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THE ECONOMICS OF PROPERTY RIGHTS — A NEW PARADIGM IN SOCIAL SCIENCE?

*Hans G. NUTZINGER**

1. INTRODUCTION

Monsieur Jourdan, the hero of Molières's comedy *Le bourgeois gentilhomme,* had a strange experience during his various attempts to become a true nobleman: His teacher of rhetoric tells him that he has spoken *prose* all his life long. Similar feelings may arise in many an economist when he is addressing himself to the *economics of property rights* which has emerged mainly during the past twenty years in the United States. He will not only be impressed by the terminological efforts but even more so by the claims put forward by the representatives of this new approach. According to them, the economics of property rights is not only

- "one of the most important advances in economic thinking that has occurred in the post-war period" (Furubotn/Pejovich, 1974, XV), but it also provides in particular the following improvements in knowledge:
- The standard model of production and exchange is generalized by considering the interrelationship between legal ownership rights, incentive systems and economic behaviour.
- In doing so, property rights analysis does not only explain human behaviour under given alternative structures of property rights, but moreover the development of those structures itself.
- Finally, the economics of property rights provides a general foundation of organization theory by explaining structure and performance of enterprises (and other types of organizations) from the interactions among the utility-maximizing members of those organizations.

Without exhausting all these claims, one can summarize the self-appraisal of property rights economists by quoting Monissen and Pejovich (1977, pp. 283—284):

* Department of Economics, Gesamthochschule Kassel.

> "... the conjecture could be confirmed that the new approach is sufficiently general to serve as a basis of a social science synthesis of hitherto heterogeneously conceived disciplines. The constitutive methodological principles of the property rights approach are simple: The organization *per se* is no longer the object of analysis, but moreover the individual agent who tries to maximize his utility in the frame of a given organizational structure. If one knows the effect of different structures of property rights on the agent's incentive system, then a systematical analysis of the interrelationships between agents in the frame of alternative socio-economic arrangements is brought about in a complex feedback system. The power of property rights economics — which strictly adheres to methodological individualism — is demonstrated not at last by confronting it with the competing approaches of methodological collectivism, be it in the form of functionalistic sociology or of contemporary neo-Marxist economics."**

It comes as no suprise that those extensive claims have met criticism and rejection both within and outside economics. Apart from the vast terrain claimed by property rights economists, it is mainly the thoroughgoing individualism of this approach which raises criticism. In order to attempt a fair evaluation of both the new approach and its critique, we shall first give a short survey of the basic notions and ideas used either explicitly or even implicitly by the representatives of this up-to-now rather heterogeneous line of thought.[1] In doing this, we try to draw some preliminary conclusions about the implications and limitations of this approach.

2. BASIC NOTIONS AND IDEAS

2.1. *The underlying notion of society*

At the core of this approach is an extended notion of *property rights* which goes beyond the legal *ownership rights* and comprehends "the *sanctioned behavioural relations* among men that arise from the existence of goods and pertain to their use" (Furubotn/Pejovich, 1974, p. 3). However, it remains doubtful whether this extension of the notion

** This and all following quotes from German texts are translated by the present author.

[1] This heterogeneity is also demonstrated by the lack of some "authoritative" monographs in this field, which is mainly represented by survey articles, such as Leipold's (1978) or the one by Furubotn/Pejovich (1972), or by a collection of readings, such as Furubotn/Pejovich (1974), Manne (1975), and Schenk (1978). The growing number of theses (e. g., Buhbe (1980), Hutter (1979), Ridder-Aab (1980) does not change substantially this picture. An additional problem is the difficulty of separating property rights analysis from related lines of thought such as the Chicago School headed by Gary Becker, from the "New Institutional Economics" represented mainly by O. E. Williamson (1975), or from the more recent work of A. O. Hirschman; we will touch on this problem repeatedly in the following sections of the paper.

of property rights to all possibilities of action given *de facto* without specific regard to its juridical legitimation by law is in itself a generalization in terms of social science. The problem lies in the underlying notion of society: If one shares the particular view of society upon which property rights economics is based, usually only implicit in the assumptions, frequently very apparent in the conclusions — namely that society is reducible to a collection of utility-maximizing individuals who regulate their entire conditions of life on the basis of mutual profitability through voluntary and basically bilateral contracts —, then and only then one has no difficulties in accepting this claim of property rights as the basic notion of a new integrated and unifying social science.

