

ECONOMICS WITH INSTITUTIONS

Agenda for Methodological Enquiry¹

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ECONOMIC METHODOLOGY AND THE INSTITUTIONALIST REVIVAL

This book grew out of an attempt to marry to each other two growing currents in economics, namely the specialized work on the general methodology of economics and the resurgence of theoretical interest in the character and role of institutions. It was the idea that both parties would benefit from such an alliance. On the one hand, research in economic methodology is clearly in need of reorientation and conceptual development inspired by concrete issues involved in substantial economic theories and approaches. Institutional economics, with its several varieties, might provide generalists in economic methodology with a source of inspiration and a test ground for such developments. On the other hand, the recent rehabilitation of theoretical study of institutions in economics raises lots of issues of a methodological character. Although institutional economists have traditionally been inclined to engage themselves in methodological reflection, there is a lot of room for sophistication. Philosophically informed general methodology might be of help here.

It is much more legitimate now than, say, twenty years ago to take institutions as a serious research problem in economics. This problem is no more the sole speciality of the followers of Veblen, Commons, Mitchell, Ayres, and others in the old US American tradition. There now exists widely respected new attempts to theorize about the logic of collective action (e.g. Olson 1965), property rights (e.g. Furubotn and Pejovich 1974), law (e.g. Posner 1973), political rule systems (e.g. Brennan and Buchanan 1985), economic history as institutional history (e.g. North and Thomas 1973; North 1981), the institution of the business firm (e.g. Alchian and Demsetz 1972; Williamson 1975, 1985; Aoki *et al.* 1990), and many more. The theoretical approaches and frameworks adopted range from evolutionary approaches (e.g. Nelson

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and Winter 1982) to the principal-agency theory (e.g. Jensen and Meckling 1976), from game theoretical perspectives (e.g. Schotter 1981; Sugden 1986) to transaction costs frameworks (Williamson 1975, 1985; North 1990). Some of the contributions adopt a literary style (e.g. Demsetz, North, Williamson), while some others employ formal techniques (e.g. Schotter, Stiglitz, Holmström). Some of them are 'closer' to standard neoclassical theory, while others are more heterodox.²

Given these new developments, it is no wonder that the introduction of institutions into the agenda of theory formation constitutes a major issue in economics. It is also entirely natural that the new agenda with institutions necessitates methodological reflection on the part of both those few who may object to it, those who try to do it by incorporating the notion of institution into the established body of theory, and those who pursue a theorization of institutions free from the constraints imposed by received economic theory. In order to justify a position about this issue, one needs to understand what is at stake: what the most fundamental conceptual, theoretical, and empirical problems are and how to steer one's course among them in a reasoned way. Methodological enquiry serves this need perfectly.³

More generally, the landscape of economics today is much richer than it was some two decades ago. The variety of rival or complementary schools and approaches may strike one as confusing. The situation makes it difficult for economists to give convincing arguments for their favoured approach as against other available options and for the newcomers to the field to make cognitively rational choices among the alternatives. Such a situation creates a natural propensity to methodological scrutiny. Characteristically, methodological enquiry may help clarify issues that are vital for orientation in this landscape, namely, it may provide analyses of the explicit or implicit commitments, the root assumptions and fundamental concepts of the alternative approaches. These concern their underlying world views, including views of human capacities and behaviour, of social structure and process, their research goals and explanatory structures, and also the more general principles of epistemic justification. These cosmological and epistemological principles serve as standards of assessment, the grounds of choice or mutual adjustment between theoretical alternatives.

Institutionalist economics in its many guises, provides a rich array of interesting topics for detailed methodological analysis. Some of the meta-theoretical commitments of the institutionalist traditions built upon the ideas of, for example, Veblen, Commons, and Ayres have been discussed, such as 'pattern-modelling' (e.g. Wilber and Harrison 1978), holism (e.g. Ramstad 1986), and pragmatism (e.g. Mirowski 1987). The economics of institutions based on the Austrian heritage of Carl Menger and Friedrich Hayek has been examined with some thoroughness in

regard to its structure and philosophical premises (e.g. Vanberg 1986, 1989; Barry 1979; Gray 1984; Mäki 1990b, c). Much less work has been done on the methodological and conceptual foundations of the theories and approaches of, say, Ronald Coase, Oliver Williamson, George Akerlof, Richard Nelson, Sidney Winter, Robert Axelrod, Mancur Olson, Douglass North, or James Buchanan. This concerns matters such as the principles of appraisal and the structures of explanation as well as such fundamental categories as institution and process.

It is well known that the methodology of economics has recently progressed in leaps and bounds, both quantitatively and qualitatively. The number of books and articles published since 1980 or so exceeds the achievements of any other, earlier period. New outlets have been established, such as the journal *Economics and Philosophy*. The amount of sophisticated work on the foundations of economic theorizing has increased to such an extent that our understanding of many aspects of economics is at a far higher level than ever.⁴ There are reasons for praise, but it has to be qualified.

The recent general methodology of economics has to a large extent been preoccupied with questions of epistemic appraisal, that is, epistemological questions concerning the rational acceptance and rejection of economic theories. The main concern has been the critical role of negative empirical evidence in the dynamic context of testing and progress, allegedly devoid of inductive inference. The meta-theories of Karl Popper and Imre Lakatos have provided many, if not most, economic methodologists with a framework of regulative categories and questions, even though not all of them have been committed Popperians or Lakatosians in epistemological matters. A *Popperian dominance*, a kind of Popperian mainstream in economic methodology has prevailed. It has been a dominance of certain questions and categories, such as whether economic theories are falsifiable and whether economists critically pursue falsifications, whether a given proposition belongs to the irrefutable hard core or to the revisable protective belt of a research programme, whether this or that episode in the history of economic thought is or is not progressive in the sense of providing increasing corroborated excess content, etc. Such a dominance of questions formulated in Popperian terms has not necessarily meant a dominance of answers favourable to Popperian views. Chapter 3 of the present volume by Wade Hands, is an indication of this. Hands has worked within the Popperian framework for many years, and many of his important contributions to the literature are critical of the applicability of both Popper's and Lakatos's methodologies to economics. The same can be said of Bruce Caldwell's work. Indeed, it has been established by recent research in economic methodology that the Popperian principles do not hold in economics – descriptively, prescriptively, or both.⁵ Still, there are many of those who

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find, for instance, some of Lakatos's categories such as the hard core, protective belt and heuristics useful for some purposes. Chapters 6 and 11 by Christian Knudsen are examples of this.

Even though Popperian falsificationism – the methodology of bold conjecture and critical refutation – is not practised or even practisable in economics, it (or a loose and more or less obscure version of it) nevertheless enjoys wide popularity in the meta-theoretical commentaries by economists. This phenomenon ranges from the introductory chapters of many standard textbooks to the attempts of some new institutionalists to legitimize their endeavours in terms of 'refutability'. For instance, Douglass North provides something like a criterion of demarcation in writing that 'in order to make a contribution to knowledge, the theory must be potentially refutable' (North 1981: x). This principle is carried over to his characterization of the concept of explanation: "explanation" means explicit theorizing and the potential of refutability' (ibid. p. 4). Another example is Oliver Williamson. He seems not particularly concerned about the fact that transaction cost economics does not involve an 'accurate view of human nature' in representing agents as 'highly calculative' and as lacking 'kindness, sympathy, solidarity, and the like', because it 'nevertheless generates numerous refutable implications' (Williamson 1985: 391–2). More strongly, he insists on 'more attention to refutable implications (and less to rhetoric)' in the study of economic organizations (Williamson 1986: 196). Of course, phrases like these do not yet imply a commitment to strict falsificationist methodology. The question that the methodologist has to face then is this: what message do such phrases convey? Given the unavoidable problems with strict falsificationism, could talk about refutable implications and the like be something else than empty methodological rhetoric? There is some work to be done here by methodologists. This also means that further research on falsificationism is not entirely futile.

