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Homo Economicus and the Economics of Property Rights: History in Reverse Order

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Abstract

This article challenges some fundamental propositions of property rights theory by revealing the inability of new institutional economics to fully grasp the notion of property, as reflected in its narrow and problematic definition of property rights. The concept of property relations is proposed as better suited to capture the social and institutional aspects of property. By reconsidering the case of the Montagnais, originally used by Alchian and Demsetz for illustrative purposes, and drawing on the works of Polanyi and McManus, we show that the historical explanation of the emergence of (private) property rights provided by Alchian and Demsetz is flawed.

JEL Codes: D02, D23, P14

Keywords

property rights, property relations, homo economicus, emergence, historical specificity

I. Introduction

Much of the literature of new institutional economics is devoted to the institution of property rights. In contrast to neoclassical theory where property rights, although considered an essential prerequisite for the functioning of the market, is yet another black box treated as exogenous to the theory, new institutional economics attempts to make it endogenous to the model.

In this vein, the issue of property rights becomes fundamental to the discourse of new institutional economics. The related literature invariably asserts that the system of property rights forms the basis of all market exchange and that the allocation of property rights in society affects the efficiency of resource use. It is emphasized that well-defined property rights are the *sine qua non* of economic development since the prevailing system of property rights establishes incentives and delineates time horizons for investment in physical and human capital, production, and exchange (Libecap 2002).

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A large body of work stemming from Coase (1960) but also involving Alchian (1965), Demsetz (1967), Alchian and Demsetz (1972), Furubotn and Pejovich (1972), North (1981, 1990), and Barzel (1997), to name but a few, confirms that a theory of property rights plays an important role in new institutional economics. This is not to say that the proposed theory represents a homogeneous and unified theoretical framework, but simply to stress that the concept of property rights has become a central issue of investigation in orthodox economic theory.

Decisive differences exist, for example, with respect to the degree to which the state is integrated into the analysis. An attempt is made, once again, to extend the neoclassical model by addressing the neglected institution of property rights. This means that the maximization postulate based on (perhaps boundedly) rational self-interested decision making constitutes the basic underlying principle of property rights theory, with transaction costs, exchange, and contract being the basic concepts of the theory. In such a framework, the essential formulation, in a nutshell, is the following: since individuals try to maximize utility based on selfish preferences, the structure of property rights affects the terms of trade and the available possibilities of exchange. The value of a traded good depends, ceteris paribus, on how the property rights over this good are defined. Hence, if the property rights are well-defined, then lower transaction costs promote contractual exchanges and the consequent gains from trade are realized. On the contrary, if property rights are not well delineated, higher transaction costs may prevent the realization of an exchange (Furubotn and Pejovich 1972). The theory proposes that a more complete specification of property rights diminishes transaction costs and tends to enhance the efficient use and allocation of resources. Thus, the efficiency of an economic system is dependent upon the specific property rights structure of the given society.

In this article, we challenge some fundamental propositions of property rights theory by pinpointing some crucial theoretical weaknesses and historical inconsistencies. We do so by dealing
with the question of the origin and evolution of property rights. Therefore the main issue dealt
with is the emergence of property rights as seen from the perspective of new institutional economics. We begin in section 2 by bringing to the fore some definitional conundrums of the theory. Our investigation reveals the inability of new institutional economics to fully grasp the
notion of property, as reflected in its narrow and problematic definition of property rights. Then
in section 3 the question of the emergence of (private) property rights in the works of Demsetz,
and Alchian and Demsetz, is scrutinized by reconsidering their illustrative case of the Montagnais
people, before drawing some tentative conclusions in the final section. Using secondary (mostly
anthropological) sources and a political economy approach, we show that the conventional
story about the emergence of (private) property rights is both theoretically flawed and historically invalid in fundamental ways, thus opening the way for alternative political economy interpretations, a task, however, that is beyond the scope of the present article.

2. Definitions and Concepts: A Critique

The pioneering paper on the economics of property rights is conventionally, and justifiably, taken to be Coase (1960). Throughout his article, however, Coase makes no attempt to elucidate the meaning of the concept of property and hence the latter remains largely unspecified. New institutional economists since then have tried to clarify the notion of property rights. In their attempt to overcome the complexity and ambiguity surrounding the notion of property, they

¹For example, in Demsetz (1967) and Alchian and Demsetz (1972) there is no reference to the state or to any other form of third party enforcement in the emergence of property rights. North's work (1981, 1990), on the other hand, is more sensitive to this issue and incorporates a (neoclassical) theory of the state into his analysis of property rights.

developed a conceptual framework whereby property is defined in terms of exclusive rights over an asset or over the attributes of an asset (Alchian 1965; North 1981: 21; Demsetz 1988: 19; Eggertsson 1990: 38). Granted this, the concept of property is almost unanimously identified with the interpretation of ownership as a bundle of rights, be it "the right to use it, to change its form and substance, and to transfer all rights in the asset through" (Furubotn and Pejovich 1972: 1,139-1,140; see also Eggertsson 1990: 34-5; Furubotn and Richter 1998: 77), or the right to *residual* income (Alchian and Demsetz 1972), or *residual control* of rights over assets (*inter alia* Grossman and Hart 1986; Hart and Moore 1990; Hart 1995). Given this, property rights are often described as "incomplete," "attenuated," or "partitioned" (Barzel 1997: 4-5; Libecap 2002).

One fundamental flaw of the new institutionalist definition of property rights stems from the way new institutionalists conceive the idea of property itself. In their discourse, the concept of property is reduced to an analytical scheme in which ownership arrangements are explained in terms of person-to-thing relations. In this way, property rights are defined simply in terms of the actions that people are able to exercise with regard to the things they own. This is evident in the new institutionalists' approach of describing property through the incidence of the right to use, the right to transform, the right to alienate, etc., a thing or an asset. But as Hodgson (1988: 153) rightly observes, this conception is primarily about individual incentives rather than about the institution of property *per se*: "this stripping of the social and institutional aspect of the property concept enables the school to mistakenly treat 'property rights' largely or wholly as a set of incentives and disincentives for the owner: as simply an amended Benthamite calculus of pleasure and pain."

