The New institutional Economics and its Implications for Development Theory

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I Prologue

In 1834, John Stuart Mill criticised the political economists of the day on the following ground. He complained that

> "they attempt to construct a permanent fabric out of transitory materials; . . . they take for granted the immutability of arrangements of society, many of which are in their nature fluctuating or progressive, and enunciate, with as little qualification as if they were universal and absolute truths, propositions which are perhaps applicable to no state of society except the particular one in which the writer happened to live."

He illustrated this criticism by pointing out the results of the Ricardian analysis of distribution depended on specific assumptions about property rights. As a matter of fact, he argued, property rights in the factors of production were radically different in different societies. India, France and Ireland all had laws of property which were different from each other with regard to factor ownership, and from those of England and Scotland, where the Ricardian assumptions applied. Moving directly from cross-section evidence to a diachronic conclusion, Mill found "the arrangements of society" to be inherently "fluctuating and progressive".

Under the unfamiliar heading of 'political ethology', Mill then enquired about the relation between institutions (laws and customs) and the 'collective character' of a nation. He sketched a relation of interdependence. A nation's (or people's) present collective character was strongly influenced by its past institutions. But nevertheless inherited institutions could be moulded by collective action in the present. Although "speculation, intellectual activity and the pursuit of truth" were much weaker propensities of human nature than selfish motives, Mill believed that the former determined whether and how institutions could be improved. This sociological position underpinned his familiar arguments for maximum liberty (Mill, 1987 (1843)).

Mill's views on institutional development have to be seen in the context of the great social debate set off by the French Revolution on the reconciliation of liberty and social order. Mill's contemporary, the German philosopher G. W. F. Hegel also contributed to the debate in 1837. His starting point was a much more heroic or romantic view of human nature, which pointed up the darker side of human behaviour: "Passions, private aims and the satisfaction of selfish desires are . . . tremendous springs of action. Their power lies in the fact that they respect none of the limitations which law and morality would impose on them" (Hegel, 1953 (1837): 26). Nevertheless, private interests had eventually to be reconciled with the common interests embodied in the state. So the development of appropriate institutions was for Hegel, as it was for Mill, a major historical task:

> ". . . in a state many institutions are necessary - inventions, appropriate arrangements, accompanied by long intellectual struggles in order to find out what really is appropriate, as well as struggles with private interests and passions, which must be harmonised in difficult and tedious discipline" (Ibid: 30).

The task of harmonisation could, according to Mill, be achieved only by the progress of thought, and the acceptance of its doctrines by the mass of inferior minds. Hegel's reconciliation device was the famous "cunning of Reason", the exhaustion of private passions by and through their real historical conflicts.

Mill, however, was the last of the classical political economists. Starting with the publication of Cournot's Recherches (1838), and moving on through Jevons to Walras, a new discipline of "economics" emerged, characterised by a narrow focus and a commitment to mathematisation (Debreu, 1984: 267-8). The commitment to rigorous mathematical methods is stated in Walras' intellectual manifesto :

> "There are today heaven knows how many schools of political economy . . . For my part, I recognise only two: the school of those who do not demonstrate; and the school, which I hope to see founded, of those who do demonstrate their conclusions. By demonstrating rigorously first the elementary theorems of geometry and algebra, and then the resulting theorems of the calculus and mechanics, in order to apply them to experimental data, we have achieved the marvels of modern industry. Let us follow the same

> procedure in economics, and, without doubt, we shall eventually succeed in having the same control over the nature of things in the economic and social order as we already have in the physical and industrial order" (Walras, 1954 (1926): 471).

The narrowing of focus is shown in the choice of harmonization problem to which mathematical methods were to be applied. The reconciliation or harmonisation problem addressed by this neoclassical economics was quite different from Mill and Hegel's concerns for appropriate institutions to reconcile the selfish individuals with state and society. Instead, it consisted of a purely economic reconciliation of the actions of profit-maximising producers with those of preference-maximising consumers under the requirement that for every commodity, its demand must equal its supply. The presentation of a theory of general equilibrium of markets, showing that , in rigorous terms, an equilibrium price vector was calculable (Walras); then the normative evaluation of such equilibria of perfectly competitive markets to derive the fundamental theorems of welfare economics (Pareto); and the first solution to the problem of the existence of such equilibria (Abraham Wald) all but monopolised the next century of economic theorising. Even Marshall, who repeated Mill's complaint about assuming the constancy of the institutional structure in his Inaugural Lecture at Cambridge, did little - except by way of description - to restore the problem of institutional change to a central place in economic thought (Matthews, 1986: 903).

