliged to run a balanced budget, the money supply need not be constant."

The link with evolutionary game theory is through updating process of firms and workers.

"Firms maximise profits by adapting to market conditions. Firms that perform poorly copy the operating characteristics of randomly encountered others that have higher profits. To determine the copying process, we use a replicator dynamic, which implies that a firm that has above-average profits is copied with a probability proportional to its profitability, and a firm that has below-average profits copies another with a probability proportional to its degree of failure."

The Replicator Dynamics on the other hand relates to Entropy through Bayesian updating.

Gintis realizes this linkage when he says:

"The findings may serve as a basis for formulating analytical models more accurately reflecting these characteristics. Such modelling may be inspired by physics, where only the tiniest systems are analytically tractable but where statistical mechanics, simulated annealing, percolation theory and other powerful techniques, are deployed to specify the macro behaviour of a system with many degrees of freedom (Albin and Foley, 1992; Foley, 1994)."