In any case, I believe that the Popperian dominance has led to a misallocation of intellectual resources in economic methodology. Armed with Popperian questions and tools, economic methodologists have had little to say about many relevant issues in economics, such as the actually effective grounds for holding beliefs, the kinds and roles of inductive reasoning, the structure of explanations, the perennial issue of realism, and the nature of metaphysical commitments involved in actual research practice. The obvious way of improving on the situation is to adopt new conceptual tools and to engage oneself in examining descriptively the elements, structures and conditions of the theories, methods, and practices prevalent in economics, institutionalism included. Many contributions to this book exemplify this approach.

Some of the actual characteristics of economics are accessible using

approaches adopted from of the sociology and rhetoric of science. Unfortunately, it is no exaggeration to say that the sociology of economics is an almost non-existent field of study. (For exceptions, see the references in Chapter 4.) The situation is somewhat better in the case of the rhetorical approach, focusing on the rhetorical devices used by economists, as exemplified in the studies by Donald McCloskey (1985), Arjo Klamer (1983) and others (see also Klamer *et al.* 1988; Samuels 1990; Henderson *et al.* 1992). The notion of rhetoric in a narrow sense is defined by the idea of eloquence. In a more general sense rhetoric is a matter of persuasion, independently of whether the language used for communicating ideas satisfies this or that standard of eloquence. Veblen is certainly a prime example of an eloquent writer. This does not however guarantee that he is found persuasive by all relevant audiences, i.e. that his rhetoric is successful. Studies of rhetoric as persuasion might help us understand why Williamson has been found more persuasive than Veblen, or more accurately, why Williamson has been found more persuasive than Veblen by certain audiences, most notably by academic economists, and why Veblen has perhaps been found relatively more persuasive by some other audiences, such as some other social scientists and lay people. Such findings are most likely not exemplifications of the Popperian canons of epistemic justification.

Some of the work on the rhetoric of economics and the sociology of science is hostile to the idea that the aspects of the world that appear as the objects of scientific theories exist independently of those theories and that those theories are true or false partly in virtue of what the world is like. In other words, many rhetoricians and sociologists of science reject scientific realism. In Chapter 2, Bruce Caldwell discusses the realist philosophy of science as an option in economic methodology. Again, in this role, realism is in need of scrutiny and development, and institutionalist economics might provide some of the necessary inspiration.⁶ Chapter 6 by Christian Knudsen contains a brief discussion of the opposition between realism and instrumentalism in the context of rival conceptualizations of economic rationality.

Most if not all institutionalist economists hold that standard neo-classical theory or its particular constituents (such as the rationality assumption) are 'unrealistic', that their own alternative is at least more 'realistic' and that being realistic is a scientific virtue of a theory. This is one theme in Chapter 7 by Viktor Vanberg. Furthermore, various institutionalists take issue with each other's assessments of these matters. In Chapter 5, for instance, Langlois and Csontos provide arguments about the desirability of realisticness in one's picture of the agent in explanations of economic phenomena. This is, no doubt, one of the most important if not the most important methodological issue in economics, but the recent methodology of economics has had little to offer that

would be of help in clarifying this perennial controversy. The Popperian dominance has led methodologists to examine appraisal in terms of predictive implications of theories even though in practice a large portion of many economists' judgements seems to be based on assessments of the realisticness of the premises of theories. Since these questions are particularly pressing in debates about the economics of institutions, the institutionalist endeavours would provide excellent materials for developing and testing ideas about realisticness.

Such work would also help us form opinions about whether realism is an adequate philosophy – as distinguished from realisticness as an attribute of representations⁷ – for this or that variety of institutionalist economics. Some institutionalists regard themselves as pragmatists, which, in many cases at least, implies that they cannot hold realism at the same time. Again, this does not preclude the likely possibility that the theories they hold are realistic in many senses of the term, such as being relatively comprehensive, plausible, or practically relevant. However, such attributes are not conceptually connected to realism. Something else is needed to meet the challenge of the viability of realism in economics. I have a few more words on these questions towards the end of this chapter.

There are many other methodological topics that are in need of careful analysis. The idea of explanation is one topic the study of which benefits from the investigation of institutionalism. The traditional complaint has been that institutions play no role in standard economic explanations, either in the role of *explananda* or in the role of *explanantia*. Today the explanatory ambitions of economics have been stretched beyond the traditional limits. This gives rise to several methodological questions. What, precisely, is the structure of the economic mode of explanation (or the alternative economic modes, if such exist)? Does it (or they) manage to meet the promises it (they) make(s)? What is the role of human intentionality in such explanations? What should it be? Are functionalist explanations legitimate? Chapter 5 by Langlois and Csontos discusses questions related to one particular method of explanation in economics, the method of situational analysis. The final chapter by Christian Knudsen also discusses issues of economic explanation.

I have pointed out that institutionalist economics offers many interesting topics and challenges to methodologists which should prompt them to develop their tools and views. In addition to such indirect inspiration, the contribution of institutionalist economics to economic methodology might be more substantial and more direct. I have in mind the two key concepts of this volume, those of rationality and institution. The concept of rationality is a fundamental notion in the study of both science and society. It is central to economics as well as to economic methodology. It is a major issue in these fields of study whether and in what sense

economic agents on the one hand and economists on the other may be assumed or prescribed to make rational choices among alternatives or to act rationally as rule-followers. Since the traditional theories of scientific rationality have been challenged, it is necessary to search for a new understanding of what makes scientific activity rational. Institutionalist thought might be of some help here. It suggests that science, too, should be analysed as a social institution. Science does not happen in a social vacuum. All cognitive pursuits are embedded in social rules and relations. It is here that economic methodology might benefit most directly from a study of institutionalism in economics and elsewhere. In this volume, the contributions by Loasby (Chapter 8) and Mäki (Chapter 4) can be read as exemplifying this spirit.

What once was the received view implied that while scientific rationality is exclusively the concern of the philosophy of science, the study of the institution of science lies within the purview of the sociology of science. Such dichotomies, however, are much less popular now than they used to be. It is no longer unusual to attempt a fusion of the two perspectives and thereby to examine the rationality and institutionality of scientific activity within one and the same framework. The development in the theory of science parallels that in economics.

VARIETIES OF INSTITUTIONALIST ECONOMICS

Institutionalism in economics is more than an attitude but less than a school or a research programme, Lakatosian or otherwise. This does not preclude the existence of institutionalist schools or research programmes, or approaches or theories or what have you. It is my opinion that there exists such a great variety of approaches in economics which might deserve to be called 'institutionalist' that we had better avoid too restrictive a characterization of institutionalism in general. All such characterizations are based on specifications of what it is that makes a theory (school, stream, etc.) institutionalist. Let us take a look at a few of them.

On the opening page of his *Markets and Hierarchies*, Oliver Williamson coined the term, 'new institutionalist economics', and described its object in two ways. First, characterized genetically in terms of its intellectual background, the new institutionalist economics draws upon 'mainline microtheory, economic history, the economics of property rights, comparative systems, labor economics, and industrial organization'. Second, characterized in terms of three fundamental beliefs of its advocates, the new institutionalist economics is based on the view that (1) 'received microtheory . . . operates at too high a level of abstraction', that (2) 'the study of "transactions" . . . is really a core matter', and that (3) 'what they are doing [is] complementary to, rather than a substitute for, conventional analysis' (Williamson 1975: 1).

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It is clear that this characterization fits well with Williamson's own version of transaction cost economics. It also seems clear that tenets (1) and (3) are shared by most of those who have been labelled as new institutionalists. Tenet (2), however, makes the characterization too restrictive to capture all such economists. No wonder then that on a later occasion, Williamson admitted that 'transaction cost economics is *part of* the New Institutional Economics research tradition' (Williamson 1985: 16; emphasis added).

