

Homogenous Social Groups Facilitate Exchange

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Introductory remarks on the purpose of the paper and the relevance of an economic analysis of institutions — II. Homogeneity and the structure of homogenous groups — III. The emergence of legal and illegal networks of exchange — IV. Homogenous social groups as functional substitutes as well as complements to economic and political processes — V. Some policy implications.

I.

It is probably an accepted statement in the profession that social institutions exert a considerable influence on economic activity¹ and therefore merit the attention of economists. On the other hand, it cannot be claimed that a comparative economic analysis of different institutions in terms of their functional contributions to the operation of an economy, in terms of the reability of exchange relationships, risk and investment decisions, growth and capital formation or harmony or strife in industry or trade is an area where the economists could give definitive answers, should an enlightened politician seek their advice. This state of affairs is particularly troublesome if the purpose of economic policy is mainly seen in the creation of an economic order in which the democratic tax state should intervene as little as possible.

While neoclassical economics takes social institutions mainly for granted, which begs the question of how universally this body of knowledge can be applied to differing economies, recent years have seen efforts to integrate economic institutions into the theoretical framework of the discipline.² Recognizing that institutions really matter, current research mostly of a micro-theoretic orientation now tends to integrate at least some elements of institutional analysis, as in the example of theories of unemployment based on an analysis of the labour contract.³

¹ An analysis of institutions, however, neither reduces to Marxism nor is it confined to “Evolutionary Economics”. Recently, we can witness attempts to integrate institutional analysis into main-stream economics, too. See e.g. *Starret* (1976).

² See e.g. “The Symposium on Economics of Internal Organization” (1975) and the “Symposium, The Economics of Information” (1976); or else the development of the “Theory of Anarchy”, *Tallock* (1972, 1974).

This paper is intended as an element of this more general research orientation, although its purpose is a very modest one. I hope to give, though partly in a tentative way, an analysis of the impact of the *homogeneity* of social groups on both the structures and relationships in which transactions among economic agents take place. More specifically, the concept of homogeneity appears to contain a set of conditions which describe properties of relationships between members of certain institutions, where these relationships, once established, reduce the costs of transaction among the members of the respective institutions.

The concept of homogeneity (to be defined more specifically in section II) is proposed to serve as an integrating link between such disparate fields as e.g. economic anthropology, public choice or the economics of delinquency; the purpose of this paper being to introduce the concept of homogeneity so as to give a coherent economic interpretation to apparently contradictory phenomena such as the evolution of a legal system and the emergence of illegal sub- or counter institutions, such as mafia-type organizations. This is an attempt to provide a more general analytic formulation of what has up until now been either merely described⁴ or been given an economic interpretation only in a very narrowly defined context of quite specific institutional arrangements.⁵

Actually, the basic argument of this paper is rather simple: transactions between homogenous partners in an exchange relationship tend to be less costly than transactions between heterogeneous actors. Starting from this elementary proposition, the relevance of a guaranteed obligatory social order for a system of voluntary exchange is explored. This is to show the extent to which social order is a means of reducing transactions costs, and the extent to which this is due to the homogenization of individual behaviour by the “imposition” of rules of public order.

The term “imposition”, however, needs to be interpreted quite carefully, imposition does not preclude a willingness to accept universal rules and constraints. On the other hand, the analysis also questions an assumption implicit in the public choice literature on the theory of the state to the effect that the public order is *unique*. Indeed, it is neither universal nor unique. Rather, the social order is viewed as being

³ The approach taken, however, may differ widely such as between *Doeringer* and *Piore* (1971), *Malinvaud* (1977) or *Williamson*, *Wächter* and *Harris* (1975).

⁴ Examples of quite different origin are *Bayley* (1976), *Bolnick* (1976), *Ireland* (1976), *Van der Laan* (1975), *Oskamp* and *Perlman* (1966), *Silcock* (19612 - 63) or *Sussman* (1972).

⁵ A Public Choice approach to the analysis of homogenous groups and their ability to facilitate exchanges in certain Chinese communities has been developed by *Janet Landa* (1976 a), 1976 b).

composed of the different norm systems which exist in a segmented heterogeneous society consisting of homogenous groups. This alternative approach serves as a frame of reference for a selective survey of empirical and descriptive studies analyzing the social functions of homogeneous groups as intermediaries in both the market and the political process. On the basis of the theoretical orientation (sections II and III) and an overview and interpretation of institutions which seems to fit the theoretical argument, an abstract characterization and typology of homogenous social groups is given.

The crucial question which everybody has to answer who proposes a new concept and orientation of research is: can new answer for economic theory and policy be expected? In concluding, I try to indicate some new and partly unorthodox implications and insights which further research on homogenous social groups might reveal.

II.

In this section, the concept of a homogenous social group is introduced in an abstract way. The idea, of course, is a perfectly general one. Therefore, I have avoided undue formalism.

Homogeneity

Given a society (S), which is composed of n individuals; where each individual (i) has available a set of alternative actions, which may be called the individual action set: (A_i). The individual action sets can be assumed to contain at least some common elements.

Following an individualistic view, the set of alternatives, or action set open to society (S) as a whole can be postulated to be realized as combinations of individuals action sets. In the beginning, no further assumptions on the structure of these combinations are needed⁶. Thus, social action could at the same time be the action of all, some or no members of the society in question, all, some or none of these actions could be identical. Of course, some of these combinations are clearly trivial. This range of possible combinations of individual action sets would give us society's action set (A_S).

Then, a homogenous group may be defined as any group (G) of individuals, where (G) is a proper subset of the society (S). In a formal

⁶ Of course, a more realistic view would have social action to be contingent on either social or individual action, where social action is not simply the aggregation of separate acts undertaken by individuals. Refinements such as these would, however, not necessarily facilitate discussion of the basic argument put forward in this article. Therefore, the exposition is deliberately kept as general as possible.

sense, homogeneity exists as the restriction on the action sets of the individuals composing the homogenous social group. This way of formally introducing the concept should, however, not be taken to imply a value judgement as to the desirability or “legitimacy” of excluding some alternatives to act from the individual’s range of activity. Thus, the existence of a homogenous group action set (A_G) may be postulated, which forms the outer bound of the action sets of the individuals within that group, and where (A_G) is a proper subset of (A_S). Likewise, the individual member of a particular homogenous group has an action set ($A_{i(G)}$), which is a proper subset of (A_G).

This restriction on the action sets of the individuals within the group, or of the group as a whole may arise as a result of any of a number of possible forces.

Following authors like *Hayek* (1967), one would primarily think of processes of historical development which have generated typical patterns of behaviour in subsets of society; presumably, because these patterns of behaviour have survived the process of selection and turned out to serve members of these social groups best over time; where these processes of development and selection define rôles, exclude some ways of behaviour and encourage or demand others. Thus, specification of rôles (i. e. restrictions on action sets) could be seen as being the result of human action, although not of human design.

Almost the opposite could also be true. One could think of homogenous groups having their peculiar “constitutions”, where this constitution is an act of either conscious creation of a social order or at least conscious acceptance, and where “elements of common understanding and common agreement (...) entail limitations upon action sets”.⁷

Also, restrictions could be strictly imposed, either externally, or internally by some subset of the group, such as an *elite*. Finally, the source of the constraint may be perfectly obscure, where the constraint is nevertheless effective as a consequence of its tacit acceptance by the members of the homogenous group.