One of the consequences of this starting point is a particular view of production as a specific form of exchange: In contrast to Marx's vision of society and social structure as determined by the conditions of production, and in accordance with classical notions of society as a "series of mutual exchanges" (Destutt de Tracy) or as a "collection of trading merchants" (Adam Smith)[2], production is only a minor technical element of society. Moreover, both in the theoretical foundation and in the practical applications, production is rather neglected and kept down to the conventional notion of the neoclassical production function — a striking modesty compared with the self-declared claim to a generalization of production theory, too. This neglect of the production side of the economy becomes very evident in its dealing with the problem of scarcity: Not production of goods to be distributed, but distribution of the produced goods by exchange is seen as the primary solution. Exchange, and not the production of goods, is seen as a central mechanism for solving the problem of economic scarcity (cf. Pejovich, 1976, p. 6). Generally, both from a historical and a logical standpoint, exchange presupposes production and hence production lends itself as a starting point for solving the problem of scarcity.[3]

Another unpleasant consequence of the basic simplistic notion of society is the difficulty in understanding government regulations[4]: Here every limitation of possibilities of exchange, called *attenuation* of property rights, appears as a limitation of a society's capacity to satisfy wants. Consequently, historical progress should manifest itself in the development towards a more and more complete specification and trad-

[2] See the critique by Marx (1844, especially 559).

[3] Of course, this is not excluded *a priori* either by methodological individualism or by the notion of property rights. It is interesting, however, to note how little attention is paid to the social conditions of production within this line of thought.

[4] Again it is important to emphasize that a more sophisticated property rights approach could modify this notion of society to allow for problems of uncertainty, prisoners' dilemma situations, social interactions not governed by the price mechanism (such as group dynamics) and so on. But this would contradict the belief of property rights economists that social interactions and social organizations can be analyzed on the basis of a few simple concepts — a belief which is ironically shared by its most important opponent, (neo-) Marxism, which, after all, mainly differs in the choice of the few basic concepts (from production versus exchange), not in the common belief in the simplicity of understanding society and social interactions.

ability of private property rights. Whatever the form and basis of government, its role remains doubtful, and even more than doubtful, as one of its constitutive elements is exactly the limitation of the room for individual action, i.e., the restriction of property rights, and not always and not exclusively for the only purpose consistent with the contractarian view of society, namely to secure the occurrence and the fulfilment of voluntary contracts. All changes, transfers and modifications of property rights which do not arise through exchanges and bilateral contracts, but, for instance, by public legislation, are subject to the *a priori* suspicion that they imply an impairment of the possibilities to satisfy wants withing a given society. The only remaining, but always precarious, excuse would then be its inevitableness for the sake of free exchange.[5] As an example, a seemingly innocuous product safety regulation is then nothing but the removal of a desirable trade-off between low prices and low levels of product safety on the one hand. and a higher price with a higher safety level on the other hand. If people dislike unsafe products, then — according to this reasoning — they would vote on the marketplace by buying the safer products at a higher price. And even social policy arguments may enter the property rights analysis of this case: Safety regulation affects mainly low income people who possibly can no longer afford to buy the respective good as it has become more expensive by government intervention and as cheaper products with low safety standards are no longer available (which one would reject in any case *individually* if one values safety so highly). Of course, this argument holds only in a world of perfect information in which one agrees to the given distribution of incomes — something that property rights economists tend to do.