It is not surprising that just as the Walras-Pareto theory of general equilibrium moved on to its comprehensive and mathematically watertight restatement in the hands of Arrow and Debreu, new questions arose, gaining attention precisely because they were insoluble within that majestic structure. The new institutional economics is 'new' because it starts from puzzles which the Arrow-Debreu theory cannot solve. It is 'institutional' because it comprehends other types of institutions than Arrow-Debreu markets. It is 'economic' because - unlike earlier attempts at 'institutionalism' - it retains many of the axioms and assumptions of the tradition which Arrow-Debreu completed, most notably methodological individualism (see Platteau, 1990: 19).

II Basic Ideas of the NIE.

The puzzles which grew up inside the theory of general equilibrium centred on the economic theory of the firm. On the one hand, the firm's economic activities were believed to be central and integral to the Walras-Pareto theory. Hicks (1946: 84) stated that dislodging the firm from its existing position in economic theory would involve the "wreckage" of "the greater part of general equilibrium theory". On the other hand, the 'firm' that was so entrenched in general equilibrium theory was ". . . a strange bloodless creature without a balance sheet, without any visible capital structure, without debts, and engaged apparently in the simultaneous purchase of inputs and sale of outputs at constant rates" (Boulding, 1950: 34). An unbridgeable gap existed between the firm as an economic actor in general equilibrium theory and the firm as an administrative and financial organisation, as it was comprehended in the 'real world'. Those bold enough to discuss the growth of the firm had to preface their models with warnings that "the 'firm' is not a firm" and with doubts about whether their subject might lie "outside the pale of economics proper" (Penrose, 1966: 1, 13). Some theorists - including the young Kaldor - dealt with the growth of the firm through the ingenious fiction of a succession of 'different' firms.

The pioneering contribution of Coase (1937) was to notice that general equilibrium theory had no explanation for the existence of firms. Firms clearly do exist. Indeed they are the dominant organisational form on the production side of the economy. Yet this form has no rationale in general equilibrium theory. 'Producers' in that theory could just as well be individuals as firms. Coase related the failure to explain the nature of the firm to the theory's assumption of costless and timeless tâtonnement, organised by Walras' auctioneer. In the real world, however, transactions are not costless. Transactions involve the 'cost of discovering what the relevant prices are' and the 'costs of negotiation and concluding a separate contract' and the costs of monitoring and enforcing the contract ex post. This is the basic idea of 'transactions costs'. The firm's objective is to minimise, not just production costs, but the sum of production and transaction costs, and corporate organisation allows the reduction of the second term in that sum. Thus, the discovery of transactions costs solved the puzzle of why firms are administrative organisations as well as economic actors.

It may seem odd that it took so long to insert the idea of transactions costs into the theory of the real side of the economy. It is easy to forget that it was only in the previous year that Keynes' General Theory had finally integrated the theory of the real economy with monetary theory, which had hitherto been developed in splendid isolation. The Walrasian system had no explanation for the existence of money, let alone firms. But monetary theory had known about transactions costs ever since it successfully explained the unpopularity of barter.

Having challenged Walras, Coase (1960) turned to Pareto's fundamental theorem of welfare economics. This states that where perfectly competitive markets are in equilibrium (and externalities are absent, along with various other prior conditions), each equilibrium is optimal. That is to say, in those conditions, no-one's welfare can be increased without reducing someone else's welfare. Coase pointed out that, on Walrasian assumptions of zero transactions cost, resource misallocations would never persist. Rational people would continue the costless process of bargaining in the market until all misallocations were eliminated. Coase argued that to account for the admitted persistence of resource misallocations, it was necessary to acknowledge the existence of transactions costs.