⁷ This point was strongly made by *Vincent Ostrom* in his reaction to an earlier version of this paper. (Letter of June 26, 1978). I should like to quote a few more sentences, in which he put forward a more specific interpretation of the concept. “It seems to me that you are approaching a problem that becomes rather critical for the ‘Constitution’ of groups (and states for that matter) in the sense that *Buchanan* speaks of constitution too. (...) In a sense then your whole paper could be constrained in one that would be amenable to analysis as one that is concerned with creating constitutional orders.” The term “creation” in this context should be handled with care; see in particular the critique by *Hayek* (1967), and more specifically, and also to be seen in the context of ‘prescription’, *Shaffer* (1975).

Prescription

One particular case of restriction might be usefully singled out, since it seems to be relevant for the analysis of exchange relationships. "Prescription" can be regarded as a special case of the general restriction on the action sets of members of the homogenous groups. Hence, a specific action is prescribed, or indicated for a given circumstance — rather than a range of possible actions. Thus, the already reduced action set of the individuals members of a particular group is narrowed down to only a single element such, that, given a particular circumstance, or stimulus affecting an individual member of a homogenous group, as a response this member has only one possible action available, and will react as prescribed. This is relevant wherever in social organization the predictability of individual behaviour is important. Generally speaking, prescription can then be regarded as a precondition for division of labour in society, and, more particularly, in exchange relationships prescription achieves what otherwise has to be established by contract or directive.⁸

Features

1. Reduction of Social Costs

The restrictions upon the action sets of the members of the homogenous social group imply the potential reduction of social decision costs of this group. As an elementary proposition, this would hold under two assumptions: a) that the costs of social decisions are a positive function of the complexity of the set of alternatives under consideration; and b) that complexity can be measured by the number of alternatives; than a reduction of (A_S) to (A_G) will *ceteris paribus* reduce the costs of social decisions. Assumption b) is a consequence of the elementary notion of homogeneity defined earlier as a mere reduction of the set of alternatives upon which to decide. This does not carry any qualitative connotations. If, instead, restriction (and prescription) were defined as structuring the decision spaces in a qualitative way, reduction of complexity could also be dealt with in a qualitative manner. This would essentially lead to the same proposition.

"Social decision costs" refers generally to the costs of search, information, considering alternatives, and negotiating agreements. Not all of these costs vary by necessity with the number of alternatives under consideration, but at least some obviously do.⁹

⁸ Similar to 'restriction', 'prescription' is to be interpreted as a technical term. By no means is coercion the source of either 'restriction' or 'prescription'.

⁹ A cost approach to social decision making was put forward in their seminal book by *James M. Buchanan* and *Gordon Tullock* (1962). In this

2. Modification of the Environment of Individual Decision Taking

The reduction of the action sets reduces uncertainty and therefore increases predictability of the dynamics of individual relationships. Prescription as the special case lowers the costs of taking decisions to zero.¹⁰ Also, prescription makes the behaviour of any one member of the homogenous group predictable to both insiders as well as outsiders, as long as they understand the structure of the group. Predictability of individual decision taking entails opportunities for synchronized social behaviour. For instance, reliability of individual members is essential for the operation of networks of communication. A functionally specialized communication network, in turn, lowers the per unit costs of information. This network processes and disseminates information, thus providing an increase in the quantity of information manageable; or, possibly at the same time, increasing the quality of the information processed by noise reduction or increased reliability.

3. Enforcement

Discussion of restrictions of individuals action sets and prescription of reactions begs the question of enforcement. For any given homogenous group, there exist specialized systems for the enforcement of the restricted action set. These systems act to enforce decisions of both an individual and a societal character, where a discussion of how enforcement is actually effectuated does not seem to be amenable to economic analysis without ending up in a tautological utility — cost calculus. Leaving the psycho-sociological question of the techniques of social enforcement aside, it can be postulated that, due to specialization, enforcement within the homogenous group is potentially less costly and/or more accurate than social enforcement in the rest of society. This in turn reduces the cost of transactions arising from deviant behaviour to both the group as a whole, as well as the individual member, whereas the effect on the rest of society depends on whether it is in the interest of the nonmembers that the standards of behaviour in the homogenous groups are stable or not. Consequently, for transactions effected in the context of homogenous groups, there is a potential reduction for transactions costs arising from contracting, gathering and processing information as well as from policing.¹¹

context, *Sydney Ulmer's* (1963) criticism of their notion of costs in political decision making is pertinent.

¹⁰ This does not apply to secondary costs of decision making, e.g. the neglect of relevant alternatives. Under prescription, the costs of foregone opportunities, which due to prescription could not be considered, can be quite substantial. See also the last paragraph of this section.

¹¹ *Thomas D. Crocker* (1971) introduced this distinction.

4. Potential Defects

Restriction, and especially prescription, entails rigidity of the homogenous group structure and implies a potential for destabilizing defects, if the group's environment, especially society as a whole, changes; such a change may render alternatives relevant for the group as a whole which are excluded from consideration by either restriction or prescription. Thus, the advantages of specialization, stability and accuracy may be acquired at the expense of an increased pressure towards constitutional change. If this is so, an argument similar to the one advanced until now may apply in turn. Homogenous social groups with a long history are likely to have undergone a variety of institutional changes and could therefore be said to be more stable than society as a whole in meta-constitutional terms. Otherwise, relatively high costs may be incurred as a consequence of not taking into account alternatives outside of the restricted action set. There is a potential increase over time in information costs concerning the nonfeasible set, upon the change of the environment of the homogenous group. The specialization characteristic for homogenous groups can have adverse consequences. Relatively high secondary decision costs can be incurred as a consequence of not taking account of the elements outside the restricted set. This would manifest itself in low quality of decisions and disruptive factors bearing upon interindividual relationships.¹² Over time, these defects can be expected to disappear due to either constitutional change or a dissolution of the homogenous social group.

5. Restatement

Homogeneity of a social group is essentially seen to be equivalent with the restriction of the action sets of the group members as compared to the action sets open to those members of society who do not belong to the homogenous social group in question. This implies that homogeneity is a relative, not an absolute concept. To speak of homogeneity of a social group is meaningful only in comparison with a set of people characterized by relatively more heterogeneity.

Secondly, restriction (and prescription) in action sets is not to be confounded with the introduction of utility boundaries. By restricting the action sets and imposing an order, a group will generally try to rule out actions which in the normal course of events produce dis-

¹² The incidence of social decision costs depends on the structure of the homogenous group in which decisions are taken. The above refers mainly to groups in which decisions are taken jointly by all members. If decisions are taken implicitly or hierarchically, a further reduction of alternatives will occur. For the sake of simplicity of exposition, *dynamic* aspects are excluded from the present discussion, although they are to a certain extent implicit in what has been said.

utilities to their members, although they might be individually advantageous to any particular group member at any particular point in time.