But here, the idealizing notion of society conflicts with its own claim to represent and explain real developments in real societies. They are characterized by increasing government limitations of property rights and by a growth of the functions and organizations of the state. Again there are many possibilities of modifying the basic model in order to deal with these tendencies, such as Niskanen's (1968, 1971) model of the budget-maximizing bureaucrat. But all those modifications imply nothing but to give up the complete information presumption implicit in the pure property rights approach. So we are led to the conclusion that either society is not only established as a collection of trading individuals or, instead, that the members of the society are not able to recognize their true advantage and/or to accomplish it by means of contracts which would even contradict more the individualistic methodology of this approach. For all that, this contradiction is so striking that even Furubotn and Pejovich, two of the leading representatives of this approach, concede "that a theory of property rights cannot be truly complete without a theory of the state. And, unfortunately, no such theory exists at present" (1974, 169). They rightly attribute the

[5] There are historical models for this view in scholastic theology: Thomas of Aquinas, for instance, analyzed the case of *taxes* under the heading "utrum rapina possit fieri sine peccato" (whether there could be plundering without crime).

lack of a genuine theory of the state to the "basic individualist bias" of the property rights approach. In fact, this line of thought faces quite considerable difficulties in dealing with social phenomena and institutions which go beyond the individual actor confined to his role as a voluntarily-contracting individual. Processes of social stratification, be it into classes, strata or even social roles, are very alien to this view. They have to be split up into individuals, and the empirical phenomena are roughly integrated by *ad hoc* explanations, for instance, by referring to bureaucratic or other non-profit organizations, of course again on the basis of utility-maximizing agents in those institutions.

The oversimplified individualistic picture of society and the resulting deficits in grasping social institutions turn up again and again in some applications of the approach where the results frequently are more an outgrowth of the underlying notion of society than the product of a deeper analysis of the problems in question.[6] Deficits and simplicity of the notion of society inherent in the property rights approach are too evident to escape ideological and methodological criticism. In a similar way, though with different arguments, the one-sidedness of the opposite notion of society in Marx's theory has been criticized. It is not by chance that property rights economics shares with Marxism not only a certain simplicity in the underlying concepts but also a tendency to overemphasize particular elements of the historical process: Both historical materialism and property rights economics — which considers itself as the liberal correction and perfection of the former (Pejovich, 1976) — face the common problem that the idealized dynamics of the historical development often conflicts with the course of real events. I do not want to go deeper into this type of criticism[7], as this would not do justice to the possible progress in knowledge inherent in this approach which is not exhausted by the simplifications and exaggerations mentioned above. And even more, from a didactic point of view, one could be inclined to assume that it is exactly the apparent simplicity and one-sidedness of the underlying idea of society which throws a new, particularly illuminating light on many economic and even non-economic relationships. The necessary rejection of exaggerated claims to total explanations does not say much about the fruitfulness of this view for many but certainly not all social relations and tendencies whereby the fruitfulness, paradoxically enough, may be a result of the bias of this view which has to be criticized in turn.[8] In order to test this conjecture, we continue to consider the most important building stones of the property rights approach.

[6] For this, see the examples in section 3.

[7] For a Marxist critique, see Peter Gey (1981).

[8] This suggestion seems plausible if one remembers the example of Marx's theory where also radical abstractions and simplifications of social relationships lead to a novel and fruitful — though not unbiased and hence problematical — view of the capitalist mode of production. For this, see also Nutzinger (1977).

2.2. *Structure and attenuation of property rights*

Although the notion of property rights is aimed at the actual discretion of agents, and not at the legal structures, the concept of legal *ownership* is nevertheless the starting point and an essential element of the generalized notion of property rights in this line of thought. Following the tradition of Roman law, it is split up into different components, namely[9]

— the right to use the asset *(usus)*
— the right to appropriate returns from the asset *(usus fructus),*
— the right to change the asset's form and/or substance *(abusus),* which refers both to the physical and economic characteristics of a good (e. g., processing, transport, destruction) and to the allocation of property rights (for instance by sale, inheritance or donation). In this third component, the central problems of economics — production, exchange and transfer — are contained.

Whereas the property rights approach remains quite traditional in this decomposition, it goes far beyond the traditional definition of goods.[10] Not only material goods, services and tradable rights (such as patents and licences) are included, but beyond that also human and civil rights (such as franchise, freedom of the press, etc.) are taken into account, which leads to the consequence: "The prevailing system of property rights is then the sum of economic and social relations with respect to scarce resources in which individual members stand to each other" (Furubotn/Pejovich, 1974, p. 3). This extension of the notion of goods to 'inalienable" rights is not only motivated by the property rights economists' attempt to comprehend all socially relevant facts in the investigation[11] but also by the idea inherent in the underlying notion of an exchange society that even those rights could possibly be traded and that a trade in those assets would perhaps increase social welfare.