But once this is done, the strong Paretian claims for the efficiency of perfectly competitive markets as a device for resource allocation are impaired. That a misallocation persists because the costs of removing it are too high is not necessarily a sign of market inefficiency, because efficiency requires the minimisation of the sum of production and transaction costs. However, this situation does raise the question of whether another social device than the market, e.g. a government, could make the required reallocation at lower cost. If it can, the market is shown to be a relatively inefficient social instrument. The market becomes one type of social device, whose performance is to be judged against that of others. It becomes the object of social cost-benefit analysis, on a case by case basis. Economists with strong pro-market commitments find this parity of position uncomfortable.

That the costs of negotiating and enforcing contracts fall within the category of transactions costs has produced a large subsidiary

literature on the problem which Williamson (1975) labels "opportunism". Economists who tended to assume that the enforcement problem could be overcome by paying taxes to the government to establish police forces and courts, now see it as much more complex and pervasive. The economic theory of games (again excluded from Walrasian systems) began the exploration of rational self-interest which respects, in Hegel's words, "none of the limitations which law and morality would impose". The study of the costs of limiting opportunism (defined as self-interest-seeking with guile) has now reached considerable refinement.

One of these areas of refinement is the economics of agency. Many types of contract can be analysed in terms of the relationship between an agent and a principal, in furtherance of whose interests the agent is supposed to act. Unless the principal is perfectly informed at zero cost about the actions of the agent, this relationship becomes problematic, in that the agent is given scope for opportunistic behaviour which benefits himself or herself and usually also reduces the welfare of the principal. (Note that rational self-interest in Walras and Arrow-Debreu benefited the individual, but had no spill-over effects on other individuals). The agency problem was entirely familiar in nineteenth century political philosophy. Hegel elaborated his dialectic of the master and the slave, as did Nietzche. Marx' account of the proletarian revolution could be reinterpreted as a catastrophic agency loss for capitalists. But the NIE re-examines this basic problem in the light of (several variants of) microeconomics.

While many different forms of contract or business practice can be analysed in the light of the agency problem, insurance contracts have been an important model, because the asymmetry in information between the parties to an insurance contract is so substantial that a language for describing the incentives problems arising therefrom has been well developed. Two concepts in particular developed in the insurance world have been given more extended application by the NIE. Moral hazard arises when an insurance contract is so drawn that it encourages (or permits) behaviour by the insured that increases the probability of the event insured against. An example is an insurance policy which will pay for a replacement car, even if the insured decides not to bother to lock his existing car at night, once he has insured it against theft. Adverse selection arises when an

insurance contract is written in a way which is particularly attractive to purchasers bearing above-average risk of the event insured against, and unattractive to those with below-average risk. Life-insurance policies which fail to ask different premiums from the well and terminally-ill would be an extreme example.

It does not matter whether one views the NIE as a "transactions cost" or an "incentives" approach. The ubiquity of incentives problems (as against earlier attempts to confine them to the economics of labour bargaining and executive remuneration) is the reason why transactions costs are high. It makes no difference from which end one starts.

III Applications of the NIE to Development Problems

(a) The first obvious area for the application of transactions cost/incentives theory to development problems is the analysis of private contracts. Work was already in hand on share-cropping contracts for land before the NIE got fully into its stride with the publication of Williamson's work in 1975. Share-cropping had been dubbed 'inefficient' by Marshall, and exploitative by modern neo-Marxists, and their prohibition sought in the interests of both efficiency and equity. A vigorous debate about share-cropping in the 1970s suggested that it was not necessarily inefficient and moreover, it had features favourable to the share-cropper, compared with a simple rental contract. Specifically, its risk-spreading character is beneficial in the high-risk environment of peasant agriculture for an operator who, because of poverty, is highly risk-averse. The abolition of this form of contract would amount to the suppression of one symptom of poverty without doing anything to suppress the disease. If so, whatever the formal position, the same basic arrangement could be expected to reappear.

A similar discussion has taken place over the phenomenon of inter-linked contracts for land and credit. The starting-point was a contractual practice whose efficiency could not be defended by appeal to the criterion of Pareto-optimality, where markets are separated except through income effects. This was followed by an interpretation based on coercion, and a re-examination which suggested a less extreme view, once transactions costs are reckoned with.