The rationale behind this argument can be readily demonstrated by reference to the well known “prisoners’ dilemma” type of game theoretic situation, where the cooperative solution has to be enforced by a social order. Homogenous social groups may then be said to have a more inclusive order, providing more cooperative solutions among the group members than is possible in the rest of society.

That is, the order which restricts the action sets makes behaviour of group members more predictable, lowers the costs of transmitting information among group members and, more generally, lowers the costs of transactions; this order can be said to be a rather detailed constitution. Since the constitution of a homogenous social group to this group is of such relatively conspicuous importance, whatever constitutional change may be required will affect the group and each of its members more intensely than would be the case in a less homogenous group with less interdependence among group members.

III.

It has been known for a long time that the establishment of a system of guaranteed forms of agreement, of enforced rules and a singular (non-disputable) attribution of alternative actions to individuals or collectives is a necessary precondition for a system of voluntary exchange. This is achieved by ruling out certain actions which would violate the public order (restriction) and the alternatives to act individually can further be reduced by particular obligations or contracts (prescription). Singularly attributed alternative actions constitute “property rights”. Thus, a specified system of legal regulation and social normation is an institutional prerequisite for the effective operation of the market economy, see for a recent restatement *Mueller* (1976, 397) with further references to the pertinent Public Choice literature. In particular, recent discussion among Public Choice theorists has clarified these conditional interrelationships with the advancement of the “theory of anarchy”, *Tullock* (1972, 1974). This body of theoretical literature seeks to explain, among other things, the emergence of the constitutional state and the conditions of its existence; *Buchanan* (1975). According to this view, the legal system is a collective good, from which no member of society can be excluded.¹³

¹³ This view was developed by *Buchanan* (1975, Ch. 7), following a line of thought initially elaborated in *Ireland* (1968). This view was taken to an extreme by *Holcombe* and *Tollison* (1976).

More specifically, the legal system is a collective good in that:

1. It operates as a procedure to resolve conflicts among individuals and groups, thereby preventing the *accumulation of unresolved interindividual conflict*. Accumulation of conflict can, in the long run, prove to be destructive for society as a whole, for instance, when basic institutions are questioned passively or destroyed actively, because they are associated with a status quo which due to an accumulation of unresolved conflicts, is no longer accepted. Continuous conflict resolution, in turn, reinforces restrictions and often issues prescriptions.

2. Secondly, the legal system provides all actors somehow contracting in society with a scheme of reference on which they can rely in their transactions. Upon certain actions or stimuli, reactions are prescribed. The behaviour of all parties to a given transaction becomes predictable due to the homogenization of individual behaviour by means of public ruling.¹⁴

3. Where the legal rules are nonspecific and ineffectively regulate a given transaction, thus causing conflict, and/or where the outcome of the legal process is not easily predictable, transactors cannot rely on the provision of the public good and will therefore demand a specific solution for their conflict. This solution to them is essentially a private good¹⁵, containing elements of publicness beyond the parties immediately involved only insofar as the conflict resolution can serve as a frame of reference or precedent for other parties in similar cases.

Although a system of legal normation contains many elements of a collective good, this need not necessarily be a legal system maintained by the state. What applies to the law applies to systems of social normation in general. Often, decentrally provided social normation suffices and serves both as a substitute as well as a complement to sets of

¹⁴ It should be noted, however, that homogeneity is a necessary, not a sufficient condition for predictability of behavior. *Thomas Ireland* on the other hand in an unpublished comment argues as follows: "However, 'homogeneity' itself is not enough to reduce transaction costs, as *Backhaus* assumes. Whether this will happen or not depends on the social structure within the identity group. (...) If I am a member of a group whose behavior is predictably unreliable, I will have lower costs in transactions with persons not in my group than with persons in it." (*Th. Ireland* (1977)). To me it seems difficult to conceive of a group (i. e. 'set' and structure) which could generate predictable unreliability. At least to the extent of predictability, there should be reliability. To make things less difficult, however, 'unbehaved' groups whose behavior becomes the less reliable the more restricted is the action set will be ruled out from further consideration.

¹⁵ The conflict resolution is a jointly supplied good, with a *low* degree of publicness. The equilibrium number of club members is typically *two*, the scale being defined between one (pure privateness) and infinite (pure publicness). See *Buchanan* (1965).

rules of a wider or more general applicability. The analysis of the public good aspects of the legal system combined with a neglect of its private good aspects has induced many Public Choice theorists to consider only *one* system for any given society. The legal system, however, is only one facet of the aforementioned institutional structure of conflict resolution in society. It operates efficiently only to the extent that the heterogeneity of citizens and the complexity of their conflicts can be overcome by recourse to the formalization of rules and conflict resolution procedures; see *Mueller* (1976, 398) with further references. The more heterogeneous the population and the more heterogeneous the object of their respective transactions and conflicts, the more conflict relevant information is foregone during the process of abstraction and subsumption under formal rules. Decentralized procedures, adopted to specific local and social conditions may integrate more information necessary for conflict resolution than can be integrated into a traditional forensic procedure. Therefore, additional social normation, special ethics¹⁶, codes of conduct in personal relations such as friendship, families, tribes, ethnic minorities and religious communities etc., as well as ideologies in political parties and business organizations, from which rules of conduct and “expected” attitudes and actions can be explicitly or implicitly derived; complement as well as substitute the formal legal system.

The case of complementarity will be referred to in an exemplary way only in section IV, while I now turn to consider the case of substitution in more detail.

Concentration of Institutions

The argument can be divided into two parts. First, a scenario is given where, beginning in a state of anarchy, institutions develop. Second, the question of uniqueness of an institutional order is addressed directly, by reference to the scenario outlined in the first place.

To begin with, reconsider our society (*S*), which, as introduced in section II, consisted of *n* members (*i*). This society initially may be thought of being in an anarchic state, where no institutional order exists. Its members, of course, will not remain isolated one from another, and engage in exchange activities. An exchange is a complicated relationship, whereby somehow a good is transferred from one person to the other in one direction, and an equivalent in the opposite direction. The interesting question, economically, is how this transfer is actually effectuated. We may postulate that “somehow”

¹⁶ *Silcock* (1962) discusses the function of ethics in professional groups. For related phenomena in the provision of medical care see also *Arrow* (1963).

refers to a service, whereby the commodity exchanged is transferred. We may denote this service by (s) and, since it needs to be produced in order to be available, we can postulate the existence of a “technology” (T), by which the service (s) is produced.

In what follows, I want to ignore the goods or services actually exchanged, concentrating on the service (s) which allows an exchange to take place.

