

Game Theory and the Architecture of Social Theory: Reflections on Luigino Bruni's *Ethos of the Market*

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Abstract: This essay is written for a symposium on Luigino Bruni's *The Genesis and Ethos of the Market*. That book identifies a tradition of Neapolitan civil economy that arose in the 18th century, and which the author opposes to the more familiar tradition of Smithian political economy. The difference in traditions is located in contrasting theories of society in which markets are situated. Where Bruni reduces the Smithian tradition to a prisoners' or Hobbesian dilemma, he reduces the Neapolitan tradition to a stag hunt. While this essay accepts the general superiority of the stag hunt as a framework for organizing social theory, it also explains the misleading character of Bruni's reduction of society to a universal stag hunt. In place of that reduction, this essay treats societies as ecologies of stag hunts which in turn leads to recognition that societies are continually turbulent and conflictual and not placid and peaceful.

Keywords: Neapolitan civil economy; Antonio Genovesi; stag hunts; prisoners' dilemmas; game theory as social theory; society as ecology; social conflict

JEL Codes: B10, C70, E02, P16

Introduction

Most economists work with a two-winged societal architecture of state and market, as exemplified by Paul Samuelson's (1954, 1955) canonical distinction between public and private goods. An alternative, three-winged architecture would feature state, market, and civil society. Luigino Bruni's *The Genesis and Ethos of the Market* presents a three-winged architecture. The book starts with some history of thought where Bruni sets forth the alternative architectures, after which he explores some implications of those architectures for contemporary theory. While I find both parts of the book interesting, after some brief introductory remarks I will concentrate on the theoretical part because that is where by stronger interest lies.

Bruni identifies two traditions of social theorizing within the intellectual history. Aristotle and Aquinas are the prime figures in one tradition, and within this tradition he locates Antonio Genovesi (1712-1769) and Giacinto Dragonetti (1738-1818) as representing a Neapolitan tradition of civil economy. Martin Luther and Thomas Hobbes are the prime figures in the alternative tradition, and he places Adam Smith, and also neoclassical economics, within the Smithian tradition of political economy. The traditions differ in their treatments of individuals in relation to society, and that difference is illustrated crisply by the title of Chapter 1: "From the Community-without-Individuals to Individuals-without-Community." The Aristotle-Aquinas-Neapolitan tradition starts with society as the object of interest, with individuals being an extraction from society much as Henry Maine (1864) conveyed in his oft-cited remark to the effect that progressive societies reflected a movement from status to contract. The Luther-Hobbes-Smithian tradition starts with individuals as the object of interest, and seeks to arrive at society from this individualist point of departure, as exemplified by James Buchanan's (1975) formulation of the Hobbesian dilemma and also by Bruno Latour's (2005) assertion that social phenomena should be derived from a non-social point of departure.

My sympathy resides with the Aristotle-Aquinas-Neapolitan tradition, as exemplified by Wagner (2007, 2010) which works with a three-winged societal architecture. The scholarly program exemplified by the orthodox dichotomy between private and public goods is in my judgment corrosive of sound thought with respect to the problems of people living well together in close geographical proximity. Yet I also think Bruni's broad-brushed intellectual history is clouded by his enthusiasm to highlight the Neapolitan tradition so that to some degree his history becomes caricature rather than apt characterization. In contrast to Bruni, Peter Boettke (2012) disaggregates what Bruni calls Smithian political economy into what he calls mainline and mainstream branches. In constructing his aggregation of theorists, Bruni also

previews what I regard as the main deficiency of his social theorizing, namely, his reduction of complex ecologies to representative agents and interactions.

In the second part of the book, Bruni seeks to recast contemporary theory within the Neapolitan framework of civil economy. The primary means by which he does this is to contrast two familiar game-theoretic models. One is the prisoners' dilemma, which Bruni associates with Smithian political economy. The other is the stag hunt, which Bruni associates with Neapolitan civil economy. While I think Bruni is on the right track with respect to a reconstruction of economic theory, I also think he goes off the rails in executing his theoretical vision, not so much by what he does but by what he fails to do. He reduces society to some singular play of a stag hunt when the alternative is to work with an evolving ecology of stag hunts. In selecting the reductionist over the ecological orientation, Bruni winds up in the same Hobbes-Smith analytical box from which he sought to escape by advancing the Neapolitan tradition of civil economy. In these brief remarks, I shall first contrast the two game theoretic frameworks for social theory, after which I will offer some comparison of reductionist and ecological orientations toward Bruni's material.