Contracts in marine fishing have been extensively scrutinised, notably by Platteau (1992). He has shown that they have relatively unusual features, and that many of these can be related to the circumstance of the activity - the unpredictability of the catch, the need for flexible working and the fact that the boat owner does not go to sea, and thus cannot monitor the labour input of those who do. We understand better the function of some of the apparently exotic terms of the contract - its short duration, its provisions about the recruitment of the crew, the payment system and so on. At the same time, such exercises face some severe problems of discrimination which require considerable comparative information to solve successfully. How much of the contract is functional for capital and labour as such? How much for capital and labour engaged in fishing? How much for marine fishing? For marine fishing in South India? And so on.

Nabli and Nugent (1989: 1341) have suggested that there is considerable scope for using the transaction cost approach outside agriculture and fishing. They suggest mining, manufacturing, transport and the tax collection. It may be that rather more has been accomplished already than they suggest. The contractual conditions of Southern Africa migrant miners have certainly been studied with (usually) an "exploitative" interpretation forthcoming. Payments systems in manufacturing have also been examined by Frances Stewart and others. But even so, there is no doubt more that can be usefully done.

(b) Comparing Public and Private Provision.
As we have seen, the acknowledgement of transaction costs, and the consequent retreat from the Walras-Pareto view of markets , disposes of the automatic preference for provision of goods and services through the market. Equally their presence undermines an ideal view of governments as benevolent and omnicompetent. Market failure is clearly with us, to a greater or lesser extent. But so is government failure. So the questions of public policy become more complicated. Should imperfect governments be used to correct imperfect markets, or contrariwise should imperfect markets be brought into play to improve the resource misallocations of imperfect governments? What the NIE tells us is that neither answer is invariably correct. Rather, the task is to estimate the respective net

changes in transactions costs in comparison with the anticipated allocative improvement, to find out whether policy should be favouring additional government intervention or further privatisation.

In many developing countries, but especially those of sub-Saharan Africa, the state has experienced a longish period of increasing disarray until recently. The transactions costs associated with the goods and services it provides increased dramatically. It is probable that privatisation of some of those functions is appropriate in such circumstances, but only if the new privately-provided goods and services themselves have low transactions costs. It cannot be assumed that this will necessarily be the case. A privatised service should be designed and legislated for, just as a nationalised service is designed and legislated for. The NIE can thus be seen as a set of tools for this kind of institutional design.

Leonard (1991) shows how the concepts of the NIE can be used in designing appropriate forms of privatisation (or semi-privatisation) for veterinary services in Africa. He argues that if the private service is allowed to be run by few fully qualified vets located in urban areas, the transactions costs will inhibit use by herders, increase the likelihood of epizootic diseases, and compel a return to state intervention. If, on the other hand, the state contracts private vets to patrol known routes used by herders at stated times, and additionally allows vets to practice privately, the public interest aspect of a veterinary service will be adequately performed. Additional problems arise in this design. Should paraprofessionals be licensed in order to lower service costs , or would the benefits of this be outweighed by the agency costs of proper supervision? Should the state turn its control of animal drugs over to private vets, to help them supplement earnings, or would this allow them to make monopoly profits? How could competition be introduced? The many complexities of institutional design for privatisation are prompted by the incentive problems exposed by the NIE.

(c) The Conditions for Collective Action

One very important type of transactions cost is the cost of excluding those who are not parties to a contract from the enjoyment of the goods or services that are provided under it. With many goods and services, exclusion is entirely straight-forward under existing

property rights, so that markets for them can operate normally. But for others the costs of exclusion can be high (in some cases, infinitely high) leading to the problem of free riders - those who benefit from provision, but do not contribute to financing it. Even when consumption is non-rival, this causes market failure, as existing payers have an incentive to try to become free riders themselves, and market provision progressively collapses.

Where property rights have not been legislated, as with common land, air, common water, there is no right to exclude and that is itself likely to raise the costs of (illegal) exclusion. Here the users all constitute free riders, with no individual willing to bear the expense of conserving the resource.