What does (s) consist in, and what about the technology (T) by which it is produced? This technology consists of an institutional device by which an optimal pair is selected from all potential traders, establishing a particular connection, which makes the technical transfer feasible and guarantees the realization of the exchange. This is achieved by protecting the exchange from all kinds of interferences, internal or external to the particular connection established. This protection may be described as an *insurance* of the transaction. Thus, what was called a technology of exchange fulfills essentially two functions: an informational process by which an optimal pair of traders is selected, and a service to protect the relationship established. There may be various ways by which these functions of processing information and of protecting established connections may be fulfilled. Applying the argument of section II above, homogenous social groups as networks of specialized communication will be able to fulfill this function of facilitating exchange, due to a relative advantage, both in terms of quantities, quality and reliability of information processing and due to the capacity of establishing and guaranteeing norms through restriction and prescription. The technology (T) then consists precisely of the homogenous social group structure introduced and defined in section II. Restriction operates to facilitate the selection of an optimal pair of traders from all potential partners in society. Thus, a particular connection is established which makes the technical transfer feasible, while the realization of the exchange relationship is guaranteed by the prescription of actions. Then, prescription protects an exchange from all adverse interference, be it internal or external to the exchange relationship. Two cases may be distinguished. When both partners to an exchange are members of the same homogeneous group, prescription will readily protect the exchange relationship from being spoiled. When, however, one partner to the exchange relationship is not a member of the homogenous social group, prescription can only govern the behaviour of the group member, not necessarily extending to the trading partner. Still, prescription may be instrumental for the protection of the exchange relationship, because for all members of the homogenous social group in question *solidarity* will be prescribed with the member facing difficulties.

Under these circumstances, it can be expected that trade will be concentrated in relatively homogeneous segments of society. This division of labour would lead us to expect benefits from specialization being reaped by the respective homogeneous social groups. More so; while dependent upon nature of the commodities transferred and the complexity of the exchange, it can be assumed that the production of the service of exchange (s) involves decreasing average costs. This is a critical assumption, however, and it is of pivotal importance for the rest of the argument put forward in this essay. At least to the knowledge of this author, however, empirical evidence can be cited exclusively in favour of the assumption, e. g. Mack (1975). Mack's study deals with the "crime industry"; the pattern of diversification of criminal entrepreneurial activities, once the communication and insurance network (the "infrastructure" of the crime industry) has been set up, seems to be ubiquitous. Basically, the assumption of decreasing average costs in the production of (s) relies on the argument, that the technology (T), by which the service is produced, is a network, where the production of an additional service increases the marginal production costs less than proportionately.

In order to illustrate a scenario, in which an exchange network will develop and concentrate, assume that the number of exchange per period of a particular commodity (j) involves the provision of the related service (s_j) x times. Now, there are certainly other goods, which may be traded, such as ($j + 1$), ($j + 2$) etc. and this calls for the provision of the related services (s_{j+1}), (s_{j+2}) etc. Under these circumstances, an institutional technology, which is designed to facilitate the exchange of the commodity (j) may at the beginning not operate at its optimal capacity because of the limited occurrence of exchanges in (j). Here it may be desirable for the "owners" of (T_j) to modify the technology (institution) so as to make possible the exchange of other commodities, such as ($j + 1$) and ($j + 2$) etc. And this may involve an additional cost of $\Delta C_{T_{j+1}}$, $\Delta C_{T_{j+2}}$ etc. In what follows, it will be assumed for the sake of simplicity that all increments $\Delta C_{T_{j+1}}$, $\Delta C_{T_{j+2}}$ etc. are of equal size, although in the real world this will hardly be the case. Starting from a particular technology (T_j), the provision of further and further services (s_{j+1}), (s_{j+2}), etc. would be added up to the point where either all exchange related services demanded in the particular society would be included into the technology or institutional structure in question, or where for some additional service the cost increment ΔC_T exceeds a benefit from increased scale. This may be illustrated as in Figure 1, where the downwards sloping lines (over) in relation to the amount of transactions, and where (in an upward direction) the cost curves represent more and more inclusive technologies. Still, the incremental

benefits from depict the average cost curves for the provision of the service increased scale become smaller and smaller.

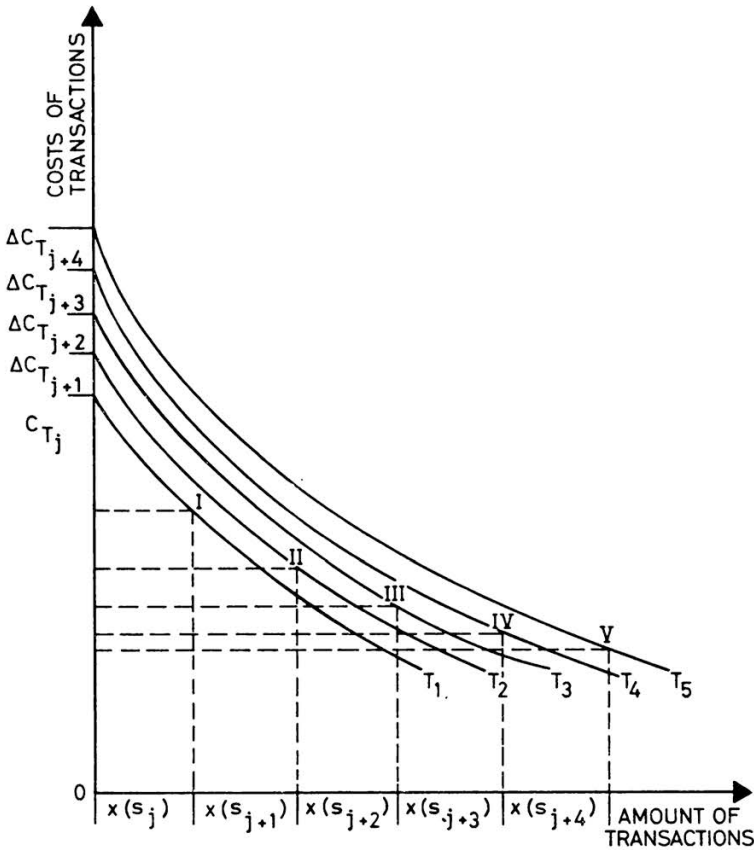


Fig. 1

It is important to note that in this case both the aggregate and the average costs of transaction decrease with the further introduction of commodities into the institutional device, as shown in Figure 2. There, the aggregate costs decrease stepwise, when the institutions become more and more inclusive. The average costs decrease accordingly. The institution which facilitates exchange by provision of the service (s) will grow up to the point where the marginal benefit from the inclusion of further services is equal to the marginal costs of the provision of these services.¹⁷

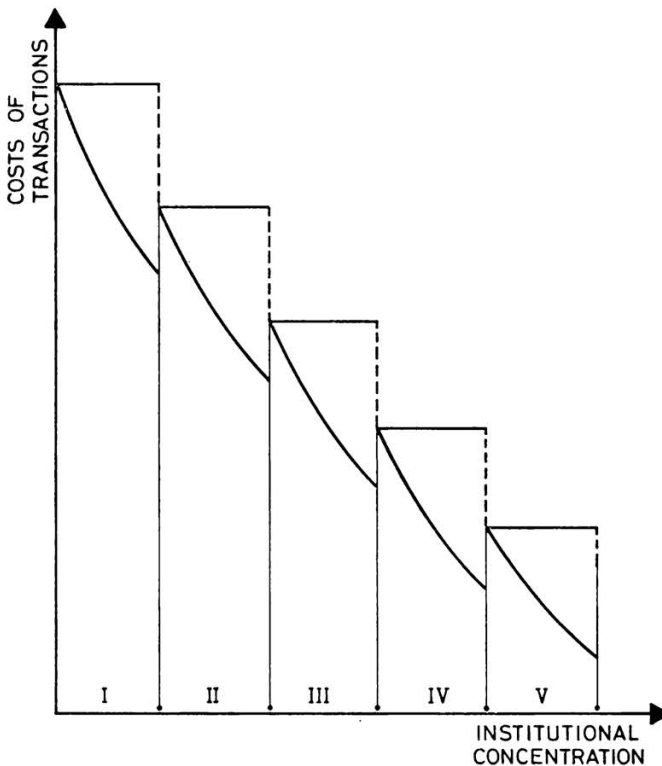


Fig. 2

How can we meaningfully talk of the costs of maintaining an institution, if the institution actually is the formal or informal inter-individual network, the internal structure of a group in society? The costs of operating the technology (T) are all the social costs which have to be foregone in order for a homogeneous social group to exist; they can be specified in a meaningful way only when the concept is employed in order to investigate a particular problem empirically. As