Prisoners' Dilemmas, Stag Hunts, and Social Theory

Bruni argues that the stag hunt game provides a superior framework for social theory than the prisoners' dilemma. About this I agree. Indeed, one may reasonably wonder whether a prisoners' dilemma can ever be observed. Two people are observed to fight. Should this situation be described as a prisoners' dilemma because some observer presumes that both would be better off if they didn't fight? The two might be fighting over something each wants badly but only one can have, and with both preferring to fight rather than flip a coin. This is a disagreement, perhaps a severe one, but there is no good reason to call it a dilemma as against recognizing it as one of life's many situations that involve disputation. As a vehicle for social theory, the prisoners' dilemma verges on incoherence as Daniel Ellsberg (1956) explains in his treatment of the reluctant duelist. The original formulation of the prisoners' dilemma involved three people, not two. Besides the two prisoners, there was a district attorney who placed the two prisoners into what was a dilemma for them but not for the district attorney. For the prisoners' dilemma to be sensible as social theory, the participants must have been put into that situation by someone else, and so they participate reluctantly inside that dilemma. This situation does not, however, provide a useful framework for social theory where everyone is in the position of a prisoner, all of whom collectively generate social configurations through their interactions. Conflict does not represent a dilemma so much as it

represents an eternal condition of society, as conveyed by the long-standing fable of Cain and Abel.

While the stag hunt offers a superior point of departure for social theory as compared with a prisoners' dilemma, realization of that superiority requires that the stag hunt be placed into an ecological setting rather than reduced to one universal play of the game. Bruni, however, takes the universalizing approach as befits an equilibrium theorist. He does this by contrasting a stag hunt game within the Smithian motif with the stag hunt game within the Neapolitan motif. Within either motif, the stag hunt game is a coordination game where whatever is produced is consumed in common but individuals can choose how much effort to devote to the hunt. The per capita yield from the hunt will be highest if each hunter participates energetically in the hunt. Yet individual hunters who slacken their effort will still participate in the common consumption. The stag hunt game and its options and payoffs invite us to imagine people moving through a forest seeking to catch a stag. The hunters are out of sight of one another, so each can choose how much effort to exert without being seen by the other hunters. One hunter might move vigorously through the brush and bramble, jumping over fallen trees along the way. Another hunter might take long rest breaks, and then meander when not resting. Both hunters, however, will enjoy the same feast at the end of the day.

Table 1 illustrates Bruni's conception of the stag hunt within the framework of Smithian political economy where each person is concerned only with his or her net gain from hunting. Each player chooses between two levels of effort. The lower level of effort ($E = 1$) is suitable for catching a hare but not a stag. For catching a stag, the higher level of effort denoted by $E = 2$ is necessary for both players, for the stag can be caught only through cooperative effort. If both players exert stag-like effort, they might catch a stag and will receive a net gain indexed at 2. Should they each slacken their effort, they will each catch a hare. Each will now secure a net gain indexed at 1. If one player exerts stag-like effort but the other does not, the player who exerts the higher level of effort will fare worse than the player who exerts the lower level of effort. In this case, each will catch a hare to be consumed in common. The person who exerted the stag-like effort, however, will obtain a net gain of zero because the value of the hare was offset by the disutility of the exertion expended in trying to catch a stag.