As the ultimate aim of a contractarian organization of society is in the as-complete-as-possible specification of property rights and their allocation to individual agents by means of voluntary contracts, limitations of property rights are typically caused by the state, which plays a central role for the nonachievement of the maximal level of satisfaction in an (exchange) society. Therefore they are labeled as *attenuation* of property rights, and they appear in two elementary forms, namely first that certain property rights are not defined or at least that they are not protected by law, and second, in the more frequent and important form that the bearer of a right is restricted in exercising

[9] Furubotn/Pejovich (1974, 4)

[10] Wagener (1979, 160) criticizes Furubotn and Pejovich (1972, 1974) for not explaining their notion of assets or goods. In fact, Furubotn and Pejovich apply these terms at first without explanation but later on they interpret them in the sense mentioned above.

[11] With respect to certain "non-idividualistic" facts, such as social certification or collective actors, they explicitly refuse to consider those facts.

certain parts, for instance by limitations of the right of sucession, of purchase and of use, or by restrictions concerning the processing of goods, for instance by regulations for the construction or the leasing of buildings. This leads to an important consequence: Assets which are physically identical (in the generalized sense mentioned above) are not only specified in quantity, space and time, but also with respect to the underlying legal structure. In this view, restrictions of property rights bear the necessary consequence that the economic value of an asset is reduced: A car in a country with a speed limit is *ceteris paribus* worth less than in another country without this regulation.

2.3 *Transaction Costs*

The limits of potential exchanges which constitute the social interrelationship in the "pure model" of property rights economics and, therefore, the limits of possible satisfaction are not only set by government interventions but moreover by the fact that even the organization of *ideal* exchanges implies *real* costs. The coordination of economic decisions through markets shares with other forms of coordination (e. g., through the political process) the characteristic that they always use real resources, whatever else the advantange of market coordination may be compared with other mechanisms.

Even if a purely contractarian organization of society could be carried out in practice — and this is not even asserted by property rights economists although this situation is inherent in their analysis as a model of reference —, not every possible exchange of specified property rights would come about because the possible trade benefits have to be compared with the expected costs of this exchange operation itself, i. e., the *transaction costs*. If one confronts the real costs of the market mechanism with those of other forms of decision coordination — such as collective bargaining, voting and other political procedures, direct command within hierarchical organizations, etc. —, then the relative size of alternative transaction cost is the *ceteris paribus* criterion for the appropriate coordination mechanism to be chosen. Based on this reasoning, Coase (1937), in his classical contribution on "The Nature of the Firm", has argued that intra-firm organization, i. e., the *enterprise itself*, arises in response to the expensiveness of market coordination. Some property rights economists, especially Alchian and Demsetz (1972), in their attempt to maintain the picture of a market society even within the enterprise, have argued that the firm is not characterized by hierarchy but by an especially efficient "private" market organization headed by an entrepreneur like a Walrasian auctioneer — and nothing else.[12] This reasoning is based on their peculiar use of terminology exploiting the fact that there are no well-established property rights in language.[13] But even in this rather artificial view, the notion of transaction costs enters

[12] For a craticism of this view, see Nutzinger (1976).

[13] As Ridder-Ab (1980, 50) correctly observes, this is "only" a semantic question — but with far-reaching consequences as I have tried to demonstrale elsewhere (Nutzinger, 1976).

implicitly in order to explain the particular structure of contracts within the firm: The entrepreneur, as the central party common to all contracts with the various factor owners, is assumed to minimize the transaction costs of production.