There exists another major line of economic thought which has traditionally been called institutionalist and which involves a critical stance towards Williamson's version. Following the lead of Veblen and Commons, William Dugger (1990) characterizes what he regards as genuine institutionalism in terms of six tenets. First, institutionalists place special emphasis on the role of power in the economy. Second, they share a reformist scepticism towards the institutions of their own economies. Third, they subscribe more or less to the old dichotomy between serviceable and predatory (or technological and ceremonial, or industrial and pecuniary) activities and institutions. Fourth, institutionalists are unified by an 'evolutionary' approach, a study of the economy as a process of ongoing historical change, not in terms of optimum states. Fifth, institutionalists are holists in that they consider the economy, and the acting individual, as part of an evolving cultural whole. Sixth, institutionalists are typically instrumentalists in the special sense that they conceive of ideas, both positive and normative, as revisable instruments in the ongoing discretionary adjustment of institutions to the benefit of humankind. Dugger then argues that Williamson subscribes to none of these six tenets, and therefore is not eligible to be characterized as an institutionalist.

Here we face the tension between what have been called the 'old' versus the 'new' institutionalism in a particularly strong form.⁸ An advocate of the old institutionalism denies that a major representative of the new variety is an institutionalist at all. Such an approach may be unnecessarily restrictive. What appears as a struggle over rights to labels is perhaps not the most fruitful line of argument. It would be more rewarding to proliferate the labels, each designating a specific version of institutionalism, and to decide on the minimum requirements that any version has to satisfy to count as institutionalism. Those requirements would have to be more permissive than either Williamson's or Dugger's. This would be accompanied by the additional acknowledgement that both the old and the new institutionalisms are far from being internally uniform. Supporters of each version could then concentrate on developing substantial arguments in favour of their own version and against others. Struggles over rights to labels could then be given up.

One possibility for a permissible and yet useful formulation of the

minimum requirements for any approach counting as institutionalism runs as follows. Let [MinI] stand for 'minimal institutionalism'.

[MinI] Any economic endeavour pursuing explanations which involve institutions in the role of either *explanantia* or *explananda* or both, constitutes a case of institutionalist economics.

Institutionalist economics in this minimal sense is economics with institutions in the role of either explaining entities or explained entities or both. Different versions of institutionalism could then be understood as being based on different specifications of [MinI], such as specifications of how institutions are conceptualized; how institutions are explained; which aspects of institutions are explained; how institutions are invoked in explaining something else; what this something else consists of, etc. This would give us a whole variety of institutionalisms. The dividing line between the old and the new institutionalism becomes relativized, as it is only one among many others which cut across both of these aggregated categories internally.

Let us then take a look at Richard Langlois's characterization of the new institutionalist economics in terms of 'themes' and as a more specific 'research programme'. He distinguishes three shared themes and the corresponding items in the new institutionalist research programme (Langlois 1986b, c). I summarize them as follows.

- 1 Common theme: abandonment of narrow maximizing rationality in favour of rationality 'in a true sense'.
Item in the programme: practice the method of situational analysis with 'a kind of bounded rationality assumption'.
- 2 Common theme: economic explanation should be dynamic or evolutionary.
Item in the programme: construct invisible-hand explanations, i.e. explain economic phenomena as unintended consequences of individual action.
- 3 Common theme: besides market prices, economic activity is coordinated by several other institutions which should also be studied theoretically.
Item in the programme: on the one hand, include various kinds of institutions as parts of the agent's situation, and, on the other, explain social institutions theoretically by the invisible hand process. This is the dual role of institutions in the programme.

As can be seen, the three common themes are very general, while the respective items in the programme are their specifications. It appears that the themes in the above characterization come very close to constituting the set of shared minimum requirements for any version of

institutionalism. Indeed, it is difficult to see why any old institutionalist could not accept them (Langlois has a reservation on this, related to the idea of the study of institutions being ‘theoretical’ as part of theme 3, but I will come back to that). If this were the case, Langlois’s themes would be common not only to the new institutionalist economics but to much of the old institutionalist economics as well. They would not help distinguish the new from the old.⁹

On the other hand, it seems obvious that the other part of Langlois’s formulation, namely that of the new institutionalist economics as a ‘programme’ is too restrictive to capture all versions of the new institutionalism. For example, not all versions subscribe to the notions of bounded rationality and invisible-hand explanation. In later sections I discuss the items of Langlois’s list in the context of the tension between the ‘new’ and the ‘old’ lines.

It is notable that Langlois characterizes the new institutionalist economics as sharing the spirit of Carl Menger’s economics, not that of his contemporary opponents, the German historicists and American institutionalists, i.e. the old institutionalists. ‘Menger has perhaps more claim to be the patron saint of the new institutional economics than has any of the original institutionalists.’ (Langlois 1986b: 5.) An even stronger tie between the new institutionalist and modern neoclassical theory can be suggested: the new institutionalist economics has grown, ‘not via a re-emergence of traditional institutionalism, but mainly through developments in the heart of modern orthodox theory itself. The irony, of course, is that the original institutionalism of Veblen and others emerged largely out of a critique of orthodox assumptions’ (Hodgson 1989: 249–50). This is compatible with Williamson’s point cited above that the new institutionalist economics is not to be taken as substituting for but as complementing standard neoclassical theory.

While the formulation of the distinction in terms of the ‘old’ and the ‘new’ has an historical import and is excessively aggregative in nature, I suggest considering some of the differences in more systematic and disaggregated terms. The rest of this chapter discusses varieties of institutionalism on a number of methodological dimensions. They include the notions of rationality, institution, and explanation, the very idea of theory and the related notion of ad hocness, storytelling, individualism and holism, and the issues involved in what may be called the method of isolation. These discussions will hopefully reveal interesting topics for further methodological enquiry.

INSTITUTIONS, RATIONALITY AND EXPLANATION

The explanatory pursuits of institutionalist economics are varied. They differ in regard to both their *explananda*, *explanantia*, and the explanatory

relation between the two. For instance, some versions are oriented towards explaining either the genesis or the persistence of existing institutions, while some others are engaged in accounting for different outcomes as behavioural consequences of different institutional regimes. In these accounts, the meanings of the concept of institution vary. The same can be said about the concept of rationality which plays a decisive role in the new efforts to theorize institutions.

It is much easier to insist on taking institutions seriously as belonging to the domain of economics than to provide a precise, unambiguous and at the same time both sufficiently rich and restricted definition of the concept of institution itself. What is it that we should take seriously as a theoretical problem? How should we transcend the various intuitive notions of institution? Unfortunately, no completely satisfactory definition of the concept of institution is available in social science literature.

No doubt this applies also to the definitions that the classics of the institutionalist tradition have provided. One of Veblen's formulations reads like this: 'An institution is of the nature of a usage which has become axiomatic and indispensable by habituation and general acceptance' (Veblen 1924: 101). In the words of Commons, 'we may define an institution as Collective Action in Control of Individual Action. Collective action ranges all the way from unorganized Custom to the many organized Going Concerns' (Commons 1934: 69). In most cases, habits and customs serve the role of *definiencia* in the old institutionalist definitions of the concept of institution. Institutions are conceived as being based on habits and customs. A similar view is put by Geoff Hodgson in Chapter 9 of the present volume. In Chapter 7, Viktor Vanberg defines institutions in terms of routines: institutions are 'systems of interrelated and mutually stabilizing routines'.

In a modern game-theoretic context, we encounter the following definition: 'A social institution is a regularity in social behaviour that is agreed to by all members of society, specifies behavior in specific recurrent situations, and is either self-policed or policed by some external authority' (Schotter 1981: 11). Langlois cites this definition approvingly¹⁰ and goes on to say that 'social institutions are made up of rules' of the form 'always react in manner *X* to event *Y*' (Langlois 1986b: 17–18).^{11,12} There is a problem here. An institution is defined in two ways, first as a regularity of behaviour and then as normative rules underlying such behaviour. It is not clear whether what is meant is that institutions consist of conjunctions of regularities and the related rules or that there are in fact two concepts of institution here. It would be advisable to adopt the first option that institutions comprise both rules and regularities of certain kinds.

In addition to rules and regularities of action, something else is needed, namely reciprocal beliefs and expectations held by the people

acting. In his more elaborated definition, Schotter (1981: 11) includes as necessary for a regularity of behaviour to constitute an institution the condition that 'everyone expects everyone else to conform to' the regularity. This element is more or less explicitly incorporated in two other definitions that are worth citing. Nicholas Rowe, an obvious advocate of some version of the new institutionalist economics, writes that 'what we call social institutions are in fact nothing more than agents rationally following rules of action, and being believed by other agents to do so' (Rowe 1989: 5). Walter Neale, more closely in the old institutionalist tradition, characterizes institutions similarly in terms of three elements, namely 'people doing', 'rules', and 'folkviews . . . explaining or justifying the activities and the rules' (Neale 1987: 1182). An incorporation of the idea of reciprocal beliefs into the notion of institution gives it a more clearly social content.