What can be done in such situations? This depends on the prospects of overcoming the free-rider problem in non-market forms of action. Although free-riding causes market failure and 'the tragedy of the commons', it also plagues alternative forms of action aimed at overcoming them. Government intervention often has to be prompted by campaigning interest groups, which are hard to organise for reasons explained by Olson (1965). Community organisations aimed at self-regulation suffer from the same difficulties of constituting and sustaining themselves as do interest groups. Part of the answer may lie in the re-structuring of the incentives which interest groups and community organisations offer to their members. That would be the economist's approach. But there is evidence that other factors are also at work when collective action is successfully organised. (Nabli and Nugent, 1989: 1338; Platteau,1990: 23-4).

Wade (1988) examined the problem of environmental degradation in South India, enquiring into the conditions under which collective action to prevent it was successful. These covered a wide spectrum. The nearness of the common resource to users, and the obviousness of its boundaries; their knowledge of the limits of sustainable use; the smallness and solidarity of the user group and its aptitude for communication; the existence of inter-group obligations and sanctions against their breach; the visibility of the offence against common rule of usage and the willingness of the state to tolerate locally-based authority - all these were favourable factors for the success of collective action to prevent the over-use of common

resources. Evidently, these factors reduce the transactions costs of community self-policing and help to explain why in some communities it is feasible, but in others it is not.

(d) Policy-conditioned International Aid.
The current practice of making certain types of international aid conditional upon specific policy changes by the recipient government can be analysed as a contractual relation, using the key concepts of the NIE. This has been done in a recent study, to which the author of this paper contributed (Mosley, Harrigan and Toye, 1991, especially chapters 3 and 4).

The contract (the structural adjustment loan agreement) as formulated in the early 1980s by the World Bank failed to close off the option of opportunistic behaviour by the borrowing government. It was possible for borrowing governments to take the loan, and then fail to make any of the required policy changes, after having agreed to do so. This was because the changes in any case required reasonable time to accomplish, and the Bank could not monitor very closely whether genuine progress was being made. Agency problems were, therefore, considerable.

Worse than this, one could argue that the structural adjustment loans incorporated an element of moral hazard. By offering loans which did not have adequate monitoring and policing provisions, the Bank was tempting countries to be opportunistic. The loan finance provided a way of easing the pressures for policy change, while the conditionality was drawn in such a way that it could be ignored with impunity.

The structure of incentives in this (and other) form of contract can be modelled using game theory. With the help of certain simplifying assumptions - for example, that the game has only two players, the World Bank and the borrowing country - the choices facing each party can be formally modelled and a solution derived. The key features of the game can be identified, so that both players come to understand better the environment in which they are acting. Either or both may then want to re-negotiate the rules of the game.

In the case of the structural adjustment loans, the key feature of the game turned out to be whether or not the borrowing country

required a further round of finance from the Bank. If Bank re-finance was not needed for any reason (a favourable movement in the terms of trade or interest rates, or the availability of non-Bank finance), the Bank was left without any sanction on opportunistic behaviour by the borrower. The Bank responded to this, in the mid-1980s, by slicing the loan into 'tranches', giving itself opportunities to stop further payment at fixed intervals inside the disbursement period of the loan. Then, when even this failed to put a stop to all reneging, the Bank asked for prior compliance with the policy conditions, thus going to the heart of the incentive problem.

If and when international aid is used with political rather than economic conditionality, the same sort of incentive problems will apply. These suggest that donor will begin by halting politically-unconditional aid to recipients whose regime they wish to change, and re-start only after they believe change has occurred.

These four examples of the application of NIE concepts to development issues are meant to be merely illustrative. They by no means even begin to exhaust the possible fields of application. The chief reason for choosing them was to show work that has already been done, and to indicate the breadth of the issues that can be treated with the NIE approach. More general comments on these examples will follow in Section V.

IV The Grand Theory of Institutions and Development

Does the NIE allow us now to provide a different and better solution to the problem of the development of appropriate institutions than those proposed over a century and a half ago by Mill and Hegel? Does it help us, not only to illuminate microeconomic problems of the kind that have been illustrated above, but also to move back successfully to the grand theory of social science? Exciting intellectual possibilities abound, and have evoked some over-excited responses. Development used to be defined as economic growth plus structural change. The NIE suggests that development should be re-defined as economic growth plus appropriate institutional change, meaning institutional changes which facilitate further economic growth. Environmentalists might want to reshape that definition around sustainable economic growth, given their belief in the

substantial ecological damage that past growth has wrought, and concentrate on institutional changes which will make future economic activity environment-friendly. But, either way, appropriate institutional change has been elevated by the NIE to a central place in the theory of developments.