Having said this, it is also true that the new institutional definition of property rights indirectly involves a relational aspect. The rights to exclude others from using an asset, to dictate or limit the terms of their use, and to alienate the asset (i.e., sell it to others) all involve relations between people. Yet, in denoting property principally as a relation between an individual and a good or a service, new institutional economists obscure the fact that the concept of property chiefly involves relations between people. This is because as Hunt (2003: 95) puts it, "a property right is not simply or even primarily a relation between an isolated individual and a material thing. An isolated individual could use any material object in any way he or she chose, subject only to the law of physics, chemistry and anatomy. He or she would have no need for, and no conception of property rights. Property rights are essentially social relations between people." Furthermore, what is meant by property will vary both between societies and within any particular society over time. There is no general conception of property that can be maintained independently of the historically specific social relations that constitute it. As Marx (2001 [1847]: 197) states "in each historical epoch, property has developed differently and under a set of entirely different social relations To try to give a definition of property as of an independent relation, a category apart, an abstract and eternal idea, can be nothing but an illusion of metaphysics or jurisprudence."

So, in order to shift the focus of the concept of property away from relations between people and things to the social relations between people, one has to go beyond the new institutionalist conception. At the societal level and for the purpose of explaining the emergence of a specific property regime or the transition from one property regime to another, the notion of *property relations*, as a part of social anatomy, connoting mostly social relations between (production) agents, can provide a *directly social*, hence wider and richer, concept. Moving one step further, one has to have a hierarchical division of the economy into various moments (or spheres) of economic activity. Analytically, the chief moment in any economy is the sphere of production. A thing has to be produced before it is exchanged and consumed. Exchange, distribution, and consumption are analytically derivative upon production, which is the first act of economic life, although each moment is dependent upon all of them making up an organic whole, the socially embedded economy, where economy and society become an integrated unity. Within the

production sphere the prevailing system of property relations assumes central analytical importance. For our purposes, at the level of the socio-economic system, property relations can be defined as the economic and social relations describing the position of each individual in the production process with respect to the means of production. Through such a conception, the notion of property becomes sensitive to historical specificities that demarcate each social formation.

To sum up, although property rights have been a central concern of new institutional economics, the proposed conceptual apparatus suffers from inherent limitations. What is required is the adoption of a directly *social* (i.e. *relational*) conception of property, signifying a different approach to the whole issue. This involves the conception of property not as a relation between an individual and a thing, but as a social relation encompassing mostly social relations between production agents. With this in mind, we now turn to the question of the emergence of (private) property.

3. The Emergence of (Private) Property Rights

3.1. Demsetz and Alchian's Theory of the Emergence of (Private) Property Rights

One of the most enduring questions about private property is how it emerges, i.e. the mechanism through which the installation of private property rights is affected. New institutional economics tries to give an answer to this question by providing a theoretical apparatus for explaining the formation of private property. The touchstones of this apparatus are provided by the two seminal articles by Demsetz (1967) and Alchian and Demsetz (1973). In these works, the two scholars attempt to erect a positive economic theory of the emergence of private rights. By positive analysis we mean that the proposed explanation of the emergence and existence of (private) property rights is based upon the postulates of scarcity, instrumental rationality, and economic efficiency, supplemented, in this case, with the concepts of externalities and transaction costs. The underlying logic of the theory is that private property emerges as a result of the inefficiency of common property.

The point of departure is the notion of scarcity of resources. In an idealized world, where abundance allows a cultivator to use a plot until its fertility is exhausted and then move to another plot for further cultivation, property rights are considered meaningless. Since all other cultivators may similarly move from plot to plot without creating significant negative effects on fellow users, this state of affairs is free of social contestation. But in the real world of resource scarcity, clearly delineated property rights become a fundamental element of the social system due to their important role in resolving "conflicts over the use of scarce resources" (Alchian and Demsetz 1973: 16).

In moving from abundance to scarcity, property rights become closely related with the notion of externality. Following Coase (1960), Demsetz and Alchian offer a theory of internalization of externalities tempered by a transaction costs constraint. In the presence of significant external costs, the internalization of externalities involves a "change in property rights, that enables these effects to bear (in greater degree) on all interacting parties." Consequently, "a primary function of property rights is that of guiding the incentives to achieve a greater internalization of externalities" (Demsetz 1967: 348). Transaction costs, related to the costs of bargaining, establishment, and enforcement of a new property regime, determine whether the process of internalization is economically beneficial.

In accounting for the emergence of a new property rights system, Demsetz (1967: 350) asserts that the structure of property rights changes when the benefits of such change exceed the costs.

It is assumed that property rights emerge when some change in the relative value of resources occurs that makes it cost-effective to internalize costs previously experienced as externalities. This, according to Demsetz, might be due to the introduction of a new technology or the opening of a new market, which can alter the ratio of these benefits and costs. So, the chain reaction runs from an exogenous change in relative prices, to the alteration of the ratio between costs and benefits, to changes in property rights. At the end of the day, the installation of private property will, out of logical necessity, drive the system to an efficient allocation of resources.

The aforementioned theoretical framework revolves around, and develops along, the historical observation that private property rights arose out of the replacement of common property, which was the property structure largely prevalent in hunting societies. The basic idea, characterized as "optimist" by Furubotn and Richter (1998: 108), is that private property emerges because it is more efficient than common property. In particular, it is believed that common property is inherently associated with large social costs (i.e. negative externalities) and transaction costs, and thus the more property rights are privatized (i.e. the more rights are moved from the community to the household or to the individual), the lower the associated transaction costs and the better the parties involved are capable of internalizing the externalities.

Accordingly, Alchian and Demsetz (1973: 22) argue that their transaction cost theory of property rights could offer a reasonable explanation of the process of enclosures of common lands in England that took place between 1450-1700. However, the reference point for the construction of their theory is a "primitive" (hunting) society. Primarily, the authors attempt to validate their theory historically in the case of a tribal community, which was initially based on communal property.