There is yet another question that can be raised about Langlois's discussion of institutions. He discusses the difference between general social norms and particular corporations, both conceived of as institutions (Langlois 1986b: 19). However, it may be asked whether particular corporations are institutions in either of the senses adopted by Langlois; they seem to be neither regularities of behaviour nor normative rules of conduct even though they involve both. Another possibility would be to conceive of particular corporations as organizations exemplifying general organization forms. All of these ingredients are incorporated in Geoff Hodgson's definition of the concept of institution: a social institution 'is here defined as a social organization which, through the operation of tradition, custom or legal constraint, tends to create durable and routinized patterns of behaviour' (Hodgson 1988: 10).

Hodgson's definition provides a composite concept which is narrower in extension than the sum of the extensions of its elements. Such a composite concept is unable to encompass all concepts of institution in use in different versions of institutionalist economics. Since it seems that there is no single concept of institution shared by even all the new institutionalists, we might have to live with several such concepts. For example, in an early contribution, Lance Davis and Douglass North suggested a distinction between 'institutional environment' and 'institutional arrangement' (Davis and North 1971: 6-7). Their characterization of this distinction is not entirely clear but it appears to have some affinities with Ludwig Lachmann's distinction between 'external' and 'internal' institutions (Lachmann 1971: 81). While institutional environments or external institutions are akin to sets of basic rules of behaviour, institutional arrangements or internal institutions are akin to established organizational structures within the frame of the basic rules. Williamson has recently appealed to this distinction and announced that 'transaction cost economics is predominantly concerned with institutional

arrangements, normally referred to as governance structures' (Williamson 1990b: 9). We may add that other branches of institutional economics are primarily preoccupied with institutional environments or external institutions, that is, basic rules of conduct.

In Chapter 10 of the present volume, North makes a similar distinction between 'the basic institutional framework' and 'the organizations that arise in consequence of the institutional framework'. Another conceptual puzzle may be observed here: while North sees organizations as 'arising in consequence of' the basic framework, in Hodgson's definition it seems to be the other way around, a social organization 'creating' stable patterns of behaviour. Whether this puzzle can be resolved by terminological adjustment or whether it reflects substantive difference will not be discussed here.

The notions of institution and rationality of conduct are connected. The important fact to notice at the outset is that any attempt to theorize institutions is dependent on rejecting the extreme form of the rationality assumption which involves the idea of perfect knowledge on the part of economic actors. This is included in the message delivered by the first 'common theme' in Langlois's list characterizing the new institutionalist economics, the one calling for the concept of rationality 'in a true sense'. His programme item goes on to specify that this true sense is given by 'a kind of bounded rationality assumption'. This is not very specific, though. The attribute 'a kind of' leaves much of the import of the suggestion open.

In Simon's early and vague definition, bounded rationality can be attributed to behaviour which is 'intendedly rational, but only limitedly so' (Simon 1947: xxiv). The implications of the two attributes of rationality in this characterization are relevant to us. First, the element of intentionality or conscious goal-directedness precludes unintentional habits, customs, and routines from the scope of boundedly rational behaviour and thereby restricts the set of versions of institutionalist economics. In particular, those versions of the old institutionalist economics which build upon the notion of habitual behaviour are excluded. The notion of routine in Nelson and Winter's version of the new institutionalist economics also raises questions from this perspective.¹³ Second, the element of being limited or bounded has often been interpreted as a matter of limited cognitive and computational competence. Since the agents are unable to gather and process the information required for attaining the maximum outcome, they will be satisfied with less. The recognition of this opens the connection to the notion of institution or organization: 'It is only because individual human beings are limited in knowledge, foresight, skill, and time that organizations are useful investments for the achievement of human purpose' (ibid., p. 199). It is true that many new institutionalists endorse the assumption

of bounded rationality. Williamson, for example, has made this clear in the case of his transaction cost version of the new institutionalist economics.

Not all branches of the new institutionalist economics subscribe to the above interpretation of the Simonian notion, however. Williamson says that while his version uses the idea of bounded rationality, Austrian theory and Nelson and Winter's evolutionary theory employ the notion of 'process or organic rationality' (Williamson 1985: 46–7). Furthermore, Langlois's own formulation of the rationality principle seems not to be Simonian. In Chapter 5 of this volume he and Csontos suggest that situational analysis – to which they subscribe – involves the idea of rationality as reasonableness and that reasonableness is an ability of an agent to give reasons for his or her actions (p. 122). However, reasonableness in this sense is neither synonymous nor coextensive with bounded rationality in Simon's sense.

There is another aspect in Simon's suggestions about rationality that is of special relevance to institutionalist economics. It is his notion of *procedural rationality*, the idea that rationality pertains, not to the outcomes of action as in standard neoclassicism, but to the procedures of action (Simon 1976). A related way of putting this is to say that rationality pertains to rules of action rather than to actions themselves directly (see Rowe 1989). In Chapter 6 of the present volume, Christian Knudsen presents an argument in favour of procedural rationality and against what might be called *outcomes rationality* (Knudsen follows Simon by calling it 'substantive rationality'). This distinction is also the theme of Chapter 7 by Viktor Vanberg. He distinguishes between rationality as neoclassical 'case-by-case-maximization' and rationality as rule-following. Neoclassical rationality is a matter of separately assessing each particular choice situation as unique and choosing the option that gives the highest payoff. Rationality as rule-following is a matter of behaving similarly in similar situations. The agent does not take each particular situation as unique but as similar to some others, as exemplifying types of situation, and behaves regularly in regard to such types, i.e. follows rules. These suggestions have the feature that, in a sense, we may say that *rationality becomes attributed to institutions*, given a specific conceptualization of institution as people acting according to rules.

In any case, the above remarks imply that Langlois's programme item attributing bounded rationality uniformly to the new institutionalist economics is problematic. In defence of Langlois's suggestion, we might perhaps argue that each of the several versions that can be found is 'a kind of bounded rationality assumption'. Yet, in this case we would end up with several kinds of such assumptions, while Langlois talks about one kind.

Let us next briefly discuss the question of the explanatory relation.

Langlois's programme item (1) prescribes that economists should practise the method of *situational analysis*. Here we meet Popper in another role, namely as a formulator of situational analysis as the method of explanation in economics and other social sciences. By using this method, phenomena are explained as consequences of individual actions constrained or determined by the 'logic of the situation' in which the actors find themselves. Situational analysis invokes rationality as an attribute of the actors: the actors are assumed to act rationally, or to use Popper's ambiguous phrase, 'appropriately' with respect to their situations (Popper 1983: 359). One possible reconstruction of the structure of situational explanation is as follows, call it [SA] (Koertge 1979: 87).

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|---|---|
| [SA1] <i>Description of the situation</i> | Agent A was in a situation of type C. |
| [SA2] <i>Analysis of the situation</i> | In a situation of type C, the appropriate thing to do is X. |
| [SA3] <i>Rationality principle</i> | Agents always act appropriately to their situations. |
| [SA4] <i>Explanandum</i> | (Therefore) A did X. |

It is notable that [SA] does not cite the agent's aims and beliefs explicitly. This is due to the peculiarity of the concept of situation in Popper: in addition to the 'external' environment of action, [SA1] also encompasses the goals and beliefs of actors.¹⁴

In a seminal paper, Spiro Latsis employed a variant of [SA] for an examination of the neoclassical theory of the firm and its behaviouralist rivals. He interpreted neoclassicism as being committed to what he called *situational determinism*, where the behaviour of actors is conceived of as entirely determined by the 'logic of the situation' so that there is only one course of action available to them. He contrasted the situationally deterministic 'single-exit' models of neoclassical economics and the 'multiple-exit' approach of Simon's behavioural economics and argued for the latter (Latsis 1972).¹⁵ There is a tension between these suggestions by Latsis and programme item 1 in Langlois. Whereas Langlois suggests that the new institutionalist economics combine bounded rationality and situational analysis, Latsis takes behaviouralism and situational determinism as rival approaches. In Chapter 5, Langlois and Csontos attempt to resolve this tension. They level a criticism against Latsis's conception of situational analysis, charging him for mistaking situational analysis in general for the neoclassical version of it. They argue that situational analysis does not require the thin neoclassical notion of rationality and that behaviouralist versions of situational analysis also exist.