The boldest solution to the question of how institutions can develop 'appropriately' comes from the pro-market camp. It is that market forces not only generate the most Pareto-efficient outcome possible in a static framework, but they also do so in a long-run dynamic framework. The unrelenting pressure to improve economic performance which they produce means that institutional adaptations which favour Pareto-efficiency are favoured over the long-term, while those which do not are abandoned. This proposition involves an implicit appeal to the biological analogy of natural selection, in which institutions which are ill-adapted to their conditions become gradually extinct.

One counter-argument to this is that people do not choose between institutions in the same way that they choose in the markets between goods, between credit offers and between jobs (Platteau, 1990: 32). This objection seems to be ill-founded. The existence of institutions, customs or social norms does not require that people have no choice about how to relate to them. People surely have to choose how conventional to be and whether they want to join certain institutions, or to try to subvert them. To assume otherwise is to accept a false dichotomy - either structures determine individual agency, or agency determines structures (Manor and Colclough, 1991: 332-3). The problem with the NIE's appeal to the biological analogy is not that people cannot choose between institutions, but the exactly opposite one - that they can.

The process of natural selection of living organisms in the natural world is based on a mechanism which has no place for conscious motivation, decision-making or choice. It is, therefore, most implausible to suggest that it can be applied to social practices which reflect human aspirations and endeavours. All discussion of the survival or development of institutions has to be placed in this context of human willing and striving. It is idle to think that an evolutionary 'mechanism' could be found outside this context, and to criticise the NIE for not having found it.

When we contemplate the survival of institutions we have to ask whether they are desired or desirable from a human point of view. We know that undesirable institutions do survive - untouchability, female circumcision, institutionalised racism, cruel and unusual punishments, for example. Explanations of these survivals is given in terms of human decisions - perhaps that it is rational for an individual to suffer unpleasant institutions because individual attempts to subvert them would bring down on his or her head even more unpleasant consequences. Explanations of the non-survival of undesirable institutions often include martyrdom - the willingness of individuals to suffer those even more unpleasant consequences, in order to break through the social defences of undesirable institutions. In short, people can and do choose how they address their institutions and that is precisely why there can be no general presumption that institutions will (when?) become "appropriate", and that it will be market forces that work the trick.

Powerful additional reasons against that presumption are adduced by Matthews (1986). One of these is discussed under the heading of "inertia", although that term perhaps gives a misleading impression of what it involved. The problem is better seen through Matthews' explanation of this "inertia":

> "Institutional arrangements are about interpersonal relations and . . . there are inherent reasons why it should be more difficult to make changes where other people's consent is needed than where they can be made by individual fiat" (1986: 913).

The purpose of every institution - not always achieved, needless to say - is to create settled expectations both for those inside and outside it, over a wider sphere of action that would be possible without it. The process of doing this inevitably creates conflicts between the interests of the institution (in achieving its purpose) and the interests of the individuals who compose it, which are only partly convergent. Hence the need for the patient negotiation of any change. The institution, as an embodiment of collective action, experiences all the problems which the theorists of collective action have identified.

It is worth noting, parenthetically, that the acceptance of this view leads to a criticism of Williamson 's account of the firm. He views the

firm as an authority structure defined as a 'command system' proposing that the division of activities between the firm and external markets will be determined by their respective transactions costs. The criticism is that the idea of the firm as a command system is an over-simplification. The firm is an institution like others - including military forces, which have a 'command system' par excellence - in which the effective exercise of authority rests on (partial) consent and (sufficient) trust. The firm which disregards the state of its interpersonal relations will soon experience transactions costs of a magnitude that will put it out of business.

If this is so, it is clear why institutional change driven from the inside can only be gradual. Externally imposed change can be much faster, and this is why reforms to institutions are so often externally driven. The external pressures for change can originate either from markets or from non-market sources. Market pressures will tend to winnow out firms that fail to minimise the sum of production and transactions costs. This does not guarantee the survival only of firms with low transactions costs. To take an example, aluminium producers who put intensive effort into negotiating special low-cost power sources can succeed in driving out minimally-administered competitors who pay normal power rates.