The potential fruitfulness of transaction costs as a heuristic tool is also demonstrated by some authors who cannot be attributed to the property rights school in the strict sense. This is particularly true of Oliver E. Williamson's (1975) "new institutional economics" which develops, following the basic reasoning of Coase, a general typology of market and firm structures within an organizational failures framework where markets and hierarchies appear as specific responses to particular outside conditions. Another prominent example is Albert O. Hirschman's (1970) extension of the pure neoclassical picture of the articulation of interests on markets, the *exit option*, where there is the possibility of leaving a market or, more generally, a contractual relationship whenever there are better (contractual) alternatives. To this indirect possibility he adds realistically the direct, verbal articulation of interests by means of the *voice option* in order to shape prevalent conditions according to one's own interest. Again, transaction costs determine which option will be chosen by the actors in a society. This leads to a better understanding of the functioning and the continuance of monopolistic and bureaucratic organizations, which traditional economic theory can grasp only insufficiently by means of rather tautological concepts such as Bain's (1956) "barriers to entry". A third interesting application of transaction costs has been provided by Kenneth Arrow (1974) in order to explain unequal distribution of power and authority by emphasizing the real transaction costs of entering and leaving organizations. His argument can be generalized by the notion of an asymmetric distribution of transaction costs among the parties involved.[14]

However, even this notion of transaction costs is subject to serious suspicions of tautology. Two major problems arise here:

1. Whereas without any doubt all economic transactions, within and outside the marketplace, are connected to real costs, a direct measurement of these costs is frequently impossible. Usually, these costs are measured only indirectly, namely by a presumption of efficiency clearly formulated for the first time by Coase (1937): It is the conjecture that the choice of organizations and coordination mechanisms is guided by the principle of cost minimization for the respective activities. This pressure for minimization, however, dominates only in a perfect neoclassical environment[15] characterized by the usual assumptions about perfect information, convexities in production and consumption, and perfect competition.[16] In fact, under perfect competition there is no room for ineffi-

[14] See Nutzinger (1976).

[15] It still exists under less favourable conditions but does not necessarily lead to minimal cost choices for organizations and coordination mechanisms. For this, see also the fine methodological remarks by Schuke (1977).

[16] Unfortunately, welfare economics has to abstract from the transaction costs and to presuppose a certain form of enterprise organization implicit in the production set when it proves existence and Pareto optimality of a competitive equilibrium.

cient coordination mechanisms, and hence the presumption of *minimal* transaction costs is justified. This simple conjecture of efficiency, however, is generally not applicable to real economies: Mitigated pressure of competition still leads to a tendency to economize transaction costs because this still increases entrepreneurial profits; but the reduced effort in search, information and adaptation activities will lead to higher than minimal transaction costs. At least, the principle of economizing opportunity costs, effective also under imperfect competition, also leads to economizing (not minimizing) with respect to systems of coordination and hence excludes grossly inefficient firms and market structures in the long run; thus, the notion of transaction costs is not a purely tautological one.[17] An additional problem may arise from monopolistic strategies of market regulation, such as the deliberate creation of barriers to entry by existing firms.[18] Therefore, in all realistic cases, transaction costs are not merely determined by the technical characteristics of the transaction itself.

But apart from the measuring problem and the possibbilitiy of "produced" transaction costs, there is an even more fundamental problem with this approach caused by the interrelationship between the different mechanisms of coordination: The costs of coordinating activities by different devices are not independent of the given distribution and structure of market and non-market coordination mechanisms; if at all, they can only be determined *ceteris paribus* for a given institutional arrangement. A certain organization of the political process, for instance, leading to practicable or impracticable legal norms, may increase or decrease the costs of market coordination, and conversely, the organization of market may influence the costs of political coordination. Another apparent example is the influence of different forms of coordination in the labour market: Here, labour law, collective bargaining, enterprise bargaining, individual contracts, employee participation and labour conflicts are deeply intertwined.[19] This leads to the fundamental problem that all conjectures and comparisons in terms of efficiency, based on transaction costs, can only be carried out by starting from a real or imaginary *status quo*, and they hold only in the environment of the initial situation; hence, all comparisons of transaction costs are *local*. *Global* statements of efficiency as attempted not only by property rights economists, but also by O. E. Williamson in his "organizational failures framework", would presuppose full knowledge of the interde-

[17] For this hint about the 'real substance" of transaction costs I wish to thank Johannes Greiner (Kassel).

[18] This arguemnt can be extended to all forms of decision-making and coordination where an unequal distribution of information among the parties involved makes it possible for single actors (individuals and institutions) to spread biased information to the other parties involved in order to keep them away from effective control, competition and articulation of interest. Asymmetrical distribution of information among the actors *(information impactedness)*, combined with some possible feints *(opportunism)*, is a major element in O. E. Williamson (1975).