3.2. The Historical Example of the Montagnais

In his classic historical illustration, Demsetz (1967) investigates the emergence of private rights in land among the Montagnais in the Canadian Labrador Peninsula, in juxtaposition to the native Americans of the Southwestern plains, where no settlement of the institution of private property took place. Demsetz examines anthropological findings, based on the work of anthropologist Eleanor Leacock, on the development of private property among the Montagnais. The story is well known. In the seventeenth century the institution of private property (in land) was unusual among such tribes. The Montagnais hunted beaver only for purposes of food and the relatively few furs thus acquired were for the hunter's family. There were enough beaver in the forest streams to satisfy the needs of all families. As a consequence, externalities, although present, were of such small significance that no one took them into account. Because the demand for beaver fur was relatively low and internal to the tribe itself, the system did not lead to overhunting, and hence there was no necessity to impose restrictions on land and on beaver hunting among the Montagnais. The socioeconomic system, premised on a "tribal-based collective ownership" in land, allowed any tribal member to hunt beaver within tribal territory (Demsetz 1967: 351-2).

At the beginning of the eighteenth century an important new development changed the balance of benefits and costs associated with beaver hunting. The exogenous factor that altered the ratio of relative prices was the opening of a new market, in which the French began to buy furs from the Montagnais. The result was the commodification of beaver fur, which could now be traded for novel goods. This had a direct impact upon the scale of hunting, which increased as a

²We use the terms "primitive society" whenever we refer to some study which uses these terms, but we put it in inverted commas indicating that this term is no longer in use. Generally, when the authors use the term "primitive society" they refer to a pre-capitalist society.

consequence, bringing about a sharp increase in the externalities associated with free hunting. Communal ownership of land then posed a problem: because the Montagnais had now an incentive to capture as many beaver as they could, it was in no one's interest to preserve the stock of animals. The Montagnais killed beaver faster than beaver reproduced themselves, the end-result being that no member of the tribe could gain from such a development, whereas all would suffer from the inefficient use of the commons (Demsetz 1967: 352).

Gradually, over a period of some decades, and starting in the districts that were the first centers of the fur trade, a system of private property in land was instituted. The system of private ownership came into being through the marking off of Montagnais's property (352). Each family became responsible for husbanding its furbearing animals and it was no longer in the family's interest to overexploit its now privately owned resource. The privatization of land thus internalized the externalities, since the costs of each family's hunting practices would be borne by themselves alone, not by other families, thus resolving the problem of excess resource depletion.

On the other hand, Native Americans in the Southwestern plains did not institute a system of private ownership in land. According to Demsetz this is consistent with his thesis, since the Southwestern Native Americans did not experience the advent of significant markets for plains animals comparable to those for furbearing animals of the forest, because the transaction costs of establishing and enforcing a system of private ownership remained high compared to the externalities that plains hunters imposed on each other. In other words, the costs of internalization exceeded the gains from the internalization.

As is immediately apparent, this is a historical illustration of what Hardin (1968), a year after the publication of Demsetz's article, called "the tragedy of the commons." The proposed solution is the privatization of common property. The emergence of private property will lead to the overcoming of problems that are inherent in communal ownership, in the sense that every individual, who is the exclusive owner, has the incentive not to overexploit the commons. In this conception, communal property is stigmatized as an inefficient form of property and hence the superiority of private ownership is asserted (355-6).

Although at first glance this scenario of the origins of private property seems a plausible theoretical explanation, it nevertheless has limited explanatory power because it suffers from both theoretical and historical inconsistencies. It is to these problems that we now turn our attention.

3.3. Some Preliminary Theoretical Considerations

Before proceeding to the theoretical and historical critiques of Demsetz and Alchian's analysis, some important conceptual and theoretical issues pertaining to the fundamental bedrock of their approach call for clarification. First, it should be noted that the notion of "emergence" does not refer to the origins of property rights *per se*, i.e. their first appearance in human history, but, rather, to the emergence of specifically exclusive *private* property rights in *land*. As Barzel (1997: 85) notes, it is impossible to develop an explanation of the initial emergence of property rights. This means that some forms of property rights are already in place, for instance private rights in consumption, as are some form of common ownership in land. Hence, the proposed theory does not have the ambition to explain the origins of exclusive rights *per se*, as the original dawn of some social practice in human history, but, rather, to provide a theoretical grounding for the transition from common ownership to private property in land.

Second, Demsetz and Alchian never make clear if the emergence of new property rights is the result of conscious rational choice or involves some form of spontaneous evolution. Initially, Demsetz (1967: 350) argues that "the emergence of new property rights takes place in response to the desires of the interacting persons for adjustment to new benefit-cost possibilities."

Immediately below this statement, however, Demsetz seems to take an agnostic attitude: "I do not mean to assert or to deny that the adjustments in property rights which take place need be the result of a conscious endeavor to cope with new externalities. These adjustments have arisen in Western societies largely as a result of gradual changes in social mores and in common law procedures. At each step of this adjustment process, it is unlikely that externalities per se were consciously related to the issue resolved."

In either case, Alchian and Demsetz explain the development of private rights without incorporating into the analysis the role of the state or any other third party enforcement agency. According to this view, the origins of private property are explained in a "state of nature" framework in which human beings live together without any government or formal law, and self-enforcing private rights are understood to evolve out of the interactions of individuals concerned only with their own interests. The focus is on optimality, efficiency, and equilibrium in the interaction among individuals. Individual preferences are assumed to be exogenous to the model. The emphasis is on how exogenous changes in relative prices affect the behavior and the consequent equilibrium outcomes.

Last, but not least, Alchian and Demsetz do not provide a purely theoretical story where pure economic reasoning yields a coherent theoretical explanation of possible social outcomes, but, rather, they claim to explain actual historical processes. This is made evident when Alchian and Demsetz (1973: 17) state their ultimate ambition: "how has this property right structure come into being? Economic historians can contribute very much to overcoming our ignorance ... and our purpose here is to facilitate historical research."