The main source of non-market external pressure is the state. One of its roles is to set the framework within which the market pressure can operate. In our aluminium company example, the state is likely to regulate the activities of the power companies, perhaps setting the rules under which special deals may be concluded by them. The state often mediates the operation of market pressures , and can do so in a way which is not conducive to the survival of the most efficient companies. The state also intervenes directly to reform institutions which are not subject to market pressures. But such reforms are typically plagued by information problems . One way of overcoming them is to begin by establishing a committee of enquiry, on which impartial representatives of the community exhaustively compile the relevant information - historical as well as current - before making recommendations for change. This itself militates against rapid externally-driven reform. The other option is to reform on the basis of political intuition. This is rapid but not likely to be conducive to efficiency, particularly in view of the complexity of most institutions.

The complexity of institutions is the third of Matthews' reasons (after inertia and the pervasive role of the state) why reform is so difficult, and why therefore the evolution of efficient institutions is so problematic. One facet of the life of institutions which tends to be forgotten once we lose sight of its human context, is its constant search for fresh recruits to replace those who have resigned, retired or died. The purposes of some of its internal rules is unlikely to be understood by all of the individuals who compose it, and the practices which have become habitual may be at variance with its rules. The very purpose of the institution may shift subtly over time, without any overt acknowledgement, in response to the creative activities of its leading figures. The reforms imposed on it by external non-market agencies may simply be misconceived because these complexities are not understood.

In summary, there are many reasons why one cannot presume that institutions will evolve efficiently, even over long periods of time. They are all rooted in the fact that individuals can and do choose to address existing institutions in a multitude of different ways. Even those political philosophers like Mill or Hegel - or, even earlier, Kant - who had confidence that people would learn (in different ways) from accumulated experience did not say whether the learning process would take generations, centuries, millenia or aeons.

V The Weaknesses of the NIE

A comparison of the discussions of Sections III and IV above suggests that, while the NIE appears to have a wide and varied range of applications to micro-level or sectoral level development problems, it is much less successful as a grand theory of the development process in its entirety. In this respect, the NIE is simply another example of the unfortunate tendency of some theorists to inflate a useful low-level theory until it becomes an unsuccessful global-historical generalisation.

It is much easier to slide into this micro-to-macro transformation because of a much remarked weakness of the NIE. Very little effort has been given to the definition and measurement of the concept of 'transactions costs' in relation to the weight of theorising which has

been developed from it. By now, this has become a well-rehearsed complaint (inter alia by Matthews (1986: 917) and Platteau (1990: 28-29)). Within monetary economics, the concept has been better served by applied researchers. Studies have measured to non-interest and repayment costs of taking agricultural credit (Adams and Nehman, 1979). This good example has been very little followed as the concept has been developed by the NIE outside the monetary context. Walras, who saw rigorous demonstration as a prelude to applictions to experimental data, would not have been satisfied with this state of affairs.

Since the NIE opens up the possibility that non-market social devices may be more efficient than reliance on market forces, much has been said about the vindication of government intervention by appeal to a cost-effectiveness analysis, comparing the transactions costs of market forces with those of government action (Chang, 1991: 67). In fact, it has been "the school of state intervention or socialism of the Chair (to use Walras' terms) that has investigated this possibility most thoroughly. The problem here is the temptation to try and justify state intervention on too grand a scale, by concentrating on extensive state action of the type that appears to have successfully accelerated development in Korea and Taiwan. But actually performing a cost-effectiveness calculation for state intervention on this national scale makes the tasks of measurement quite prodigious. The best that can be done is to produce theoretical arguments about why, in such cases, the transactions costs of the state's intervention may well have been low. These difficulties reinforce the case for restricting NIE theory to micro-level analyses. The quantification tasks are much more likely to be manageable.