Table 1: Stag Hunt Game (Smithian Political Economy)

	Hare-like effort (E = 1)	Stag-like effort (E = 2)
Hare-like effort (E = 1)	1, 1	1, 0
Stag-like effort (E = 2)	0, 1	2, 2

Table 2 shows Bruni's portrayal of the stag hunt game within his vision of Neapolitan civil economy. The difference between the tables resides in Bruni's addition of the term ∂ , with $0 < \partial < 1$, to three of the cells in Table 2. The term ∂ is meant to signify some sense of civic spirit by acting in a friendly and cooperative manner toward others within the society. The impact of adding ∂ in Table 2 is to increase the likelihood that both participants will exert high rather than low effort, which through the accumulation of outcomes over repeated plays will generate a higher standard of living within the society. This formulation yields nothing surprising, for it says simply that team production will be more productive if the participants act genuinely as members of a team than if they act in solipsistic fashion. A society where people act after the fashion of Table 1 will be impoverished relative to a society where people act after the fashion of Table 2. A Smithian political economy of impoverishment and a Neapolitan civil economy of enrichment, however, does not map easily into any historical comparison of London (or Edinburgh) and Naples. Perhaps Bruni's theories don't fit the practices within the particular places. Perhaps British practice was better than Smith's theories with Neapolitan practice likewise being worse than Genovesi's and Dragonetti's theories.

Table 2: Stag Hunt Game (Neapolitan Civil Economy)

	Hare-like effort (E = 1)	Stag-like effort (E = 2)
Hare-like effort (E = 1)	1, 1	1, ∂
Stag-like effort (E = 2)	∂ , 1	$2 + \partial$, $2 + \partial$

To be sure, Bruni does not use these alternative formulations of the stag hunt as explanatory instruments. He uses them as motifs for organizing social theory. All the same, one cannot help but wonder what either formulation of

the stag hunt has to do with the problems that arise out of people having to live together in close proximity which provides the material for social theories to explore. I think Bruni's intuitions are right about society being more usefully thought about within a three-winged societal architecture than within the conventional two-winged architecture. I also think the stag hunt provides a more useful point of orientation than the prisoners' dilemma. Yet I think Bruni ends his analysis with what is essentially a lengthy preface to the analysis he did not undertake. The unfulfilled challenge or promise of what Bruni sets before us requires exploring the missing gaps in a social theory of civil economy that would stand in contrast to the impoverished theorizing that follows the orthodox motif. For instance, within an ecology-theoretic motif, sets of hunters would surely develop alternative institutional arrangements. In one such set, a hunter discovered sleeping rather than helping to hunt a stag might have his head bashed in. This might reduce the odds of catching a stag at that moment, but it would also reduce the number of people to be fed from whatever was caught. More significantly from an ecological orientation, the stage would have been set for the emergence of regions of private property within the social commons, adding institutional structure in the process to the environment in which stag hunts occur.

Facing a Fork in the Social-Theoretical Road

The object about which economists theorize is denoted by some such abstract noun as economy or society. But there are different ways to conceptualize that object, and those different conceptualizations lead in different analytical directions. The most prominent conceptualization these days treats societal observations as pertaining to states of equilibrium. This conceptualization allows, indeed requires, reduction of society to a single play of a stag hunt and its architecture from three wings to two, or even to one. Three distinct wings might be identified, and yet those wings bear a definite pattern of connection dictated by the given conditions by which equilibrium theories proceed, and which allows reduction to a single wing. For instance, the intensity of civic spirit will be reflected in market outcomes, perhaps with standards of living varying directly with intensity of civic spirit. The pattern of political outcomes will likewise conform to the given conditions, in that the state-market boundary will vary according to assumptions about preferences. The logic of Pareto efficiency must pertain to society in its entirety, which in turn dissolves any three-winged architecture into a uniform field defined by the equilibrium conditions in light of the relevant data (Potts 2000).

Within equilibrium theory, economics is necessarily reduced to a science of rational choice, and with society disappearing into the background through

this reduction. The market is a social commons that people step into in two capacities. One is as a producer who supplies inputs. The other is as a consumer who buys products. The analytical domain of economics is generated through various exercises typically involving constrained optimization: producers maximize net worth and consumers maximize utility. Beyond those two adventures into the market, the rest of life proceeds as if people were solipsistic. The market is an instance of a social commons that allows people to live more commodiously than they could live under autarky, but that is all. This is the “individuals without community” part of the title of Chapter 1. No one makes such assumptions explicitly, of course, but the conventional reduction of the object of economic theory to states of equilibrium has this effect.