Consider next Langlois's tenets (2) and (3) for the new institutionalist economics, especially the respective items in the allegedly shared programme. They suggest that the new institutionalist economics provides

invisible-hand explanations of economic phenomena and institutions (see also Rutherford 1989: 306–12). This would seem to suggest an important difference between the old institutionalist economics and the new institutionalist economics concerning the respective conceptions of the origins of institutions, even though Langlois does not explicitly comment on the old institutionalist economics position. Using Menger's distinction between 'organic' institutions (as unintended consequences of individual actions and interactions) and 'pragmatic' institutions (as results of intentional design), the difference would appear as that between the advocates of the organic view and those of the pragmatic view. Such a generalization needs some qualification.

It may be admitted that many advocates of the old institutionalist economics are in favour of viewing institutions as discretionary. For instance, Commons writes that the attention of institutional theories 'is directed towards *intended* or *purposeful* changes, and to a *managed* equilibrium instead of an *automatic* equilibrium' (Commons 1934: 120; see also, for example, Tool 1979 and Bush 1987). Such statements, however, typically concern the suggested *normative* tasks of economics. As a *descriptive* idea, the notion of unintended consequence is not alien to the old institutionalist economics. Witness Wesley Mitchell: 'Coordination within an enterprise is the result of careful planning by experts; coordination among independent enterprises cannot be said to be planned at all; rather it is the unplanned result of natural selection in a struggle for business survival' (Mitchell 1913: 38). It is because actual coordination among independent enterprises is perceived as generating 'waste', and as conducive to business cycles and other harmful effects (*ibid.*) that these institutionalists take the normative interventionist stance.

Another important qualification results from recognizing that the new institutionalist economics stream is itself divided about this issue. Some members of the stream are consistently in favour of practising invisible-hand theorizing about institutions, most uncompromisingly the Austrians, following the paradigm of Menger's theory of the spontaneous genesis of money and Hayek's Fergusonian dictum about phenomena and institutions as 'results of human action but not of human design'. Within the game-theoretic wing, Schotter (1981) and Sugden (1986) have provided models which conform to the invisible-hand mode. For example, in Schotter's approach, 'institutions are outcomes of human action that no single individual intended to occur . . . they emerge or evolve spontaneously from individual maximizing or satisficing behaviour instead of being designed by a social planner' (Schotter 1986: 118). On the other hand, there are institutions and aspects of other institutions which are theorized by some wings of the new institutionalist economics as discretionary. For instance, in the public choice approach by Buchanan,

Tullock and others, one of the research problems has been the design of sets of rules that guarantee optimum outcomes; and in the contractarian approach of Williamson, North, and others, institutions are typically considered as direct outcomes of intentional contractual design.

However, even this generalization is in need of qualification because of ambiguities, for example, in Williamson's position. Three different views have been or can be attributed to him. First, Schotter includes Williamson among those who view the emergence of institutions as an organic or spontaneous process generated by individual purposive actions (Schotter 1986: 118). None of these purposive actions is supposed to involve the specific purpose of creating those institutions. Second, as pointed out on an earlier occasion (Mäki 1987: 371), we can find in Williamson formulations which seem to imply a position which is diametrically opposite to that attributed to him by Schotter. This is the idea of a visible hand, as it were, with a specific purpose of bringing about the institutions to be explained. For instance, Williamson postulates the existence of 'an institutional-design specialist' whose task is 'not merely to resolve conflict in progress but also to recognize potential conflict in advance and devise governance structures to forestall or attenuate it' (Williamson 1985: 29, and 1986: 172). Due to bounded rationality, however, comprehensive *ex ante* planning is not possible (Williamson 1985: 30–2). Third, it is possible to argue plausibly that the structure of Williamson's theory implies a commitment to functionalism. To explain the existence of social institution *X* by suggesting that it serves function *Y*, i.e., that it has *Y* as a consequence of its operation, amounts to a functionalist mode of explanation. In Williamson's case, his alleged functionalism is implied in the explanation of a given governance structure by suggesting that it is efficient in economizing on transaction costs. No mechanism of mediation between existence and efficiency, either of an invisible-hand type or a visible-hand type, is or can be systematically theorized in Williamson's framework. (For this interpretation of Williamson, see Dow 1987, and the final chapter of the present volume by Christian Knudsen. Chapter 9 by Geoffrey Hodgson also offers a criticism of Williamson's views, based on the functionalist interpretation.)

While the above discussion relativizes the validity of Langlois's suggestions, it also indicates some tempting challenges to a methodological analyst. The explanatory structures actually in use in economics call for a deeper understanding.

THEORETICITY AND *AD HOCNESS*

It has been argued by Ronald Coase that 'the American institutionalists [i.e. representatives of the old institutionalist economics] were not

theoretical but anti-theoretical . . . Without a theory, they had nothing to pass on except a mass of descriptive material waiting for a theory' (Coase 1984: 230). In the same vein, Langlois maintains that the old institutionalism of Veblen and his followers represents a 'non-theoretical' version of institutionalism: 'they wanted an economics with institutions but without theory; the problem with many neoclassicists is that they want economic theory without institutions; what we should really want is both institutions and theory', this last option being the new institutionalist one (Langlois 1986b: 5). This suggests that the distinction between the new institutionalist economics and the old institutionalist economics is coextensive with that between *theoretical institutionalism* and *non-theoretical institutionalism*. This seems to be one of the most popular ways of viewing the matter amongst those who identify themselves as new institutionalists.

In the context of such judgements, the very notion of theory has usually remained unanalysed. Any judgement of whether this or that variety of economics has pursued or has been able to produce theories presupposes a clarification of the concept of theory itself. Typically, this is not done by those who hold views about the matter. Given the radical ambiguity in the use of the term 'theory', such a clarification is not an easy task, and it will not be attempted here. Suffice it to make a few general remarks of immediate relevance to institutionalist economics. I use the notion of *ad hocness* for this purpose.

To begin, it may be admitted that the new institutionalists are not alone in their judgement of the old variety. This is evidenced by a recent statement by Allan Gruchy, a representative of old institutionalism. He classifies different (old) institutionalist approaches into three categories:

- 1 The 'miscellaneous or topical' approach which 'draws attention to economic problems that are ignored by orthodox economists [. . . but] lacks theoretical cohesiveness, since economics is said to have no precise boundaries and the doors are kept open to any topic or project that may engage the attention of the institutionalist investigator';
- 2 The 'thematic' approach which focuses on 'various well-established basic themes' but still lacks 'an overall framework of interpretation into which the basic themes . . . can be fitted in a general unity';
- 3 The 'paradigmatic' approach which seeks 'an overall analytical framework of analysis'.

(Gruchy 1990: 361–3)

Gruchy then admits that 'the majority of institutionalists [apparently of the old institutionalist type] adhere to the miscellaneous or topical approach to the study of institutional economics' and that even those few (such as Veblen, Mitchell, Commons, Ayres, and Galbraith) who have pursued developing a theoretical framework for institutional

analysis have not got very far (*ibid.*, 363–4). Elsewhere, Gruchy admits that (old) institutionalists ‘have become engrossed in the analysis of limited issues rather than in an exposition of the theoretical foundations of their economics’ (Gruchy 1982: 225).