3.4. Terminological Problems and Historical Inconsistencies

Much of the theory's efficacy is based on the presumption that communal property provides an incentive for, and inevitably results in, excessive resource depletion (Demsetz 1967: 354). This tragedy presupposes that there is a "free" and "unmanaged" access to common resources. Indeed, this is reflected in Alchian and Demsetz's (1973: 19) definition of common property: "we shall use the phrase 'communal rights' to describe a bundle of rights which includes the right to use a scarce resource but fails to include the right of an 'absentee owner' to exclude others from using the resource. Operationally this means that the use of a scarce resource is determined on a first-come, first-serve basis and persists for as long as a person continues to use the resource." Furthermore, Alchian and Demsetz (1973: 19) go so far as to argue that common ownership can be "associated with state ownership," hence reaching the conclusion that "communal rights mean that the working arrangement for the use of a resource is such that neither the state nor individual citizens can exclude others from using the resource."

There is much confusion in this account of the nature of common property, since, in effect, common property is simply taken to mean anything that is not private property. However, such a distinction is elusive and vague. It is now widely accepted that property rights can in general be divided into four different classes: open access or non-property, common property, state property, and private property. Drawing upon Bromley's work (1989: 204-6) we can further elaborate the classification of property rights in terms of the holders of rights. *Private property* refers to cases in which an individual is vested with all the elements of a property right. This does not mean that these rights are unrestricted. In reality, private property is restricted by state regulation, social convention, social norms, and so on. With *state property*, on the other hand, the government or the public sector is responsible for the management of resources that are state property. The state has the right to determine use and access and thus the right of exclusion.

Under *common property*, property rights are assigned to a group of individuals collectively. Every member of the group does not "own" the rights individually, but jointly with the other members of the group. Finally, under *open access*, property rights are held by no one. No defined groups of users or owners exist and the benefit stream from the use of the resource is available to anyone.

Note that common property is essentially distinguished from open access property in that the community has the right to exclude the nonmembers from the use of the resource. In a now classic article on environmental economics, Ciriacy-Wantrup and Bishop (1975) clearly demarcate the difference between open access property, where no one has the right to exclude anyone from using a resource, from common property, where the members of a clearly demarcated group have the right to exclude nonmembers of that group from using a resource (see also Bromley 1991; Ostrom 1999). Thus, we can argue that under common property, a right to exclusion is assigned to a well-defined group, whereas under open access, a right to inclusion is granted to anyone who wants to use the resource.

Thus, Demsetz and Alchian's account fails to recognize a key distinction between *common property (res communes)*, where property rights reside with an exclusive group of co-owners, and *no-property (res nullius)*, where no property rights have been defined and enforced. This conceptual and definitional oversight is perpetuated in their works and leads to errors in description and economic assessment of historical common-property situations.

In this light, Demsetz and Alchian's theory becomes a dubious framework for explaining real historical developments. What they overlook is that in history there are no commons without communities within which the modalities of access to commons are managed. As Bromley (1991: 91) indicates, "the European common fields, the common forests (Iriaichi) in Japan, the common pastures in the Himalayas and the Andes, and the summer pastures in the Swiss Alps are examples of common property resources that were (and still are) certainly not open to all for indiscriminate squandering. These are examples of common property resources. Despite the sweeping predictions of Demsetz and others, these common property natural resources have been well managed for thousands of years." And he concludes that "they are not mismanaged precisely because they are common property resources. It is open access resources – what Demsetz calls 'communal property' – that are prone to mismanagement."

In other words, the new institutionalists are guilty of confusing property regimes in which a resource is free for the taking, with other regimes where access to, and use of, the resources are subject to strong internal regulations. As Carpenter (2000: 662, 663) for instance shows, based on a large number of ecological and ethnographic studies, restricted access fosters communication among the co-users to develop rules to protect the viability of the commons: "the hypothesis [is] that excluding outsiders from the local commons implicitly defines a salient ingroup among the members of the local community which, in turn, provides an impetus to institute rules to govern the use of the commons ... [I]f we can keep others out, it makes sense for us to do something about our behavior."

Additionally, in discussing Hardin's version of the problem, Thompson (1993) questions the validity of the theory on historical grounds. He portrays the theory as "uninformed" (108) in relation to the real historical facts, since "what it overlooks is that the commoners themselves were not without common sense. Over time and over space the users of the commons have developed a rich variety of institutions and community sanctions, which have affected restraints and stints upon use" (107). Moreover, Ostrom's (1990) comprehensive empirical analysis demonstrates that throughout history there were sustainable, long-enduring communities that have not succumbed to the tragedy of the commons. Through an in-depth analysis based on numerous case studies, including Japanese forests, Swiss grazing pastures, and irrigation systems in Spain

and the Philippines, she demonstrates the existence of several long-standing and sustainable common property regimes.³

Interestingly, some scholars within new institutional economics have acknowledged that commonly owned resources were in some cases actually managed as private property. For example Barzel (1997), based on Dahlman's (1980) work studying English villagers' practice of using certain areas for collective grazing and cutting firewood, admits that the commoners actually managed to rule the commons and hence the tragedy was avoided: "they could neither add livestock to the herd nor cut whatever amount of wood they wanted. On the contrary, they were allowed to place in the herd only a set of animals, and all villagers were restricted as to the amount of wood they could cut. Whereas that land was held in common, its use was directly controlled by the villagers, partly through voting. It was certainly managed as private property" (99-100).⁴

So far, the argument is that Demsetz and Alchian's exposition of the tragedy of the commons is an unduly pessimistic story. History shows that the tragedy is not at all inevitable under common property regimes. The theory is not well-founded on historical grounds. As Ankarloo (2006: 58) rightly argues, "rather than grounding the theory in history, property rights theorists most often bring a story as an *illustration* of the theory."