The logic of this reduction can be avoided only by embracing non-equilibrium or ecological theorizing, as Wagner (2007, 2010) elaborates. The orthodox market-state dichotomy leaves no place for society or community in any real as distinct from virtual sense of the word. In contrast to this implicit sociology of autarkic individuals who use the market as a way to multiply their capacities, Bruni wants to treat the market as a social space, to recur to Virgil Storr’s (2008) formulation. The challenge raised by the “community without individuals,” part of Bruni’s title for Chapter 1 is to incorporate genuine community into economic theory without allowing individuals to recede into the theoretical background. To this this requires a three-wing architectural arrangement for the analytical object denoted as society, whereby society is constituted through the three spheres of market, state, and civil society, as illustrated by such scholars as Georg Simmel (1900), Norbert Elias (1982, 1991), Vincent Ostrom (1999), and Jeffrey Alexander (2008). The Neapolitan tradition of civic republicanism likewise operates with this three-part scheme.

What is the point of distinguishing civil society from market within an equilibrium theory? Within that theory, civil society and market are both arenas organized through voluntary transaction and so are both instances of market. Any distinction between the two is as arbitrary as a distinction between night clubs and movie theaters as places where people like to go. The central problem statement of equilibrium theory starts with the presumption of given wants, resources, and knowledge. From this point of departure, civil society has no work to do that is not done already by market.

Alternatively, if there is work to be accomplished within a sphere denoted as civil society and distinct from market or state, that work must be situated in some fashion outside the orthodox equilibrium framework. Civil society would be bound up in many ways with the civilizing process, to recur to the title of Norbert Elias’s (1982) penetrating treatise. Within this alternative analytical scheme, wants are not given but rather are continually being formed and changed through social interaction. Society involves people living together

in close proximity, and the processes involved in doing so are often quarrelsome and conflictual and not always peaceful and pleasant. For instance, there is continuing conflict at various margins between holding individuals responsible for their actions, as reflected in traditional private law principles and practices, and replacing responsibility with therapy, as Philip Reiff (1966) noted and lamented.

In contrast to the implicit sociology of autarkic individuals who use the market as a way to multiply their capacities, Bruni wants to treat society or community as more than market. The orthodox market-state dichotomy, however, leaves no place for society or community in any real as distinct from virtual sense of the word. A three-winged social architecture makes sense only within an analytical framework grounded in non-equilibrium processes of ongoing development and contestation. One could, of course, always portray a three-winged architecture in equilibrium terms, but nothing would be lost by reducing that architecture to two wings or even one. To avoid reduction of three wings to two, or even to one, requires an intellectual framework wherein each wing possesses some autonomy, as illustrated both by Georg Simmel's (1900) and Jeffrey Alexander's (2006) treatment of society and by Carl Schmitt's (1932) treatment of the autonomy of the political.

What Vantage Point for Social Theory?

Social theory involves a theorist who thinks about society in some fashion. To do this, however, requires adoption of some vantage point, of which there are two possibilities. One point places the theorist outside the object of interest; the other point places the theorist inside that object. Theorizing about society is different from thinking about nature in this respect. In thinking about frogs or geese, for instance, there is no option but to theorize from a position outside the object of inquiry because we have no experience of how the world appears to a frog or goose. For the social sciences, however, there are both inside and outside positions from which to theorize, though the outside position is really imagined and not experienced because society as an object cannot be apprehended in its entirety.

Suppose someone sits in a balloon a mile above a crowd that contains 5,000 people that are moving down a boulevard. Everyone in that crowd is moving at the same speed and in the same direction. They all start and stop in unison. In all respects, the crowd is acting as if it were a single person who happened to resemble a rectangle, or perhaps an exotic species of caterpillar. It's likely, of course, that such an observer would recognize that he was looking at people and not an exotic caterpillar, and so conclude that those people constituted a parade.