If one ignores this self-denying ordinance, transactions costs ends up as an all-purpose tool of explanation, pressed into service to "solve" any and every puzzle - but in fact empty of explanatory power. Even at the micro-level, it is quite possible for the concept to support a tautological functionalism of the sort beloved of many conservative economists. When market outcomes appear to be inefficient according to traditional economic analyses - i.e. those which ignore transactions costs - some will be tempted to argue that they are as efficient as they can be once transaction costs are taken into account. This is usually done without any quantification, just by admitting the possibility of their existence theoretically. Unless

transaction costs are quantified, they are not being 'taken into account' properly. They are only being conjured with, to evoke the spirit of Dr Pangloss for whom "everything is for the best in the best of all possible worlds". It will often be the case that market outcomes remain inefficient, even after transactions costs have been accounted for. We then have to seek for the residual causes of these inefficiencies. To say that we must bring "history" back into the explanation is but a first step. "History" is just another portmanteau concept which has to be unpacked, to make clear whether one is appealing to pure contingency, class power, culturally-formed expectations or whatever.

The NIE retains from the Arrow-Debreu framework the postulate of methodological individualism and the concern with static equilibrium solutions. As Section IV has argued, these features make it an approach which is ill-adapted to provide adequate global-historical theories. The NIE in this respect is in much the same predicament as Marshall was a century ago - stressing the centrality of dynamics and evolution to an understanding of economics, while providing only static analyses. Thus, even if confined to the micro-level, it abstracts from the requirements of future development, optimising only for the present or the short term. This is acceptable only if the path of dynamic optimisation is identical with that of a succession of short-term optima. If this were true, farsightedness would be socially worthless.

VI Conclusion

A recital of the weaknesses of the NIE should not be read as a vote in favour of rejecting or ignoring it. Despite these weaknesses, the NIE represents an important breakthrough for development theory. This breakthrough has two facets, one linquistic and psychological and the other substantive. In the first place, the NIE has brought about a major shift in the terms of the discourse about development. Those approaching this discourse from the orthodox or neoclassical side have found, in the NIE, a means of extending the scope of "economics" as they understand it, and therefore also of widening the range of thoughts which it is permissible and legitimate for them to engage with. Before the NIE, structuralist theories of development were "too ill-defined" for neoclassicals to understand. They were

given the intellectual status of "things which left-wing development economists say", remarkable chiefly for their incoherence (see Matthews, 1986: 903, 907). The NIE represents an escape hatch through the wall of incomprehension which has separated the school of those who demonstrate their conclusions mathematically from the school of those who do not. The mathematical demonstrators can now talk about institutions, too, because they have found a language to do so with which they feel intellectually comfortable.

Should the school of mathematical non-demonstrators feel threatened by this, or should they welcome it? Some will undoubtedly interpret it as a new phase of neoclassical imperialism. Some will contend that intellectual accommodation will prove possible only on oppressive terms. They fear that co-habitation will occur only if they agree to abandon their old language, as in nineteenth century Wales when an improved education was provided, but only in English, and Welsh-speaking children were whipped and expelled from school if they did not learn the new language. Such apprehensions are surely too pessimistic. The non-demonstrators are in better shape than such a defensive view of future prospects of intellectual exchange imply. As is shown in Section III, many lines of post structuralist enquiry have investigated issues in the manner of the NIE, even without having used its terminology. To change the linquistic metaphor, many structuralists have been talking prose for a long while without knowing it. They should be well-placed to engage with the NIE's conceptual vocabulary, and need not fear that such an engagement would necessarily occur on disadvantageous terms.

The substantive point is that the NIE (however the encounter of concepts develops) does address a problem of very fundamental interest, which orthodoxy and structuralism alike have until recently tended to shy away from. The exploration of "opportunism" - rationally self-interested behaviour in conditions of strategic interaction of decision-making, deficiency of information and uncertainty has far-reaching consequences beyond the realm of game-theory to which it has been traditionally confined. It is inconceivable that development theory will not benefit from being re-thought to accommodate the persuasiveness of "opportunism". It has been conventional for development theorists to attribute opportunism to a few selected organisations - multinational

companies, international financial institutions, compradors - when it has a much more general application to human behaviour than has yet been reckoned with.

The pursuit of this enquiry should appeal not only to the new institutional economists, but to development sociologists, economic anthropologists, political scientists - indeed, to the whole range of social science disciplines which have created multidisciplinary development studies.

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