¹⁷ Because of the assumption of the equality of the total cost increments this cannot be shown graphically. Under this very restrictive assumption, the institution grows up until the point where it encompasses all goods and services. Consequently, only one such institution will survive in any given society. This case is identical to that which has up to now received the exclusive attention of economists. The suggestion of the singularity of the state in this literature consequently rests on the implicit assumption of the equality of total cost increments. If this — as it seems: unrealistic — assumption is dropped, the purely economic explanation of the emergence and existence of the state no longer holds. (This does not preclude, however, different explanatory attempts in economic terms.)

such, the notion of a homogeneous social group is perfectly general, and so are the accompanying notions, in particular costs and benefits. More specifically, the social costs to the members of the homogeneous social group are the utilities foregone due to restriction. These are not identical to the social costs the existence of the homogeneous social group may impose on other members of society who are in turn not members of this group. Similarly, the benefits, which the members of a homogeneous social group enjoy as a consequence of the proper "operation" of the homogeneous social group structure are not similar to those benefits which other members of society may enjoy in terms of externalities spilt over by the existence of the homogeneous social group.

The evolution of substitutes to state organization

In this section, I want to discuss certain conditions under which the singularity of state organization is questioned. In order to develop this argument, a scenario is described under which a counter state organization develops. We may interpret (T) more narrowly as being the legal structure, which is guaranteed by the state. There are various reasons why there may be a divergence between the norms and preferences held by a substantial part or even the majority of society and the norms prescribed by the legal system. Or, more generally, the legal system, at least in some areas, may impose costs on parties seeking conflict resolution, which these parties can partly or mostly avoid when taking recourse to nonstate forms of conflict resolution. In business, we may think of arbitration procedures. Also, the state is of course not simply a device to economize on the costs of transactions by designing institutions which facilitate exchange. Rather, the state has the quality of a "moral" institution, by which quality it tends to override the preferences of its members at least from time to time. So, quite often sovereign power is used to prohibit certain transactions, which some members of society may disapprove of, in which others may nevertheless want to engage. Prostitution or the consumption of certain narcotics may serve as examples for this kind of prohibited exchange. In these cases, the costs of transactions are raised instead of minimized by the state legal system. Whether such prohibitive policies are effective, however, depends on the availability of substitute patterns of exchange.

Again, we exclusively think of service (s) by which an exchange is actually made possible, and in order to distinguish this part from the rest of the argument where we dealt with legitimate exchanges, the service which is to facilitate an illicit exchange is denoted as (\bar{s}). Then, there will be a demand for this service (D_s), as well as the costs of providing the service, which are a function both of the "real" costs of

transactions as well as the expected punishment by state enforcement agencies.¹⁸

It follows from the discussion in section II, that an exchange prohibited by the state legal system could nevertheless be effectuated in the context of a homogeneous segment of society where the homogeneity of this group would protect the exchange relationship from outside interferences, especially from interferences from enforcement agencies. In the absence of such an institutional device, even if there is a large positive difference between the demand for this exchange and the expected costs (including those inflicted by enforcement agencies), the transaction will not take place. If, however, the state happens to prohibit an exchange which may be facilitated within a pre-existent social group (such as an ethnic minority with few outside contacts¹⁹) and which, consequently evades political control, the set up costs of an alternative institutional structure may be relatively small. By "set up costs" we understand all those costs to be borne by the homogeneous sub-segment of society which are attributable to a decision to engage in the transaction in question. Again, these cannot be exhaustively specified unless a particular example is examined, but in a general way we may again refer to the utilities foregone by group members due to the engagement in the illicit transactions mentioned.

I have for the sake of simplicity up until now discussed the process of the change of institutions as if the institution as a technology were owned by someone who was in the position to modify it deliberately. Although there may be a hint of truth to such a view, e. g., when organizing patterns of behavior and responsibilities in industrial and administrative organizations, in general social engineering isn't as pervasive, and the benefits from modifying institutions cannot easily be reaped by an entrepreneur. In general, social change will not be an artifact but a development, composed of many elements, each an adjustment to new pressures and/or opportunities.

This view seems to be particularly appropriate when discussing the scenario of how counter-states may encounter the proper conditions to develop.

To recall, trade within this alternative social structure of exchange, (S), implies an insurance against outside interference into the exchange, particularly action by the state and its enforcement agencies.

¹⁸ For a graphical treatment of this relationship the reader is referred to *Buchanan* (1973).

¹⁹ The Chinese heroin market in central Europe may be quoted as an example.

In Figure 3, I have tried to illustrate a case where there is one exchange (requiring the service \bar{s}_j) the demand for which is large enough to cover the costs of engaging in the respective transaction. These costs are shown in the technology cost function (T_1), and the point I is the initial break even point. Once this exchange related service (\bar{s}_j) is provided by the institution characterized by (T_1), also the demand for other somehow related services may be satisfied. This calls for an adaptation of the institutional technology respectively.

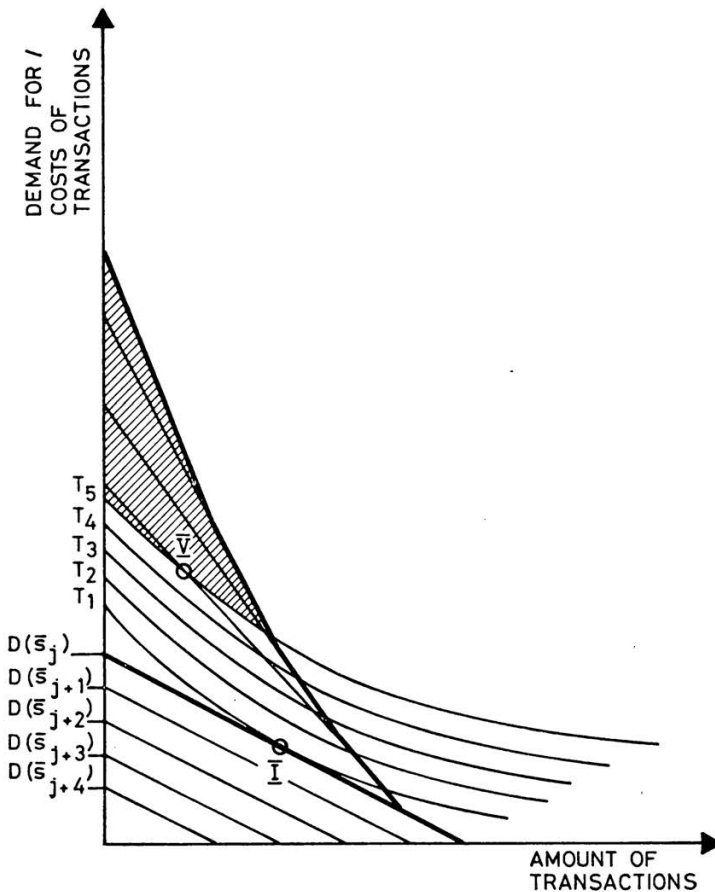


Fig. 3

For instance, (T_2) represent the technology cost function, where both the demand for (\bar{s}_j) and (\bar{s}_{j+1}) can be satisfied. (T_5) then is the technology cost function which represents the institutional framework