3.5. A Theoretical Critique: Transaction Costs and the Problem of Homo Economicus

Given the aforementioned analysis, it is quite legitimate to assume that the problem of over-exploitation of resources can be avoided by some form of regulation of the commons. For example, in the specific case of the Montagnais hunters, a logically conceivable solution to the problem of over-hunting might be the effort to manage the commons through the imposition of a rate for the number of hunted beaver. Through a collective decision-making mechanism the members of the tribe might restrict their hunting so as to ensure that beaver could reproduce themselves, thereby avoiding the "tragedy" of excess resource depletion. In such a case, regulation could do the job that new institutionalists argue could only be done through the privatization of land. Hence the logical basis of the explanation of the emergence of private property as the necessary result of efficiency considerations is removed.

Actually, Demsetz considers such a case but argues that the management of the commons implies significant transaction costs that eventually will prevent the agents from coordinating and cooperating on the pattern of resource use. In particular, he claims that any agreement to curtail the rate of exploitation of the resource presupposes some notion of collective decision

³Contrary to the conventional idea of the privatization of commons (or even centralized governmental regulation) as the solution to the tragedy of the commons, Ostrom proposes an alternative approach to managing the commons: the cooperative self-organization by the resource users themselves based on a set of "design principles." These include clearly defined boundaries, monitors who are either resource users or accountable to them, graduated sanctions, and mechanisms dominated by the users themselves to resolve conflicts and to alter the rules. Ostrom (1990: 182) concludes that "if this study does nothing more that shatter the convictions of many policy analysts that the only way to solve [common pool resources] problems is for external authorities to impose full private property rights or centralized regulation, it will have accomplished one major purpose".

⁴It is worth noting that in a later work Hardin (1982) acknowledges that commoners can rule the use of the resource by posing some restrictions, rather than solve the problem by instituting private property.

making, which in turn engenders important *ex ante* and *ex post* negotiating and policing costs. And he concludes by saying that "it is very difficult to see how the existing communal owners can reach an agreement that takes account of these costs" (1967: 355).

Again, it seems that the transaction cost concept serves as a catch-all phrase to justify the optimality of private property. What is missing, however, in Demsetz's account is the crucial fact that the transition from common to private property can also involve significant transaction costs, posing once again the problem of collective action. In other words, Demsetz fails to notice that similar negotiations and policing costs can, in the same manner, prevent the establishment of private property. In discussing the problem of transition costs between property regimes, Banner (2002: 364) exemplifies the point: "it sounds simple, in the abstract, for a tribe of 50 people to divide up the commons. Just give everyone 2 percent of the land, and that is that. But neither the people nor their resources are likely to be homogeneous How do we value everyone's share? As a scrawny but gluttonous member of the community, should I get less than 2 percent? More than 2 percent? And once we settle on the value of my share ... how do we translate that into actual resources? What if some parcels have some trees or are close to water?" and so on. All these questions impose important negotiation costs for the members of a group to divide the commons. Furthermore, additional enforcing and policing costs have to be reckoned with for the installation of exclusive rights.

Demsetz (and Alchian), however, never make any attempt to incorporate these costs into their theory of the emergence of property rights. On the contrary, Demsetz makes it look certain that individuals will inevitably convert the resources owned under communal arrangements into resources owned privately. This is an unduly categorical position. As we have pointed out, the establishment of private rights also involves high transaction costs in the form of negotiation, enforcement, and policing costs. Granted this, for private property to be more efficient than regulated common property as a way to organize resource use, it has to be explicitly shown that the transaction costs of the latter exceed those of the former. Given that Demsetz and Alchian do not attempt such an exercise, but also, and principally, that they do not even conceive the possibility that transition is likely to be costly, it is quite legitimate to consider their argument as arbitrary.

To make things worse for Alchian and Demsetz's argument, whether the costs are higher or lower from private property than for common property is an issue difficult to settle in specific cases. Indeed, it is highly questionable whether such a comparison is feasible given the insuperable difficulties in quantification and measurement of transaction costs (see Meramveliotakis and Milonakis 2010). On the other hand, if the assessment that the costs of regulating the commons exceed the costs of establishing private rights is arrived at merely by observing that the hunting grounds are privatized, then the theory becomes circular. According to the latter view, establishing private rights involves lower costs than regulation of the commons because the former prevailed over the latter. But, exactly because of its circularity, this explanation is no explanation at all.

Going beyond the problems associated with the transaction cost rationale, the underlying logic of the tragedy of the commons story is that it occurs when an individual makes a rational decision to exploit the commons but that decision turns out to be ruinous for the commons. Thus, the theory has two prerequisites: first, the benefits from exploiting the commons are received individually, but the costs from such exploitation are shared by the group. Second, the benefit of exploiting one more unit from the commons exceeds the individual's share of the cost incurred by the additional extraction, but the total cost of the exploitation exceeds the benefit. Hence, individual rational action leads to a collectively irrational result.

There is actually a third requirement, which is normally a hidden assumption and is added here in order to stress the point: each individual in the group acts in a self-interested manner to secure the highest possible well-being for himself, given current information about opportunities. This implies that the theory is built on the premise of an individual rational actor or the "homo economicus." The essence of this neoclassical type of person is the conception of a human being as a rational and calculating seeker of his own selfish preference satisfaction. According to this model, man is a maximizer of his own consumption possibilities (or utility based on selfish preferences) who is capable of making rational choices among available alternatives. When applying this model of a rational self-interested individual in the context of a common property system, the "tragedy" result becomes inevitable. Such a conclusion then is built upon the implicit assumption that Montagnais hunters are representatives of "homo economicus."

For instance, in discussing an alternative to the private property solution, Alchian and Demsetz (1973: 23) explicitly use the logic of the "homo economicus" postulate to justify the superiority of exclusive rights in efficiency terms. In particular, they consider whether the "tragedy" can be avoided in a different way, i.e. through the transformation of private pelts to collective ownership. In this way, the gains from each hunted beaver are internalized to the tribe, as are the costs of depleting the stock. The implication of this conversion is that the incentives which create the problem would disappear and no negative externalities would arise, in the sense that collectively the community will bear the same costs and benefits of their hunting. However, such an adjustment, according to Alchian and Demsetz (1973: 23), will cause further problems of incentives to work, specifically free riding and shirking.