Let us approach the issue theoreticity from the perspective of the notion of *ad hocness*. The traditional Popperian idea of *ad hocness* refers to the various immunizing stratagems by means of which scientists modify some of their auxiliary assumptions with the sole purpose of defending their hypotheses against negative empirical evidence: those modifications do not generate independently testable statements or novel predictions (e.g. Popper 1959: 80–2). Popper’s methodology denounces the employment of such *ad hoc* stratagems. It has been pointed out, however, that Popper’s own treatment of the rationality principle in the context of situational analysis appears to be in sharp contrast with this falsificationist rule (e.g. Koertge 1979, Hands 1985a); that is, he admits that the method of economics involves a crucial assumption which is false but still should not be rejected. Popper writes as follows:

‘Now if a theory is tested, and found faulty, then we have always to decide which of its various constituent parts we shall make accountable for its failure. My thesis is that it is sound methodological policy to decide not to make the rationality principle accountable but the rest of the theory . . .’

(Popper 1983: 362)

Evidently, this is reminiscent of Lakatos’s account of the scientific endeavour, based on the idea of unshakable core claims. Accordingly, the rationality assumption would be construed as one of the hard core propositions.

This is related to Lakatos’s notion of *ad hocness*, according to which a move is *ad hoc* if it does not conform to the hard core and heuristics of a research programme. While the traditional idea of *ad hocness* retains the criticist spirit of Popperian methodology, the Lakatosian idea is rather conservative: *non-ad hoc* moves are conservative of established frameworks or research programmes. It has been pointed out by Wade Hands (1988) that whereas methodologists of economics have mostly employed the criticist notion of *ad hocness*, mainstream economists use the conservative notion in their own assessments of research. In the normative Lakatosian framework, there is no need to worry about this usage in mainstream economics, since Lakatos acknowledges ‘the rationality of a certain amount of dogmatism’ (Lakatos 1970: 175). He even suggests this as a demarcation criterion between mature and immature science: mature science consists of research programmes with inviolable hard cores, while immature science consists of ‘a mere patched up

pattern of trial and error'. Lakatos says that 'good scientists' call the latter '*ad hoc*' (ibid.). *Non-ad hocness* in this sense is a guarantee of theoretical unity and continuity.

Thus, at least the usage of '*ad hoc*' among mainstream economists accords with the Lakatosian canons. The economic substance of this notion is well-known: a piece of research is said to be *ad hoc* if it is not based on modelling involving the constrained optimization assumption. This may be called *neoclassical ad hocness*. Neoclassical *ad hocness* is a special case of conservative *ad hocness*. On the other hand, neoclassical *non-ad hocness* may be accompanied by criticist *ad hocness*: the continuity of the neoclassical endeavour may involve employing *ad hoc* stratagems to protect a certain version of the rationality principle, for instance.

Now it is obvious that all of the three institutionalist economics approaches (1) to (3) in Gruchy's list above are guilty of neoclassical *ad hocness*. In this regard they are on the same footing with the classical Keynesian assumptions of wage and price rigidities and behavioural propensities, which cannot be derived from the assumption of rational individual optimizing behaviour. On the other hand, much of the new institutionalist economics attempts to avoid neoclassical *ad hocness*; it tries to guarantee a theoretical continuity with standard neoclassical economics by adopting some of its most basic assumptions or their modifications. Similarly, the early expressions of the so-called new Keynesian approach strove for neoclassical *non-ad hocness* in attempting to reduce Keynesian outcomes to neoclassical first principles.

It seems to me that, to some extent at least, the claim of the untheoretical character of the old institutionalist economics is based on the identification of 'having a theoretical character' with 'being neoclassically *non-ad hoc*'. According to this idea, any piece of research which does not conform to some of the fundamental assumptions of neoclassical economics, or their modifications is, by definition, untheoretical. On the other hand, since many versions of the new institutionalist economics comply with them, they are said to be theoretical in character. Furthermore, it follows that if one pursues a replacement of the theoretical foundations of neoclassical economics by a different set of theoretical foundations, the endeavour is doomed to untheoreticity in the sense of neoclassical *ad hocness*. For such reasons it should be clear that the notion of neoclassical *ad hocness* is too restrictive to provide us with an adequate notion of theoreticity.

A tempting option is the loosening of the strict neoclassical restrictions on the substance of the candidates for theoretical status. This seems to be what Langlois and Csontos suggest in passing in Chapter 5. They say that the introduction of an institutional background (rules, habits, customs) against which individual choices are made is perhaps *ad hoc* from the point of view of standard neoclassical theory, but not from that

of situational analysis. Here, too, *ad hocness* is not theoretically neutral, since it is characterized in terms of specific restrictions on theoretical substance.

A general and substantively neutral notion of *ad hocness*, having close affinities with Lakatos's more specific concept, might still be useful for a characterization of the idea of theoreticity. Lack of logical and conceptual unity, integration and coherence provide one legitimate sense of *ad hocness*. This may be called *theoretical ad hocness*. Furthermore, we might say that the more theoretically *ad hoc* an endeavour is, the less it has a theoretical character. It seems obvious that the old institutionalist economics approaches (1) to (3) are more or less theoretically *ad hoc* and thus non-theoretical. However, they are not equally so, but in descending extent: while (1) is entirely theoretically *ad hoc*, (3) is close to being theoretically *non-ad hoc*.

The pejorative use of the expression '*ad hoc*' has many edges, as witnessed by Herbert Simon's recent assessment of the new institutionalist economics. He first remarks that 'the new institutional economics is wholly compatible with and conservative of neoclassical theory' (Simon 1991: 27). This is to say that the new institutionalist economics is neoclassically *non-ad hoc*. Simon then says that the new institutionalist economics has incorporated a number of auxiliary exogenous assumptions to the neoclassical corpus, such as those concerning moral hazard and the incompleteness and asymmetric distribution of information. He concludes with the following statement: 'Since such constructs are typically introduced into the analysis in a casual way, with no empirical support except an appeal to introspection and common sense, mechanisms of these sorts have proliferated in the literature, giving it a very *ad hoc* flavor' (ibid.). It is not completely clear which of the two senses of *ad hocness* Simon has in mind: he may think that *ad hocness* is a matter of missing empirical support or else that it is a matter of violating something like a principle of parsimony or theoretical unity. In the latter case, he would appear to imply that the new institutionalist economics, too, has the 'flavour' of being theoretically *ad hoc*.

The lesson of all this is that there is a need for clarity in the use of the concepts of *ad hocness* and theoreticity. The methodologists of economics would do a useful favour to their fellow economists and to themselves by analysing these notions with care.

STORYTELLING

Institutionalist economists, though far from uniform on this question, have traditionally rejected the idea of theory as a formalized and axiomatized system of propositions. Economists are rather understood as 'storytellers'. 'Storytelling is an attempt to give an account of an

interrelated set of phenomena in which fact, theory, and values are all mixed together in the telling' (Ward 1972: 180). It is the coherence of the story, the way its parts fit together, that increases its persuasiveness. Ward's characterization of economics is not restricted to institutionalism: this is how economists of all persuasions 'do in fact behave; this is, roughly speaking, the methodology that we actually use in establishing our professional beliefs' (ibid., p. 190). A more recent statement estimates that '90 per cent of what economists do is such storytelling [telling the story of the Federal Reserve Board or of the industrial revolution]. Yet even in the other 10 per cent, in the part more obviously dominated by models and metaphors, the economist tells stories' (McCloskey 1991: 64).¹⁶ Oliver Williamson, too, writes that his variety of institutionalism purports 'to tell plausible causal stories' in order to answer the question, 'What's going on here?' (Williamson 1990a: 65).¹⁷

In a much cited but somewhat obscure article, Wilber and Harrison argue that 'institutionalists have engaged in a systematic form of storytelling' called 'pattern modelling' (Wilber and Harrison 1978: 71).¹⁸ In their understanding of pattern models they follow the lead of Kaplan (1964) and Diesing (1972). Pattern models are comprehensive or 'holistic' representations of complex networks of phenomena in which the wholeness, uniqueness and evolutionary character of the object is emphasized. The structure of such models is 'concatenated' rather than 'hierarchical' (Kaplan 1964: 298). This means that pattern models 'are composed of several relatively independent, loosely linked parts, rather than of deductions from a few basic postulates' (Diesing 1972: 222).