[19] For Germany, see for instance Nutzinger (1981).

pendences between the different forms of coordinating decisions.[20] From this follows: Whenever the property rights economists claim to have provided a generalization of the standard model of production and exchange, then this claim, strictly speaking, has to be confined to models of partial equilibrium in the tradition of Marshall and cannot be easily extended to general equilibrium situations in the sense of Walras. As long as there is a near-decomposability between different co-existing forms of coordination, then some more general conjectures can be derived, but with the more restricted claim for plausibility and not for logical validity.

One of the uneasy consequences of this situation is the fact that transaction costs are not objectively given *a priori*, but that they depend decisively on the respective initial endowment or, to use the language of property rights economics, that they depend on the initial distribution of property rights concerning the assets of the society in question. Any change of this distribution implies a change of relative prices and, therefore, generally of the value of all possible transactions. Whether markets or specified property rights emerge, and which extent the trade in those rights will have compared with the size and structure of non-market mechanisms, cannot be determined without an implicit value judgement concerning the underlying distribution of property rights among the economic actors; property rights economists tend to assume tacitly the *status quo*. In this latter case, of course, government regulations and interventions have to be considered as attenuations of property rights dangerous to social welfare. Here, the "strict methodological individualism" (Monissen/Pejovich, 1977, p. 284) of the property rights approach falls into a methodological deadlock: It attempts to escape collective value judgements and to compare instead different situations based on "objective" (transaction) costs; but this type of comparison presupposes, as we have seen, a special type of social welfare function based on the value judgement that one has to start with the respective initial distribution of property rights in comparing alternative situations.[21]

2.4. *A first evaluation*

What follows from our critical discussion of the basic concepts of property rights economics? It should have become clear that at least at the present stage the claims of its representatives to have furnished a generalization of the economic standard model of production and exchange and the base for a social science synthesis of hitherto heterogeneously conceived disciplines cannot be maintained without severe

[20] Interestingly enough, this idea can be found in the work of the German "ordo-liberal" economist Walter Eucken (1975) who, in a more general perspective, talks about the *Interdependenz der Ordnungen* (interdependence of orders).

[21] For this, see the excellent survey article by Allan Schmid (1975).

limitations and modifications. But considering the potential (and, as we will see, actual) fruitfulness of this approach, it would be counterproductive to throw away property rights analysis together with the justified criticism of its exaggerated claims. Instead, we propose to investigate a more modest demand: Could it not be the case that property rights economics, far from being a general theory, is a particularly illuminating viewpoint which contributes both to a better understanding of many a problem under consideration as well as to the discovery of some more general characteristics inherent in many seemingly distinct problems? Of course, this question can only be answered by looking at some practical applications of property rights economics, which we shall do in the following section.

3. SOME PRACTICAL CASES

3.1 *A not necessarily deterrent example: the analysis of co-determination*

The co-determination view of labour participation and co-determination can be summarized roughly though not unfairly as follows: Workers' co-determination in Europe has been generally introduced by legislation and not via bilateral contracts between employers and employees:[22] "All that we know is that co-determination has not emerged voluntarily in the West" (Pejovich, 1978, p. 6). Thereby, it is argued, the property rights of both parties in the labour market have been infringed: Entrepreneurial discretion has been restricted by legal rights for employee co-determination — property rights in the firm have been attenuated —, but the worker is harmed, too: He is stripped of the trade-off between co-determination, leading probably to lower wages in the long run due to the harmful effects of participation, and higher payments without dysfunctional co-determination. If co-determination would really serve the interests of the parties on the labour market, then they could have agreed on it by means of voluntary bilateral contracts in the frame of the liberal legal order which does not prevent it.[23] In addition, we find the usual neglect of other forms of interest articulation and of decision coordination by most authors in Pejovich's (1978) collection on co-determination: For Gallaway (1978, p. 188) the possibility of leaving the firm appears as true "worker participation in decisions that affect their lives", and he does not deter from quoting the high quit rates in assembly line work as a proof of this participation, and not as a sign for a high level of job satisfaction. Nor does he ask the question of whether the high turnover rate in the American manu-

[22] Also the case of Sweden falls under this verdict as the agreements between employees and employers were initiated by state legislation; see Ryden (1978). Ironically, the farest-reaching German co-determination law in the mining and steel industry is based on "voluntary" agreements between employers and employees initiated by the employers themselves, of course, based on the particular conditions after the Second World War.