On another day, that same person might once again sit in a balloon a mile above another crowd of 5,000 people moving down a boulevard. While this crowd seemed to move at roughly the same speed as the previous crowd, some people would be seen to move faster or slower than most of the people. From time to time, moreover, some people would break ranks and leave the crowd. In comparing the two crowds, this second crowd would appear distinctly disorderly and possibly even chaotic. The observer would surely conclude that it would take some considerable effort by a parade marshal to shape this crowd into a respectable parade.

Occluded from the observer's field of vision was the stadium that the crowd had left after conclusion of the game they were watching. What was observed was not an imperfect instance of a parade, but rather a social configuration that was not at all reasonably reducible to a parade. This configuration was not at all disorderly or chaotic. It did not conform to the observer's image of what a parade should look like, but it wasn't a parade in any case, and any effort to treat it as a parade would yield social disruption and not improvement. The orderliness of the exit from the stadium is readily apparent to those who are inside the configuration. While that scene might have some frantic qualities or moments as people rush to their various destinations, it is orderly all the same as people are able to get to their desired destinations pretty much as they had planned.

Coordination within this pedestrian crowd, however, is qualitatively different from coordination among the members of a parade. The pedestrian crowd ontologically is a different type of social configuration than the parade. The parade is supervised and directed by a parade marshal. It can be reduced to a point mass status and its progress illustrated by a dot that moves along a map as time elapses. This can't be done for the pedestrian crowd. The members of the crowd are traveling to different destinations and walking at different speeds. The crowd cannot be reduced to some point mass status and designated as being in equilibrium. To be sure, it's possible the parade won't move as the parade marshal planned. For instance, some such exogenous event as the breakdown of a float might cause the parade to stop until a repair was made. Still, the parade is still reasonably reducible to point status, only that mass is now without motion until the repair is made. In contrast, the pedestrian crowd is a non-equilibrium process that includes jostling and turbulence as part of its natural operation.

The pedestrian crowd surely provides a superior image for social theory than a parade, yet the equilibrium character of orthodox theory construes societies as if they were parades. Within this framework, economics is necessarily reduced to a science of rational choice and with the objects of choice being resources and their allocations. The analytical domain of

economics is generated through various analytical exercises typically involving constrained optimization: producers maximize net worth and consumers maximize utility. Beyond those two adventures into the market, the rest of life proceeds as if people were isolated Robinson Crusoes. No one makes such assumptions explicitly, of course, but yet the common reduction of the object of economic theorizing to equilibrium states has this effect.

The alternative is to treat economics as a form of genuine social theory and not a theory of choice writ large. Doing this elevates the institutional arrangements for governing human interaction into the analytical foreground, while placing resource allocations in the analytical background. After all, resources do not allocate themselves, for only people can do such things. Placidity is the central stylized fact of equilibrium theory, save to the extent that exogenous shocks are imposed. But even the exogenous shock approach to turbulence is problematic because the equilibrium theory has no means within it to dissipate turbulence. Dissipation takes time and equilibrium stands outside of time. Within the context of equilibrium theory what exists are just different social configurations, which means that exogenous shocks can alter social configurations but the theory itself does not account for how that shock does its work in altering the history from what it would otherwise have been. In other words, turbulence is not apprehensible from within equilibrium theory. All that is apprehensible are equilibrium states, with the observation of different equilibrium states at different instants being attributed to exogenous shocks.

An alternative approach to explanation is to explain turbulence as an internally generated quality of human interaction (Wagner 2012). To do this requires that society be conceptualized as some such non-equilibrium configuration as a crowd of pedestrians passing through a piazza and not as a parade. Furthermore, explaining the characteristics of parades would involve different considerations than explaining the characteristics of the crowds in a piazza. Variation in the quality of parades would be explained in terms of such variables as the talent of the parade marshal, the musical and marching abilities of the members, and the amount of time given to rehearsal. None of these things are relevant for explaining observed variation in the orderliness of different piazzas. Instead, such variation would probably be explained in terms of such variables as the degree to which the participants have internalized common conventions of courtesy and the ability of people to judge the intentions of others so as to avoid bumps and collisions.