There are several features of storytelling by means of pattern models that make them unamenable to falsificationist testing. First, from a pattern model 'one cannot deduce specific predictions of future behavior in novel circumstances' (Diesing 1972: 164). Second, a pattern model 'is rarely if ever finished completely. The model builder always has loose ends to work on, points that do not fit in, connections that are puzzling' (ibid.). No wonder then that Mark Blaug complains that 'because storytelling lacks rigor, lacks a definite logical structure, it is all too easy to verify and virtually impossible to falsify. It is or can be persuasive precisely because it never runs the risk of being wrong' (Blaug 1980: 127). Yet, as was pointed out, storytelling is an indispensable part of all of economics and is not restricted to institutionalism. Again, it follows that falsificationism does not help us understand what goes on in economics.

The blame is not only on the Popperian dominance. Given the distinction between 'formal theory' and 'appreciative theory' as introduced by Nelson and Winter (1982), we may say that the methodologists of economics have typically examined economic theory in its 'formal' variety, theory with a well-defined deductive structure connecting

'assumptions' and 'implications' (e.g. Boland 1989) or as a set of definitions or a set-theoretic structure with separate application statements (e.g. Hausman 1992; Hands 1985b). However, much of economic theorizing has not yet reached, will not reach, or does not aim at reaching such a theory – and even if it has reached it, is not reduced to it. Methodologists would do well to start studying 'non-formal' forms of economic theorizing.

INDIVIDUALISM AND HOLISM

It has been suggested by many commentators that the representatives of the new institutionalist economics are committed methodological individualists, while the members of the old institutionalist economics category subscribe to holism of one variety or another, often of a functionalist kind (e.g. Langlois 1989; Rutherford 1989; Hodgson 1989; Hejdra *et al.* 1988). This suggests another distinction, that between *individualist institutionalism* and *holist institutionalism*, and the claim is that it is coextensive with that between the new institutionalist economics and the old institutionalist economics.

Methodological individualism in the context of economics is thought to be the thesis that the explanations of economic phenomena and institutions should be formulated in terms of the properties of individuals. Methodological holism not only denies this but also prescribes that such explanations be phrased in terms of collective entities. Functionalism is often mentioned as a prime example of holism. Before proceeding further, I would like to claim that this issue is one of the least understood in the methodology of economics. Both 'individualism' and 'holism' appear in the literature in a number of unanalysed meanings, and sophisticated case studies are not available.¹⁹ No good analyses exist, but none will be attempted here. A few remarks may suffice to indicate that some caution is needed when attributing individualism and holism to the two aggregated institutionalisms.

The thesis of the coextensionality of the two distinctions – between the new institutionalist economics and the old institutionalist economics on the one hand and individualist institutionalism and holist institutionalism on the other – can be questioned simply by pointing out that there are unquestioned members of the new institutionalist economics category who are not consistent methodological individualists. For instance, it has been pointed out by Viktor Vanberg and others that in invoking group selection mechanisms in his theory of cultural evolution, Hayek has failed to live up to his stated individualist methodology (Vanberg 1986). Also, if it is the case that Williamson's theory is functionalist in that it explains characteristics of governance structures by their functional effects, not by any detailed mechanism of individual

action and interaction, and given that functionalism of this sort is not compatible with methodological individualism, then another major representative of the new institutionalist economics would appear as a methodological non-individualist.

In passing, let us point out a link of the present issue to that of Popperian falsifiability. In their defence of the alleged individualism of the new institutionalist economics against the alleged functionalism of Marxist theory, Hejdra *et al.* (1988: 309) argue that functionalist explanations suffer from 'inherent untestability'. This, they seem to think, is a fatal defect, since 'most economists have, after all, come to adopt some variant of the Popperian "demarcation principle", whereby only those theories that are able to yield refutable propositions are regarded as "scientific"'.²⁰ The problems of falsificationism are also problems of this judgement. To begin, it is not at all evident that methodological individualism is any better in providing unproblematically refutable implications. Furthermore, the point by Hejdra *et al.* also raises questions of the character of Williamson's appeal to the notion of refutable implications, mentioned above. If Williamson is a functionalist and if Hejdra and his co-authors (and Jon Elster whom they cite) are correct about the incapacity of functionalism to yield refutable implications, then Williamson would have run into contradictions. Evidently this issue calls for greater clarity on a number of methodological fronts.

As suggested above, among the key notions in need of clarification are those of individualism and holism themselves and the underlying issue dividing them. The issue is sometimes formulated as that of the proper relation between 'wholes' and 'parts', sometimes between the 'micro' and the 'macro', some other times between 'agency' and 'structure'. Sometimes the issue is construed as that of the ontological status of social things (such as corporations, central banks, markets, nation-states) or social properties (such as being a business manager, having a property right, having purchasing power) or what Durkheim called social facts (e.g. the fact that OPEC raised the price of oil in 1973). Sometimes it is understood as a semantic issue concerning the linguistic reducibility or translatability of expressions of such social items into expressions of human individuals. Sometimes it is taken to be a clash between two notions of explanatory priority.

No wonder then that the very terms 'individualism' and 'holism' are desperately ambiguous. For example, some usages of 'individualism' appear to imply what is often called 'atomism' or the idea of individuals devoid of social attributes, or the idea that individuals' properties are uninfluenced by their social surroundings. This and other such narrow usages should not blur the fact that there are many other, also non-atomistic, forms of individualism. To add to the conundrum, some of

these forms are forms of holism on some other dimensions. For instance, a new institutionalist economist, even though identifying him or herself as an individualist, is often a holist about social properties. Furthermore, ontological and methodological commitments do not always go together. For example, a methodological individualist of some sort may be an ontological holist of some sort without contradicting him or herself.

For further illustration, consider the following usages of the term 'holism', also found within the institutionalist discourse. First, 'holism' is being used as a name for the view that social entities (such as groups, organizations and institutions) or social properties (those involving social relations) have an independent existence (ontological holism) and/or should be referred to as the fundamental *explanantia* in social scientific explanations (methodological holism). Second, the term is used to refer to an approach which is directed to large 'wholes' so that it is comprehensive or encompassing. Such an approach avoids focusing on narrow fragments of economic reality separate from wider social structures and processes or from the whole of surrounding culture. Hence the insistence on studying the economy in intimate relation to political, social cultural, and moral aspects of society in the sense that statements concerning these latter aspects may be and often have to be used as *explanantia* when explaining economic phenomena. To create a terminological contrast to the first usage of 'holism', this view might also be called 'comprehensivism' or an 'overall viewpoint' or the like. Third, according to yet another meaning of 'holism' the world is composed of integrated wholes or organic unities akin to living organisms. It is the task of enquiry not to separate the elements of such organisms from one another but rather to study them as essentially interlinked. The elements of such organic wholes are tied together by internal relations between them: the essential properties of the elements are dependent on such interrelations. This third usage of 'holism' often goes together with one or both of the other two usages, but is conceptually distinct from them. It is sometimes called 'organicism'.

Given such a plurality of meanings of the term, the precise variety of the alleged or self-proclaimed 'holism' of the old institutionalist economics appears unclear. It seems that all three notions of holism (and more, due to their internal variation) have been advocated by these institutionalists. Their 'holism' sometimes appears as nothing more than comprehensivism, a call for breadth or an overall approach in selecting one's explanatory factors. Sometimes the thesis is stronger, that of their obtaining collective entities or organic unities as the objects of study. The advocacy of pattern modelling is a case in point. These remarks bring us to the idea of isolation in economics.

ISSUES OF ISOLATION

Any theory involves an *isolation* of a limited set of entities from all other ingredients in a total situation. Some theories are more isolative than others. Both the Walrasian overall approach and the Marshallian partial approach involve isolations of various sorts, but the former is less isolative (and more 'wholist') than the latter in that it encompasses all markets of the economy. Isolations are often accomplished by using *idealizing* assumptions such as 'information is perfect' or 'there are no transaction costs' or 'tastes are fixed' or '*ceteris paribus*'. In such assumptions a factor is mentioned but it is assumed that it or a related feature has zero impact on the object under study. On the other hand, in *omitting* a factor one simply refrains from mentioning it. Omissions are ubiquitous means of effecting isolations. Examples of omission in standard economic theories range from the omission of the role of gender and corporate culture to the omission of the age and size of the universe. The method of isolation is a poorly understood but crucial aspect of economic theorizing and controversy. The analysis of this method and its applications gives us an access to some of the roots of the theoretical endeavour of economics, something that is closed to the Popperian framework focusing on the deductive implications of theories. This is also directly linked to the issue of realisticness in economics: in an important sense, the more isolative a representation is, the more unrealistic it is, and vice versa. (For a framework for analysing various aspects of the method of isolation in economics, see Mäki 1992a).