However, the use of the concept of "homo economicus" in such an environment is doubly problematic. For one thing, the concept itself has come under heavy fire in recent years from many quarters. For heterodox economists and political economists this concept is no more than a mythological construction of the economist's imagination incapable of representing human behavior even under capitalist conditions. In other words, not even those who live within the logic of capitalism carry with them the behavioral traits of the "neoclassical rational man" (*inter alia* Ferder and Nelson, eds. 2003; Hunt 2002; Milonakis and Fine 2009). But even within mainstream economics, recent experiments in behavioral economics have shown that individual behavior under capitalism is subject to cognitive and emotional constraints, and new elements with regard to human behavior such as pro-social or other-regarding behavior (fairness, reciprocity, altruism, etc.), have forcefully entered the picture, depicting individuals as more humane and less like the robotic homo economicus (Frey and Benz 2004: 68-75). Having said this, profit maximization is beyond any reasonable doubt one of the main driving forces of the modern capitalist system. This, however, is not a general human trait, but represents a historically specific result of the imperatives of the capitalist market.

Going back to Alchian and Demsetz's conception, the problem is not only that they assume this sort of behavior exists in a social setting such as that of Montagnais hunters, but also that the behavioral traits of self-interested individuals are considered as the *dominant* characteristic of the members of this hunting society, which can legitimately be used to justify their argument. Both the method and content of Demsetz and Alchian's theory are shaped by the presumed existence of "homo economicus." Even if we leave aside the question of whether "homo economicus" is a correct description of human behavior under capitalist conditions, however, it remains highly questionable whether we can explain the origins of private property by reference to the neoclassical behavioral postulate of self-interested rational calculation, which in fact presupposes the institution of private property and market mentality. In other words, the problem is whether we can presume that from the dawn of history individuals behaved according to the rules of rationality in the form of utility maximization based on selfish preferences focusing solely on individual consumption possibilities.

In one important cross-cultural experimental study, researchers found from their behavioral model that people failed to act egotistically to maximize their individual utility in all 15 different

small-scale societies examined. According to the results of the experiment, people's behavior reflected their cultural milieu (Henrich et al. 2001). This is probably the most important common denominator of the new findings in behavioral economics. According to them, there is no such thing as a representative individual. Rather, individuals are molded by their social environment in decisive ways. Indeed, individual action never takes place in a social vacuum, but has instead to be located within the proper historical and social context from the outset. In this way, human behavior becomes a function of the social setting. It is social structure that shapes individual behavior, rather than the other way around. But as has been argued elsewhere, "this does not mean that individual behavior is totally *determined* by these collectivities. Only that individual action is necessarily *filtered through* and *conditioned by* these structural and social factors and institutions" (Milonakis 2003: 116).

Arguably, here a problem arises because in order for their explanation to work, Demsetz and Alchian must presume that specific traits like rationality, free riding, and shirking are ubiquitous. They make no allowance for history, nor do they regard human behavior as being (partly but essentially) the historic product of the social setting. Additionally, in their theory, the individual is taken as exogenous and immutable. In contrast to this, in the following analysis, we shall argue that, to the extent that they have any historical relevance, the behavioral traits of "homo economicus" are strictly associated with the economic logic of the capitalist market, and consequently the Montagnais in Demsetz's illustration cannot be considered as representative of the rational individual maximizer of standard economic theory.

To further highlight this issue, it is necessary to engage in a discussion of the conceptual differences between the notions of a capitalist "market-based economy" and of a "primitive economy," stressing the structural differences between the two. The former consists of a system where market exchanges are the *pervasive element for the livelihood of individuals*. It presupposes the commodification of material products, land, and labor power. In this sense, the market is not defined merely as the meeting place between buyers and sellers, but, more importantly, reflects the qualitative aspects of the institutional process of exchange. For example, labor power is a commodity, bought and sold through a price-making process. In similar fashion, land becomes a marketed commodity that is bought and sold at a price determined by the forces of demand and supply. In this context, buyers and sellers "economize" in an attempt to minimize monetary costs or to maximize monetary gains, following a change in relative prices. The whole production system is guided by individual profit-seeking.

On the other hand, as Polanyi's (1957 [1944]) important work has shown, a market-based economy was not the rule in human history. Indeed, for Polanyi, the market did not play a vital role in human social life until very recently. It should be noted that Polanyi does not deny that the market was present for most of human history, but, instead, he stresses the fact that the influence of the market in the organization of society was not as important as it is today. On the contrary, in "primitive" economies "markets are not institutions that function within an economy, but without. They are meeting places of long-distance trade. Local markets proper are of little consequence" (1957: 58; see also Dalton 1961: 14).

According to Polanyi (1957: 47), the essential characteristic of pre-capitalist economies is that they are organized through non-market patterns of integration such as *redistribution* and *reciprocity*. That is, the production and distribution of material goods are organized by transactional principles essentially different from market exchange.

The pattern of *redistribution* is prevalent in what Polanyi terms archaic societies and implies a heavy influence of central political authority, where the center of power may be the temple (controlled by priests) or of the palace (secular), though not invariably. In this manner, redistribution's "supporting pattern" is centricity, movements of the products of land and labor into and out of a center. The central controlling power allocates land and labor to alternative aspects of production. Products of land and of the craft industries move inward as tribute, taxes, rent, fines,

dues, gifts, offerings, etc., and outward as retributions for services, rewards, gifts, allocations of various sorts to the different sectors of the center and the periphery, that is, to the society as a whole, in terms of the status of the different sectors which compose society (1957: 49).

The pattern of *reciprocity*, in contrast, is normally found in societies with a decentralized system of symmetric social relations. It refers to the "give-and-take of goods and services," and is "enormously facilitated by the institutional pattern of symmetry" (1957: 48). Reciprocity is prevalent in many kinship dominated societies: the hunters and gatherers who live in camp settlements as well as independent farmers in a society of small communities or villages. It operates in terms of the symmetry of the different social groupings, such as families, lineages, clans, communities, such that everyone is equal (or almost) with no dominating status. Though such societies have chiefs, headmen, or councils, they do not enjoy special status. Granted this, Polanyi (1957: 48) concludes that "reciprocity and redistribution are able to ensure the working of an economic system without the help of written records and elaborate administration because the organization of the societies in question meet the requirements of such a solution with the help of patterns such as *symmetry* and *centricity*."

