

Title: Dr Pangloss, I presume? Functionalism and the Evolution of Institutions: Seven centuries of Italian sharecropping contracts, 821 to 1517 AD.

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ABSTRACT

Over 100 years ago Veblen (1898) asked why economics was not an evolutionary science, and answered that the mental habits of economists were far too conservative to venture on the “risky and uncertain” enterprise of exploring the evolutionary paradigm. No doubt his answer would not be the same today. Important exploratory work has been carried out, notably by Nelson and Winter (1982), but unquestionably economics as a whole still pays little more than lip service to evolutionary analysis (Hodgson 1993 for review). In a sense this is not surprising: in the textbook neo-classical world, evolution has already happened. The efficient have been rewarded, the inefficient weeded out, and there are no “big bills left on the sidewalks” (Olson 1996). Evolution is defined out of existence.

This state of affairs is recognised as unsatisfactory, but no consensus exists on how to modify it. Vromen (1995) has argued that the real difficulty in trying to apply evolutionary thinking to economics lies in arriving at a satisfactory specification of the transmission mechanism. Of the three ingredients underpinning evolution, mutation, selection, and transmission, this last aspect remains the most troublesome. In part this may reflect a deep, if mostly unspoken, division among economists interested in an evolutionary approach on what Sober (1984) has called the difference between “selection for” and “selection of”, or what could be termed the functionalist vs. the structuralist view of evolutionary economics. The first has the disadvantage of being more or less openly teleological: traits are selected that bring an evolutionary advantage (=increased transmission of genes into the next generation, or in economics, higher net benefits). In this Panglossian world, all is at its best given transaction costs, and the outcome may in fact be indistinguishable from a smooth Arrow-Debreu setting. The second has an implicit randomness (traits arise haphazardly, and competition works with whatever current traits are available) that moves us too far away from the Promised Land of Pareto optimality. One is purpose-driven and forward-looking, but ends up assuming away what has to be explained; the other is rooted in the past and pushed from behind and has trouble dealing with significant shifts. Unsurprisingly in this state of affairs, the evolutionary analysis of institutions has been focussing on collecting case studies. (Alston, Eggertsson and North 1996)

Yet the structuralist and functionalist approaches are not mutually exclusive. I am not suggesting that I will put forth a general paradigm of reconciliation, but more modestly I will examine how a particular institution changed over time in response to external stimuli and internal needs. The institution is the long-lived share contract known as *mezzadria* in Italy, already in use by the 9th century AD, and really not abandoned until the 1960s. The contract had a series of well-defined clauses, some of which appear in the early versions in one guise or another, while others are only introduced in successive centuries. I thus have a well-defined set of rules, carefully

recorded in notarial chartularies, exhibiting both stability and change. From June 821 to January 1517 I can track the evolution of clauses through 835 sharecropping contracts, following them through periods of demographic expansion (9th to early 13th centuries), stagnation (late 13th to mid 14th, 15th) and decline (from mid-14th on), through shifts in demand, altered relative prices, and other changes.

The analysis identifies a number of contractual obligations present in the earliest agreements and tracks how these have changed over the 7 centuries for which evidence is available. By “changed” I mean, first, refinements and extensions of each obligation; second, their geographic spread; third, the frequency with which they are mentioned. In effect I will treat the early contracts as an initial benchmark against which mutation can be tracked. So far there is nothing here to disturb the sleep of the most orthodox structuralist, but what I intend to show is that mutation to the original “benchmark package” is functionally explainable. To do so I have to have a framework within which changes can be understood. Broadly, this is a principal-agent problem

I have argued (Galassi 2000) that share contracts constituted a compromise between two opposing forces: the problem of opportunistic behaviour by the labour force in a setting where multiple margins of performance had to be monitored on the one hand, and the costliness of monitoring inputs on the other. The sharing rule is, in this perspective, meant as a self-monitoring incentive given that continuous supervision was not cost effective. However, multiple performance margins and exogenous noise meant that room for discretion had to be built into the contract, which in turn gave scope for opportunism. Since not all opportunistic choices would have been known at the time when the benchmark package was designed, the functionalist account of the contract’s evolution needs to show that there occurred a restriction of opportunistic behaviour in those areas where discretion did not matter (and may have been harmful), while retaining discretion where detailed prescription would have generated cumbersome and possible counterproductive reactions. This evolutionary trend must then be shown to have spread chronologically and geographically from its inception point.

The functionalist test of an evolutionary explanation of contractual change is therefore reasonably easily designed. Because I cannot observe communication flows between actors, I have to rely on geographic or chronological proximity to argue that a solution found in one location spread (that is, increased its frequency in the population). If this is found to be the case, the process will be clearly Lamarckian rather than Darwinian or, in more current parlance, “memetic” (Blackmore 1997). If so, Dr Pangloss may still have the last laugh.

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