through which all services (\bar{s}_j) through (\bar{s}_{j+4}) can be provided. The shaded area gives an idea about profit potential for such an (illicit) activity.

In terms of an analysis of enforcement strategies, it would be interesting to see whether the institutional network which facilitates illicit exchange could be wiped out by eliminating the initial demand for (\bar{s}_j), e.g. by legalizing the trade and the commodity, the exchange of which (\bar{s}_j) facilitates. In the example depicted in Figure 4, this would not help at all. The re-legalization of the trade in (j) does not destroy the whole network. The process of the evolution and concentration of counter institutions in this example is not as easily reversible. Once established, the network under these circumstances could very well survive on the exchange relationships facilitated by (\bar{s}_{j+1}) through (\bar{s}_{j+4}). Furthermore, of course, after re-legalization there is normally no restriction to legalized exchange, which could be effected through the same networks as under prohibition.

This scenario would explain how in heterogenous societies, mafia-type organizations which explicitly exist outside the state legal order, often defying it, could evolve *and* persist. Counter institutions based on the principles of restriction and prescription are able to profit from a reduction in the costs of transactions, in *Crocker's* (1971) taxonomy this implies "C" reduced contract costs, "I" reduced information costs and "P", especially in the case of prescription, reduced policing costs. This would particularly reduce the risk of moral hazard which to avoid is, of course, essential for any insurance (*Arrow* (1963)).²⁰

The profit to be made by facilitating exchange through a homogeneous social group network, the existence — not extent — of which is shown in the shaded area in Figures 3 and 4, is appropriated by the effective "owners" of the counterinstitution. On the basis of this general analysis these owners cannot be identified. We may consider either the homogeneous group as a whole, an *elite* within the homogeneous group, society as a whole, the consumers of the services provided, or even an external agent. Similarly, one does not normally speak of the "owners" of a legal system. The question becomes relevant, however, when policy implications are to be considered. The "owners" can be regarded as those groups which take an interest in the shape, dynamics and development of the institutions in question. Then the "owners" are the agents with whom the policy maker has to reckon when making homogeneous social groups the instrument or object of his policy.

²⁰ The concept of "moral hazard" was introduced by *Arrow* (1970). For an extensive discussion see *Eisen* (1978). In the case of professional ethics, e.g. public silence is *prescribed* as the adequate response upon receiving knowledge of a colleague's act of malpractice.

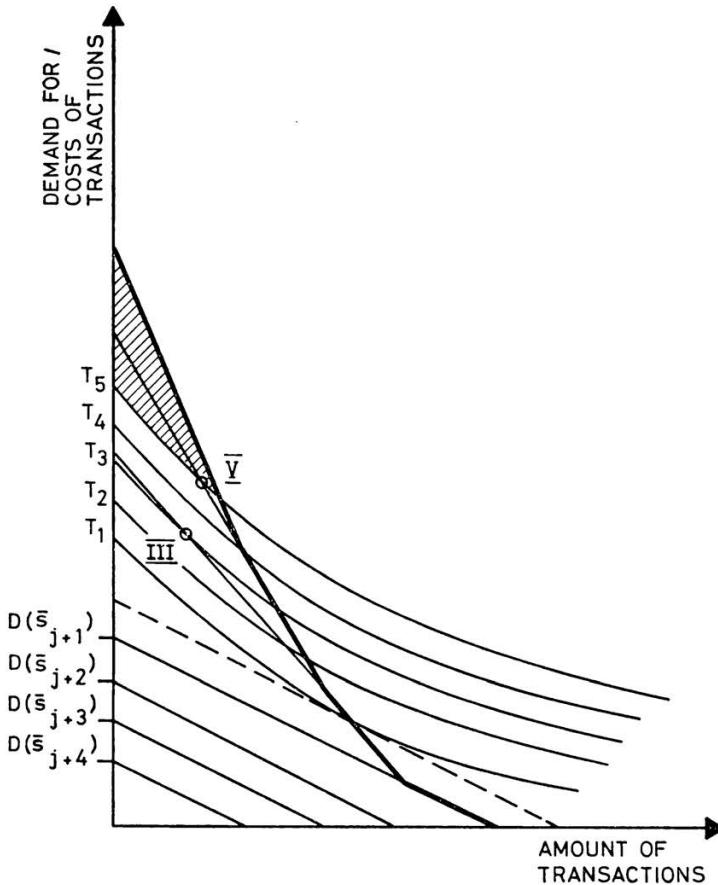


Fig. 4

IV.

In the preceding section, counter institutions which facilitate exchange have been discussed as substitutes for the state legal system and by virtue of this discussion somehow appeared in the light of unlawfulness. It would, however, be grossly misleading to think of counter institutions only in terms of substitute networks engaged in illicit transactions. The predominance of extra legal trade would in general be mainly the result of unwise public policy. Indeed, the studies mentioned earlier deal with a wide array of different realizations of the basic principle discussed in this essay, such as

- *ethnically* homogeneous groups²¹ through which the trade of specific commodities is carried out;
- homogeneity of *local* residents which helps in programmes of community development; see *Bolnick* (1976);
- the *ethnic* and *local* homogeneity in Japanese neighbourhoods, which effectively renders police services superfluous, *Bayley* (1976); further, in this case it is highly doubtful whether any state norm not shared by the homogeneous neighbourhood could effectively be enforced by the state by means of police intervention;
- *ethnic* homogeneity in professional groups facilitating internal group communication as well as the enforcement of standards of competence, deviant behaviour being ultimately sanctioned by expulsion; this method also prevents deviant behavior in prisoner — dilemma type situations²², where the common benefit may be a monopoly or cartel profit extracted from the rest of society; *Silcock* (1962) and *Arrow* (1963);
- as a final, though by no means exhaustive example²³, we may quote *personalistic* homogeneity of social groups (identity groups²⁴). These may turn out to be particularly relevant in bodies of political decision making of limited size, such as in committees. These groups serve as quasi-insurance systems against the risk of being defeated by vote, the identity group always voting as a block, following group decisions made earlier; the individual member substitutes the risk of being openly defeated for the risk of internal defeat, which is preferable either because of similarity of members' preference or because of the likely erosion of the standing of the person in question in the respective body of decision making; *Ireland* (1976).