In pre-capitalist societies, where redistribution and reciprocity are the main institutional features of resource allocation, the individual appears to have *different behavioral traits than the capitalist market logic dictates*. Again, in the words of Polanyi (1957: 49), "as long as social organization runs in its ruts, no individual economic motives need come into play; no shirking of personal effort need be feared In such a community the idea of profit is barred; haggling is decried; giving freely is acclaimed as a virtue."

Thus, the structural specificities of pre-capitalist societies assign to human behavior traits different to those of "homo economicus." Indeed, as Weber (2003 [1905]: 60) verifies, in his classic treatise *The Protestant Ethic and the Spirit of Capitalism*, in relation to pre-capitalist man: "the opportunity of earning more was less attractive than of working less. He did not ask: how much can I earn a day if I do as much work as possible? but: how much must I work to earn the wage ... which I earned before and which takes care of my traditional needs? A man does not 'by nature' wish to earn more and more money, but simply to live as he is accustomed to live and to earn as much as is necessary for that purpose."

Hence, the conclusion is that the behavioral traits ascribed to "homo economicus" cannot become effective unless existing institutional structures lend themselves to this effect. This means that human behavior is not something exogenous to society but, instead, is crucially influenced by the specific historical and social conditions. Particularly, the behavioral traits of microrationality, self-interest, free-riding, and shirking are mainly associated with capitalist market mentality. This does not mean that such behavior is totally absent from pre-capitalist social frameworks and institutional settings, but, rather, that the explanatory power of such preoccupations is very weak when applied to societies other than capitalism.

Through this prism, it becomes apparent that, in principle, the general logic of the "tragedy" story becomes deeply problematic if applied to non-capitalist contexts. The notions of reciprocity and solidarity that characterize hunting societies bring into question the assumption of "homo economicus," since people in these societies actually do not follow the inexorable logic implied by the tragedy story. In fact, the hunter in these pre-capitalist societies was not the selfish, egoistic person who tries to maximize his own utility without regard for others. He did not capture as much as he wanted from the commons ignoring the fact that such behavior would contribute to the exhaustion of resources. Additionally, the behavioral traits of free riding and shirking were the exception rather than the rule. This also seems to confirm the historical findings

⁵See also Herskovits (1952: 11) who argues that in "primitive" societies "production and distribution involve little of the profit motive, and labor is only in special instances for hire."

described previously, that common property had been well managed for thousands of years and commoners were not without commonsense. Last, even if some instances of behavioral deviations were apparent, the nature and homogeneity of "primitive" society ensured the smooth functioning of the commons (Grandori 2001: 150). Indeed, in this context, it could be argued that the so-called tragedy of the commons occurs not because of the absence of private property, but, to the contrary, because the intrusion of capitalistic elements into a non-capitalistic system undermines the traditional socio-economic relations that made the commons sustainable. In the same way that shirking and free riding are by-products of the capitalist mentality, so are the behavioral patterns that lead to the destruction of the commons.⁶

3.6. The Question of Historical Specificity

Let us now turn to the historical conditions of the Montagnais and particularly to the issue of whether the actual behavior of the Montagnais can be described through the "homo economicus" behavioral postulate. In this fashion, hunters are presumed to act "as if" they were the microrational individuals who respond in a selfishly optimizing fashion to given price changes. Consequently, our concern here is to check to what extent the emergence of private property can be considered as the result of a rational response of the Montagnais to a threatened tragedy of the commons.

McManus's (1972) anthropological and historical work on the Montagnais is instructive. McManus's analysis indicates that even after the appearance of the market for beaver, the Montagnais society still relied largely on the principle of reciprocity as the dominant institutional mode of integration. Given this, the prevailing socio-economic conditions come closer to Polanyi's description. Consequently, the behavior of Montagnais hunters seems to deviate to a large extent from the notion of "homo economicus." In fact, Montagnais's behavioral attributes are embedded within a social framework articulated through cooperation and solidarity.

McManus (1972: 41) notices that the pattern of life of the Montagnais families was seasonal: in the winter each family hunted separately from other families, while in the summertime the band gathered together in their summer location. A chief, selected by the band's members on the basis of hunting ability, usually headed the band without having any dominating power over the other members of the tribe, since the band as a whole makes important decisions collectively (48). Recall that this is consistent with the non-hierarchical type of reciprocal societies in Polanyi's analysis.

Although the trade of beaver furs provided Montagnais with an additional source of income, which helped them to obtain other food resources (42), it was nevertheless insufficient to satisfy fully their needs for food supplies. In McManus's story the fur trade did little, if anything, to reduce the risks associated with the uncertainty of food supplies and starvation (45). This observation reveals that the market was of little importance for the Montagnais society, since their livelihood did not depend on market exchange, but, rather, on the risky hunting of other animals. This also confirms Polanyi's thesis that where market-exchanges did exist in "primitive" (precapitalist) economies, they were subordinated and contained.

Yet, the most important fact is that eventually the Montagnais did not establish a purely private property structure as Demsetz and Alchian suggest, but in fact a hybrid semi-common, semi-private formation of rights. McManus (1972: 50) refers to it as the "Good Samaritan constraint" to indicate the social norms and rules the Montagnais devised to protect each member of

⁶The same capitalist mentality creates difficulties when a market economy tries to protect its collective patrimony through regulation: natural resources, old-growth forests, fisheries, and so forth are threatened by poaching, regulatory non-compliance, and black-marketeering.

the tribe from hunger. This is explained by the fact that the Indian society was based fundamentally on an egalitarian principle: "... individuals could not withhold goods from other members of the band who were in 'need'" (50). For that reason, "... individual members of the band had the right to exclude others from taking furs ... from their territories for sale, but they did not have the right to exclude others from killing animals for consumption." Therefore, "rights to use for direct consumption were common and ... rights to use for exchange were exclusive" (48-9). Outsiders were not permitted to harvest furs on somebody else's territory for trade, but they were allowed to hunt even beaver for food. Additionally, Rich (1960: 45) notes that the Montagnais still placed a peculiarly high value upon generosity and gift-giving, where any visitor to one's encampment was to be supplied with food and shelter.