[23] In a similar way, Alchian and Demsetz (1972) argue against the efficiency of participation and workers' management; for a critique of this position, see Nutzinger (1976, section IV. 2.).

facturing industry has not changed the unpleasant working conditions which lead to these partly excessive quit rates. In fact, given the implicit value judgements of property rights analysis, this must be "optimal"; otherwise, the situation would have changed. The same type of Doctor Pangloss reasoning underlies Furubotn's (1978, p. 164) analysis of the economic consequences of co-determination on the rate and sources of private investment which cannot help but conclude that "an inefficient incentive structure is created [because] workers are granted rights to make decisions affecting the capital assets of the firm but have no responsibility for supplying this capital and no long-term claim on the income derived from it". What about the worker's interest in his workplace, and in profits due to the more and more frequent profit-related incentive schemes? What about the empirical investigations which do not reveal negative consequences on the profitability of co-determinated firms?[24]

Whenever the property rights economists conclude that co-determination means the attenuation of property rights and hence a decrease in the value of the assets, they simply have the wrong model of reference in mind. The situation without co-determination is in reality not one with unrestricted property rights but rather a situation where other forms of labour market regulation, such as restrictive labour law, tedious collective bargaining, frequent state intervention, costly strikes and other forms of social conflict prevail. If one looks at the interaction between different forms of coordination between "labour" and "capital" then the picture becomes much more difficult than the property rights economists tend to assume, and in this broader context it might well be the case that even in terms of entrepreneurial profits the situation with co-determination might be a better one given the fact that other forms of decision coordination are not costless, and very often quite costly, to apply. The authors here become victims of their single-minded concentration on markets and their neglect of other forms of social interactions. Here, a modified approach considering the transaction costs of different forms of coordination could well lead to important insights into the dynamics of industrial relations and cross-cultural differences, between different countries.

Unfortunately, property rights economists tend to overlook this broader view. Their conclusions are apparently based on two implicit preconditions, namely that changes of property rights should only be brought about through contracts and that these contracts should be guided by that net value of the respective activity which is expected by the parties involved and which follows from the initial price situation and hence from the given distribution of property rights. However, lack of information can prevent improvements which can possibly be brought about by legislation if this resolves prisoners' dilemma situa-

[24] See, for example the *Biedenkopf Report* (1970) which, however, is correctly criticized by Monissen (1978, 78) for its low standards of empirical research and theoretical foundation. But there is no hint that a more sophisticated research will lead to basically different conclusions about the economic consequences of co-determination. For this, see also Diefenbacher and Nutzinger (1981).

tions where labour market parties in many countries are trapped. But even if this is not the case, it goes not without a value judgement to exclude a *redistribution* of property rights by the legislative measure of co-determination. This redistribution in favour of employees can make the entrepreneurs worse off. But this redistribution of property rights also changes price and cost structures so that both situations — the one with and the one without co-determination — cannot be easily compared: if one takes a situation with workers' co-determination as a starting point, then one is likely to get the opposite result (assuming property rights analysis), namely that the lack of co-determination leads to a Pareto inferior situation as otherwise the labour market parties would have attempted to change the situation to their mutual benefit, either through internal contracts or through the articulation of interests in the political process.

The problem with this view is apparent: By no means it can be excluded that there is a stable situation where no participatory rights for workers exist and where there is no change through bilateral contracts (with workers making it worth the employers' while to given them participatory rights by bidding). But it is not less probable that starting from a situation with co-determination there is no incentive to change the situation because the price and cost structures in both situations differ. This is a general problem for the allegedly "objective" cost comparisons inherent in property rights analysis: "The point is that there is a cost minimization for each alternative property rights distribution. Cost minimization, then, cannot be a guide to the choice of that distribution" (Schmid, 1976, p. 165).