²¹ Through these groups the trade of specific commodities (import and luxury goods through Lebanese traders in Sierra Leone, rubber through the Hokkien Chinese families in Singapore and Western Malaya) was effected. While in Sierra Leone Lebanese traders were the only group maintaining outside as well as national contracts and therefore were able to engage in import trade, the Hokkien Chinese reduced contract costs (in particular uncertainty due to unreliability of indigenous producers and further aggravated by peculiarities of the small holder rubber market) by means of dealing exclusively within their own families, thus reducing costs of information, transaction, conflict resolution etc.

²² The reader unfamiliar with this constellation of interests is referred to *D. Luce* and *H. Raiffa* (1957, pp. 94 - 102, Ch. 5.4, 5.5).

²³ Further cases analyzed include: *John C. Hause*, *Thomas R. Saving*, *Rodnes T. Smith* (1976, pp. 433 - 435, 431 - 432 and 303 - 430 respectively); *Smith's* analysis, focuses on the substitution between legal and illicit trade, the homogenous groups being firms; *Hiroaki Hayakawa* and *Zianis Venieris* (1977, pp. 599 - 617), *M. H. Moore* (1973, pp. 270 - 277).

²⁴ In order to give credit to whom credit is due, I should like to report that according to *Thomas Ireland*, it was *Robert Whitaker* who invented this term.

These examples also shed some light on how homogeneity is actually achieved. In general, restriction is a consequence of a common reference system held by the group, prescription is equivalent to standardized behavior and modes of conduct which also secures the compatibility of the ends of the individuals incorporated into the group. Homogeneity seems to be continually reenforced by processes of social coercion, which work smoothly when members interact. When this socialization fails, homogeneity can still be secured by (the threat of) expulsion of deviant members, *Akarlof* (1976, 436). Transactions costs in homogeneous groups are reduced by a common language and social as well as local proximity which both reduce the costs of communication and thus facilitate mutual monitoring of group members. This leads to standardization and consequent predictability of group members' behavior, and, as a consequence of both of these factors, the availability of specific insurance system reducing moral hazard. In-group insurance, in turn, is superior to outside insurance because of the reduced costs of communication, of monitoring group members and, in case of conflict, the reduced costs of conflict resolution.

Not all of these characteristics need be present in every case mentioned, homogeneity of social groups still being a relative concept. There exists, however, a close interrelationship between these characteristics. These interrelationships deserve further attention by economists, apart from the explanation attempted in this paper of the emergence of concentrated and constituted institutions and the emergence as well as persistence of counter institutions to the public order.

In concluding, let me turn to some possible policy implications.

V.

The economic relevance of the analysis of homogeneous social groups as proposed in this paper is to be seen where exchange relationships are to be explained. More particularly, in terms of economic policy the approach is to be expected to be most relevant where reforming or restructuring the institutions of exchange is set as a goal of public policy. The following may constitute a possible research agenda.

Competition and cartels

Given that homogeneous social groups facilitate exchange, it should be interesting to find out whether they typically lead to cartelization of those markets which they control and tend to close markets for themselves, excluding nonmembers. This possible secondary effect is just the corollary of homogeneous social groups' relative advantage in

trade. Cartelization could be either beneficial or harmful to society as a whole, depending on whether the monopolization leads to an intensification of exchange (as a consequence of economies of scale in providing the exchange related services) or whether it leads to a reduction in output. Of course, also both effects could occur. Under the assumptions of the preceding analysis, the first alternative seems to be the more likely one.

If however, homogeneous social groups would monopolize some illicit trading activity, the second effect could also be beneficial to society, following *Buchanan* (1973) who argued like this: "if monopoly in the supply of 'goods' is socially undesirable, monopoly in the supply of 'bads' should be socially desirable, precisely because of the output restriction" (119). For this surprising result to be correct, however, *Buchanan* had to assume independence of criminal activities (127) whereas in this essay the precise contrary was held to be correct. If different criminal activities as such depend on an infrastructure and insurance systems etc., the assumption of independence is simply untenable exactly because of decreasing average costs for the inclusion of further activities into the illicit exchange system, see also *Backhaus* (1979). Obviously, discussions of this kind open up a wide area of research, the scope and possible fruitfulness of which, today, can barely be appreciated.

International trade

Similarly, homogeneous social groups can be expected to facilitate exchange wherever artificial barriers have been imposed. This may be applicable to international trade, an application of which was already suggested by *Vanderlaan's* (1975) study on the Lebanese traders in Sierra Leone. Again, this should also apply to illicit international trade, such as drug traffic, and a very special application would deal with the trade in information and the possibilities for censorship, *Reforms of the Legal System Tullock* (1969), *Backhaus* (1978).

A final (though by no means exhaustive) example could suggest possible reforms of the legal system itself, on the basis of an economic analysis. The current situation has the costs of civil litigation on a continuous rise, *Grunsky* (1976), while the amount of conflicts solved is not only shrinking in volume and quantity but also in quality, with certain types of legal conflict simply disappearing from the state system at all, a tendency which has been severely criticized by lawyers on occasion. One of the reasons for homogeneous social groups to be able to facilitate exchanges is their capacity to solve conflicts among themselves with relatively more efficiency. Separating those conflicts out of the general legal system which can be more efficiently or ex-

pediently be dealt with in homogeneous segments of a society may be a perfectly reasonable development had it been made the objective of public policy.

Summary

The efficiency of exchange in an economy depends on the structure of social institutions in which trade is allowed to take place. This calls for an emphasis on the economic analysis of social institutions. The purpose of this paper is to introduce the concept of homogeneity of social groups. Homogenous social groups are described both theoretically and by way of examples. They are shown to facilitate the establishment and preservation of certain types of exchange relationships, both legal and illicit. This sheds some new light on received options of publicity, e.g. in terms of some unorthodox ant-trust implications.

Zusammenfassung

Die Effizienz des wirtschaftlichen Tausches ist durch die gesellschaftlichen Bedingungen bestimmt, unter denen Austauschbeziehungen gepflegt werden können. In dieser Arbeit werden bestimmte gesellschaftliche Institutionen unter diesem Aspekt erörtert, indem der Begriff der Homogenität einer sozialen Gruppe eingeführt wird. Homogene gesellschaftliche Gruppen, so wird anhand einer theoretischen Abstraktion sowie verschiedener Beispiele gezeigt, erleichtern die Gründung und den Fortbestand bestimmter Formen von Austauschbeziehungen, sowohl legaler als auch illegaler. Daraus folgt eine neue Sicht einiger traditioneller Optionen der Wirtschaftspolitik, zum Beispiel etwas unorthodoxe wettbewerbspolitische Vorschläge.