The cause behind the emergence of a social norm such as gift-giving or the related "Good Samaritan" principle is related to the nature of the aboriginal social environment. Rules were put in place that would reduce the risk of starvation, reflecting an institutionalized form of insurance. As Berkes *et al.* (1989: 153) indicate in reference to "primitive" societies, "all resources are subject to the overriding principle that no one can prevent a person from obtaining what he needs for his family's survival."

Furthermore, McManus (1972: 39) notes that "almost all the historians in the fur trade to whom I have referred remark that beaver populations were sharply reduced after the introduction of the fur trade." This seems to run contrary to Alchian and Demsetz's (1973: 25) suggestion that, "with private rights to hunt the land these inventories could be maintained at levels more consistent with the growing market for furs." McManus (1972: 46) cites evidence from the Hudson's Bay Company, the exclusive buyer of the furs, which incurred costs to conserve the beaver population by establishing, *after* the institutionalization of private rights, quotas to constrain the Indians' harvest of beaver. According to McManus the aforementioned result is due to the specific property rights structure, where the existence of common property for consumption prevents each Indian "... to fully take into account the effects of his decisions on the future stock of beaver" (51).

From our perspective, on the contrary, Montagnais society seems to be consistent with Polanyi's vision of "primitive" economies. Specifically, the institutional characteristics of the Montagnais show a society based on the principle of reciprocity in an environment in which the risk of starvation is relatively high. The Montagnais acted altruistically, pursuing the common good of the cohesion and sustainability of the band. Furthermore, as the "Good Samaritan" principle testifies, the pattern of Montagnais's behavior is endowed with social, emotional, and nature-related skills. Even in the appearance of the market for beaver furs and the emergence of exclusive rights on land, the Montagnais still behave in a manner which significantly differs from what the "homo economicus" model postulates. This is not meant to imply that the Montagnais have no market mentality whatsoever, but, rather, to argue that the dominant mode of behavior is still characterized by reciprocity. This means that someone gives to someone else, expecting a fair and tangible return at some undefined future date. It is a very informal system of exchange, whereby the expectation that the giver will be repaid is based on trust and social sanctions. This delineates the particular structure of property rights in the Montagnais's case, where an individual finding himself in need of food may kill beaver on somebody else's land in the expectation that the other hunter involved will be permitted to kill in the first individual's land in the future.

Granted all this, the Montagnais hunters cannot be conceived as rational economic men driven exclusively by self-interest and totally susceptible to the forces of the market. Rich (1960), who delved deeply into the riches of the Hudson's Bay Company archives, stresses that the Montagnais did not maximize, accumulate, or take profit as the standard economic theory predicted. Their attitudes regarding reciprocity and gift-giving helped to shape and define the trade in ways which were formal and social, rather than purely economic. Hence, it becomes apparent that much of

Demsetz and Alchian's economic logic is inapplicable in explaining the emergence of exclusive rights, since the Montagnais hunters actually were not the self-interested individuals with the propensity to shirk and free ride as the theory predicts. Consequently, it is impossible to demonstrate, starting from this historically highly questionable premise, that it was the actual possibility of the tragedy of the commons which led the Montagnais to establish private rights in land. This is a clear case of an undue generalization, taking a notion that applies to a particular context and applying it indiscriminately to other social contexts. As Maine, quoted in Bohannan (1957: iii), rightly points out, "the mistake of judging the men of other periods by the morality of our own day has its parallel in the mistake of supposing that every wheel and bolt in the modern social machine had its counterpart in more rudimentary societies."

To push the argument even further, given the inapplicability of the "homo economicus" postulate to the actual behavior of the Montagnais, it is quite legitimate to argue that there is no theoretical justification for the presumed inefficiency of common property. Interestingly enough, some new institutionalists have themselves acknowledged that common property could be the optimal outcome for people looking for an insurance mechanism against hunger (e.g. Posner 1980).

In short, it would appear that in Demsetz's argument, history is made to fit the logic of the argument rather than vice-versa. Rather than grounding the theory in history, Demsetz and Alchian assume an "as if" history to fit with their theory. But economic history is anchored in real facts, not in logical constructs of "stylized" social processes. By making the individual ahistorical, the real history of socio-economic systems is lost. What is required is the incorporation of the individual into the social setting of the specific historical framework.

4. Concluding Remarks

This article set off by identifying the general logic of the arguments new institutionalists invoke in their endeavor to explain the emergence, change, but also the very existence of private property rights and institutions in general. While there is increasing recognition of the importance of social institutions in this context, the new institutionalist approach remains fundamentally asocial in nature, with the writers in this tradition failing to take their explanatory premises beyond the (asocial) individual. In particular new institutional economics fails to incorporate into the analysis any reference to social relations, social structures, and social conflict. As a result, property rights are conceived not as a social relation between people but as a natural relation between a person and an object, the individual is the asocial "homo economicus" of standard economic theory, and property rights arrangements are explained on the basis of their efficiency and individual rational choice decisions. As such, new institutional economics is a questionable framework for analyzing economic behavior, structure, and change.

The reluctance to move beyond the individual is critical in explaining the new institutional economics' inability to generate a full-fledged theory of property relations and institutions. Without socially based conceptions of institution formation, and in the absence of an understanding of structural factors, one cannot begin to explain variations in the form and content of institutional outcomes. In other words, institution formation cannot be explained without an analysis that emphasizes social relations and specifies a clear causal relationship between economic change, social interests, distributional conflict, and institutional arrangements. What is required is a methodological and theoretical framework that distances itself from methodological individualism and the asocial and ahistorical notion of "homo economicus" by taking the social as a point of departure and incorporating the aforementioned structural factors that lie behind the genesis of institutional arrangements.

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