Whereas a modified property rights analysis can reveal the complexity of labour participation by considering different forms of coordination and the related costs, the concrete analysis carried out by Pejovich and his associates suffers from an overly narrow contractarian perception of the world and a consequently biased conception of the co-determination problem. After all, one important point remains from their investigations to be analyzed by further research: We have to look for reasons why a change of property rights towards co-determination has only rarely taken place through bilateral contracts. The transaction costs of bilateral contracts compared with those of other forms of coordination, such as a general legal regulation, will be an important, though not comprehensive element of an explanation. And certainly one can learn from property rights analysis that contractual agreements, whenever applicable, are preferable to global regulations as they permit a more flexible adaptation to the concrete situation. But in a world of incomplete information, the theoretical second best of a legal regulation might well be a realistic first best.

3.2. *Externalities from the property rights perspective*

In the present author's view, property rights analysis becomes more rewarding if one applies it to the case of externalities. Cheung (1970) and other property rights economists have correctly criticized the Pigo-

vian solution for correcting the divergence between private and social costs for neglecting the costs of applying Pigovian taxes. They correctly maintain that the decision as to whether externalities should be internalized, and if so, by which means, cannot be taken without considering the cost of internalizing. Given this fact, sometimes no improvement will be possible by further internalization.

From a property rights viewpoint, externalities are nothing but unspecified and hence untraded property rights. As the Pigovian tradition looks at externalities as a form of "market failure" which requires government intervention, the property rights economists argue for a solution exactly in the opposite direction, namely by extending market relationships and through further specification of property rights.

This is a good view as long as it is not exaggerated. Certainly it is often the case that it is not market failure but government failure (preventing an adequate structure of property rights) which hinders "externalities" from disappearing through appropriate specification of tradable property rights. But this is not necessarily and not always so: "You cannot show analytically that the government, in principle and in all cases, handles externalities better than the market; nor can you prove the opposite" (Dahlman, 1979, p. 156). What one can do (and should do) is to compare the transaction costs inherent in the different approaches to the problem of externalities. Without yielding a global optimum, this approach gives some practical policy implications that — depending on the specific conditions of each case — comprehend the whole range of possible measures, from direct inhibition up to complete inactivity.

This is also in principle acknowledged by Cheung, in spite of his market-biased view. He argues for a sort of subsidarity principle, starting from the real conditions: "The question is whether, given the same effects of an action, actual market contracts or realizable government regulations involve lower transaction costs so that a higher net gain or a lower net loss will result" (1974, p. 29). Whereas a single-minded view of the externality problem in terms of unspecified property rights would lead to the naive conclusion that there are no externalities other than those already kept down to the lowest possible level by trade in specified property rights, or those prevented from attaining the minimum level by government impediments to appropriate specification, a correct application of the transaction costs approach leads to a more balanced and policy-oriented conclusion: "The immediate implication, so often overlooked in subsequent writings on Coases' work, is that when there are transaction costs and informational differences between traders, that it may very well matter to whom liabilities and rights are assigned. This directs the analysis to policy matters... The Coase line of reasoning does not limit attention to tax rates alone — any government action that achieves either a decrease in the costs of transaction or some other approximation to a desirable course of action is feasible. Not only Pigovian taxes but all other weapons in the government's arsenal become available as well... If the government can make the costs of moving to a preferred allocation lower than the benefits of doing so, there is a guarantee that the result is sanctioned by the Pareto

criterion. Any economist who is also a self-interested government consultant ought to embrace the Coase analysis whole-heartedly, for it would seem to call for more and better cost-benefit analyses by government agencies dealing with pollution and other environmental problems" (Dahlman, 1979, pp. 158, 160—161).

Again we see the big advantage of the modified property rights approach comparing the transaction costs of different modes of coordination. If this line of thought dominates over the presumption of markets as the only efficient allocation mechanisms, then much can be learned from this particular viewpoint. It then can become an important but not exclusive part of an integrated social science view. The bias for markets and against all other forms of social coordination may then be replaced by the critical question of whether we have yet made sufficient use of market relationships in solving the important present-day economic problems. This leads to a variant of the famous conclusion by Clausewitz: Property rights economics is too important to be left to the property rights economists.

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