References

- Akerlof, George (1976), "The Economics of Caste and of the Rat Race and other Woeful Tales"; *Quarterly Journal of Economics*, Vol. XC, No. 4, pp. 599 - 617.
- Arrow, Kenneth J. (1963), "Uncertainty and Welfare Economics of Medical Care"; *American Economic Review*, Vol. 53, pp. 941 - 973.
- (1970), "Political and Economic Evaluation Social Effects and Externalities"; *The Analysis of Public Output*, ed. J. Margolis, New York: Columbia University Press, NBER Conf. Series.
- Backhaus, Jürgen (1978), "On Censoring and Persuading"; Center for Study of Public Choice, VPI & SU, Blacksburg, VA 24061.
- (1979), "Defending Organized Crime? A Note"; *Journal of Legal Studies*, VIII.3, pp. 623 - 631.
- Bayley, David H. (1976), "Learning about Crime: The Japanese Experience"; *The Public Interest*, No. 44, pp. 55 - 68.
- Bolnick, Bruce B. (1979), "Collective Goods Provision through Community Development"; *Economic Development and Cultural Change*, Vol. 25, No. 1, pp. 137 - 150.

- Buchanan, James M.* and *Gordon Tullock* (1962), "The Calculus of Consent: Logical Foundations of Constitutional Democracy"; Ann Arbor: University of Michigan Press.
- Buchanan, James M.* (1965), "An Economic Theory of Clubs"; *Economica*, Vol. 32, No. 125, pp. 1 - 14.
- (1973, 1976(2)), "A Defense of Organized Crime?"; *The Economics of Crime and Punishment*, ed. Simon Rottenberg, Washington, D.C.: American Enterprise Institute for Public Policy Research, pp. 119 - 132 (120).
- (1975), "The Limits of Liberty: Between Anarchy and Leviathan", The University of Chicago Press, Chicago.
- Crocker, Thomas D.* (1971), "Externalities, Property Rights, and Transactions Costs"; *Journal of Law and Economics*, Vol. XVI, No. 2, pp. 451 - 464.
- Doeringer, Peter* and *Michael Piore* (1971), "Internal Labor Markets and Manpower Analysis"; Lexington, Mass.: Lexington Books, D. C. Heath.
- Eisen, Roland* (1976), "Uncertainty and Information — Uncontrolled Behaviour and the Problem of Moral Hazard"; München: Jahrbuch für Nationalökonomie und Statistik, Band 191.
- Grunsky, Wolfgang* and *Nicolo Trocker*, „Empfehlen sich im Interesse einer effektiven Rechtsverwirklichung für alle Bürger Änderungen des Systems des Kosten- und Gebührenrechts“?; München, C.H. Beck'sche Verlagsbuchhandlung.
- Hayakawa, Hiroaki* and *Yiannis Venieris* (1977), "Consumer Interdependence via Reference Groups"; 85 (3) *Journal of Political Economy*, pp. 599 - 616.
- Hayek, Friedrich A.* (1967), "Studies in Philosophy, Politics and Economics"; The University of Chicago Press, Chicago.
- Helpman, Elhanan* and *Arye L. Hillmann* (1977), "Two Remarks on Optimal Club Size"; 44 (175) *Economica*, pp. 293 - 296.
- Holcombe, Randall G.* and *Robert D. Tollison* (1976), "Lindahl Pricing of the Law" unpublished manuscript; Texas A & M University, and Law and Economics Center, University of Miami.
- Ireland, Thomas* (1968), "Public Order as a Public Good" unpublished manuscript; Loyola University, Chicago.
- (1976), "Gordon Tullock's Game: A Personalistic Analysis"; *Public Choice Annual Meeting Paper*, Roanoke, VA.
- (1977), "The Economics of Social Association" unpublished manuscript; University of St. Louis.
- Landa, Janet* (1976), "An Exchange Economy with the Legally Binding Contract: A Public Choice Approach"; *Journal of Economic Issues*, Vol. 10, No. 4, pp. 905 - 922.
- (1976), "The Ethnically-Homogenous Hokkien-Chinese Middleman Group: A Club-like Organization for Economizing on Contract Enforcement Costs"; *Public Choice Society Annual Meeting Paper*, Roanoke, VA.
- Luce, Duncan* and *Howard Raiffa* (1957), "Games and Decisions: Introduction and Critical Survey"; New York: Wiley, pp. 94 - 102, Ch. 5.4, 5.5.
- Mack, John A.* (1975), "The Crime Industry"; Saxon & House, Lexington Books, D. C. Heath, Westmead, Farnborough, Hants., England.
- Moore, Mark H.* (1973), "Policies to Achieve Discrimination on the Effective Price of Heroin"; 63 *AER P & P*, pp. 270 - 277.

- Mueller, Dennis C. (1976), "Public Choice: A Survey"; *Journal of Econ. Literature*, Vol. XIV, No. 2, pp. 395 - 433.
- Oskamp, Stuart and Daniel Perlman (1966), "Effects of Friendship and Disliking on Cooperation in a Mixed Motive Game"; *Journal of Conflict Resolution*, Vol. 10, No. 2.
- Ostrom, Vincent (1978), personal letter of June 26.
- Saving, Thomas R. (1976), "The Legal and Illegal Markets for Taxed Goods: Pure Theory and Application to State Government Taxation of Distilled Spirits. Comment"; *19 Journal of Law and Economics*, pp. 431 - 432.
- Schaffer, B. Duncan (1975), "Violence as a Product of Imposed Order"; *The University of Miami Law Review* 29, pp. 732 - 763.
- Silcock, T. E. (1962 - 63), "Special Ethics in the Economics of Group Behaviour"; *Malayan Economic Review*, Vol. 7/8, No. 1, pp. 1 - 18.
- Smith, Rodney T. (1976), "The Legal and Illegal Market for Taxed Goods: Pure Theory and Application to State Government Taxation of Distilled Spirits"; *19 Journal of Law and Economics*, pp. 393 - 430.
- Starret, David (1976), "Social Institutions, Imperfect Information and the Distribution of Income"; *Quarterly Journal of Economics*, Vol. XC, No. 2, pp. 261 - 284.
- Sussman, Martin B. (1972), "Family, Kinship and Bureaucracy" *The Human Meaning of Social Change*, eds. Angus Campbell and Philipp E. Converse, New York: Russel Sage.
- Symposium: The Economics of Information; *Quarterly Journal of Economics*, Vol. XC, No. 4 (November 1976, pp. 591 - 666).
- Symposium on Economics of Internal Organization; *Bell Journal of Economics*, Vols. VI, VII, Nos. 1 (Spring 1975) 2 (Autumn 1975) and 1 Spring 1976), pp. 163 - 180, 552 - 606, 105 - 131.
- Tullock, Gordon (1968), "A Note on Censorship"; *The American Political Science Review*, Vol. 62.4, pp. 1265 - 1267.
- (1972), "Explorations into the Theory of Anarchy"; Blacksburg: Center for the Study of Public Choice.
- (1974), "Further Explorations into the Theory of Anarchy"; Blacksburg, Center for the Study of Public Choice.
- Ulmer, Sidney (1963), "The Role of 'Costs' in Political Choice: A Review"; *Journal of Conflict Resolution*, Vol. XI, No. 2, pp. 171 - 176.
- Van der Laan, Hendrik Laurens (1975), "Lebanese Traders in Sierra Leone"; The Hague and Paris: 'S Gravenhage.
- Wilson, Amy Auerbach, Sidney Leonhard Greenblatt and Richard Whittingham Wilson (1977), "Deviance and Social Control in Chinese Society"; New York.