Pursuing the I-We Relationship

Perhaps no word is more misused than the collective noun “we.” Suppose a politician wants to establish a new program. That politician won’t say “I want to do this to reward some of my supporters.” Instead, the politician will say something like “*We* need this program to improve future opportunities for *our* children.” If four friends go for a ride, each of them would say *we* went for a ride. But if one of the four persons in the car had been kidnapped by the other three, that person most surely would not have said “*we* went for a ride.” Bruni’s use of the stag hunt within the context of Neapolitan civil economy requires recognition of “we,” as is conveyed by his use of ∂ in the stag hunt to illustrate some sense of affection for living within the social unit. Bruni objects to the Hobbes-like formulation because he doesn’t think a plurality of individuals will necessarily constitute a “we” in the Neapolitan scheme of thought, and I agree about this. At the same time, however, I am uneasy with the ease with which Bruni invokes “we” in the Neapolitan version of the stag hunt.

The Hobbes-like scheme of thought starts with individuals and explores how a set of such individuals might agree to constitute a society. The central presumption of this scheme is that individuals are prior to society. Initially, each individual must be separate from and unknown to the others. Otherwise, they already constitute a society. The analytical direction for social theory is to start with a set of individuals and generate a “we” from that point of analytical departure. To treat society in this manner is surely to embrace an impoverished notion of society as well as an impoverished agenda for social theory. Eight friends might gather one evening to play poker. Consistent with the Hobbes-like setting, they will agree on the rules by which they will play before they start playing. And they will complete a hand before they consider whether they want to change the rules for subsequent rounds of play. What is most notable about this stylized setting, however, is that the players comprised a society before they started playing: society exists before play starts.

The alternative scheme of thought starts with society and extracts individuals from that societal point of departure. This analytical scheme extracts a set of ‘I’s from that initial “we.” This alternative point of departure clearly fits the historical record, in contrast to the Hobbes-like scheme. Yet on several occasions I have heard the Hobbes-like scheme defended against the alternative on the grounds that the Hobbes-like scheme is analytically more challenging than the scheme that starts from society. This is certainly so if society is treated in equilibrium terms as the resolution of a universal Hobbesian dilemma. Yet there is no good reason to think the I-We relationship

is universal within society when the alternative is to think in terms of factions and coalitions.

While friendship exists inside society, so does antagonism and animosity. A desire for approbation is often posited as producing mutual support within societies due to the operation of processes through which esteem is generated (Brennan and Pettit 2004). While this is surely correct, also correct is Arthur Lovejoy's (1961) recognition that approbation is cousin to envy (Shoeck 1969). People have preferences over other people and their activities, but without arriving at identical rankings. Qualities and actions that elicit admiration from some people will elicit envy from others. Community is often assimilated to some warm and fuzzy notion or place, in which respect Bruni tells of a communal paradise that was lost in the aftermath of the Reformation. A more accurate story, I believe, would tell of a paradise that never was and never will be, as Augustine recognized in his two cities framework. To speak of community or society is not to speak only of such friendly things as dancing and playing poker. Fighting, after all, is also a social activity, as is the use of politics as an instrument by which some people dominate others. Societies have natural turbulence, and with the intensity of that turbulence varying across time and place. To keep such ideas in play, however, requires thinking about societies not in terms of geometries of smoothness but in terms of geometries of roughness. To do this, societies cannot be reduced to representative transactions, as exemplified by reducing the formation of constitutional consensus to the agreement among eight friends to play poker.

Going Forward

Luigino Bruni's *The Genesis and Ethos of the Market* raises some significant challenges for transforming economics into a genuine social theory, in contrast to its present position as primarily a theory of rational choice which is a monstrous by-product of the marginal revolution. A vision of economics as social theory, moreover, would locate economics as being centrally relevant throughout the range of the humane studies, in contrast to the narrow and often tangential place that is warranted by orthodox formulations. Bruni offers valuable insight relevant to pursuing such a scholarly research program. In my judgment, Bruni's intellectual history is more satisfactory than the contemporary theory part of the book. With respect to theory, I think the research program that conforms with his intuitions can be carried forward only within some kind of ecological framework where we both participate in and are caught up within the societal frameworks that we all participate in making but which all the same is not a direct object of choice for anyone.

Notes

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