We have already cited Williamson's (1975: 1) statement that 'received microtheory . . . operates at too high a level of abstraction'. We may now ask what this statement means. It seems that one obvious idea delivered here is that standard neoclassical theory is too isolative in that it does not encompass the reality and efficacy of transaction costs. Williamson says that the standard theory is similar to physics which studies frictionless planes, friction being the analogue of transaction costs (Williamson 1985: 19). Both poles of this analogy employ an idealizing assumption of the form, $p(x) = 0$, which serves to exclude the impact of friction and transaction costs, respectively, from consideration. By excluding transaction costs standard theory also excludes institutions from consideration. On the other hand, the inclusion of transaction costs in the theory makes it capable of dealing with institutions and decreases its level of 'abstraction'. The issue between Williamson and standard neoclassicism is that of isolation.

A major issue between Williamson and much of the older branch of institutionalism is that of isolation as well. Among other things, this has to do with how economic agents are depicted. Williamson admits that, compared to orthodoxy, even though the agents of transaction cost

economics 'correspond more closely with human nature as we know it', the theory 'is plainly a narrow prescription. It makes little provision for attributes such as kindness, sympathy, solidarity, and the like' (Williamson 1985: 391). Some such excluded attributes are included in some of the more traditional institutionalist analyses. Perhaps even more relevantly, Williamson's theory excludes the influence of factors such as technology and power. Again, in some other institutionalist approaches, these are supposed to have a major impact on institutional structure and economic performance. Hence the suggestion that here, too, the issue is that of isolation. (For a more detailed account, see Mäki 1992c.)

Put in terms of the idea of storytelling, it may be revealing to hear Williamson say that the research objective of transaction cost economics is 'to tell plausible causal stories with the help of a few central principles' (Williamson 1990a: 65). The result of such an approach is supposedly more isolative than pattern modelling, to which some of the advocates of the old institutionalism subscribe. As characterized above, pattern models are not derivations from a few basic principles, but instead are composed of a large number of loosely connected, more or less equal parts. Such comprehensive representations are less isolative than representations based on a few key principles.

To give an interpretation of the discussion by Langlois and Csontos in Chapter 5: they connect the issues of rationality and institution directly to the issue of realisticness and isolation. This connection is mediated by the notion of explanation. Simply put, the idea is that the more the explanatory burden is put on the situational constraints, the less the picture of individual agents has to be 'realistic': the situational logic accounts for what takes place in the economy, provided that agents act rationally. This Machlupian idea is, no doubt, an important insight. In future work, it should be developed by carefully analysing the kinds of and detailed grounds for unrealisticness defended on these lines. At this stage it is easy to see that what is at stake is one variety of isolation: the internal organization of actors, the mechanisms of gathering and processing information and the like are excluded from consideration. The theory isolates the capacity of actors to react 'rationally' to changes in circumstances from their other properties.

The notion of isolation can also be used to suggest a general idea of what makes a piece of tradition of research theoretical. We might say that an endeavour is theoretical if it involves a systematic use of the method of isolation. Of course, the consequences of this suggestion depend on the precise specification of the attribute 'systematic'. One such specification would give us the definition of theoreticity in terms of neoclassical *ad hocness*. But there are a number of others which would give us more liberal notions of theoreticity that would apply to many instances of the old institutionalist economics, for example.

In general terms, the main issue is the precise location of the boundary line between the included and excluded factors drawn by an isolative theory. I mention the final but very important problem related to the method of isolation, namely that of dealing with states and processes. On what conditions is it permissible to isolate states of the economy from the processes that produce, reproduce and undermine them? What should we think of a theory based on such an isolation? Is it an attempted description of something real, or is it just an exercise in logic? Many institutionalists are inclined to think that it is the main task of economics to theorize about processes and that the standard neo-classical preoccupation with equilibrium states does not advance our understanding of the causal mechanisms of the economy. It can be argued that this is a key issue regarding the prospects of realism in economics: it is theories of process that deserve to be treated as hypothetical, potentially true or close-to-the-truth representations of the economy. They, too, are isolative in many ways, but they at least try to avoid excluding what are conceived of as the key elements that keep the world going. (For a detailed argument of this kind, see Mäki 1992b. In Chapter 11 of this volume, Christian Knudsen makes briefly a similar suggestion, but leaves it unargued.)

THE CONTRIBUTIONS

In addition to the opening and concluding chapters by two of the editors, the contributions to the book are divided into three parts. The first part, 'Approaches to economic methodology', contains three chapters focusing on alternative methodological images of economics in general. The second part, entitled 'Broadening the notion of rationality', provides three perspectives on the conceptualization and explanatory role of the very idea of rationality from an institutionalist perspective. The third part on 'Institutions and their evolution' contains three chapters dealing with different ways of theorizing the role that institutions play in the economy and the mechanisms which generate institutions and their change.

Part II provides general perspectives on economic methodology. In Chapter 2, Bruce Caldwell accomplishes three things. First, he provides responses to some of the ordinary criticisms or suspicions that economists have against methodology as a specialized field of enquiry. He corrects some mistakes by showing that, for example, methodologists today do not pretentiously and arrogantly tell economists how to do economics; that methodology is not the province of heterodox groups, since every economist is bound to make methodological decisions; and that practising economists are not able to tell good economics from bad on good grounds. Second, Caldwell discusses some recent contributions to the

study of economics and their relation to philosophy. These are the philosophy of realism, the study of the rhetoric and sociology of economics, understood moderately as complementing rather than substituting philosophical perspectives, and an anti-philosophical scepticism. Of these, the sociological approach is represented in Chapter 4 of the present volume. Third, he records three topics that deserve further study in economic methodology. They are the rationality assumption, the idea of prediction, and the role of ethics in the economy and in economic reasoning – all of them highly relevant to the institutionalist agenda. The notion of rationality is the subject of several contributions to this book.

Chapter 3 by Wade Hands gives a concise assessment of the Popperian tradition in economic methodology. He summarizes Popper's falsificationist methodology of bold conjecture and severe testing and lists some of the major problems in falsificationism, such as the Duhemian problem of the involvement in testing of a great number of uncontrolled auxiliary assumptions; the impossibility of testing severely the qualitative predictions prevalent in comparative statics; Popper's failure to develop a theory of truthlikeness to ground his falsificationist rules; and the inappropriateness in economics of Popper's idea of scientific progress, defined in terms of the notion of novel facts. Hands concludes that 'strict adherence to falsificationist norms would virtually *destroy all existing economic theory* and leave economists with a rule book for a game unlike anything the profession has played in the past'. No wonder then that falsificationism has not been practised in economics. Hands then explains why Lakatos's methodology of scientific research programmes has been more popular among economists: it allows for conservatism about a set of key presuppositions without giving up the notion that empirical evidence matters for the development of theory formation. However, Lakatos shares much of Popper's inadequate idea of scientific progress and is therefore as incapable of providing much guidance to economists in their search for progressive theory choices. Hands concludes that the Popperian tradition is not of much help to economists in the endeavour to make rational decisions about the fate of alternative theories – for instance, about the relative merits of various institutionalist theories.

Chapter 4 tries to give an impression of an entirely different perspective on studying science. Science is depicted as a social institution, as having an irreducibly social character. An analysis of recent social studies of science suggests three ways in which 'science is socially conditioned'. First, scientists may be understood as maximizers who pursue social goals such as academic credibility. Second, the justification of knowledge-claims and competence-claims may be viewed as a social process of rhetorical persuasion and negotiation. Third, some have suggested that the contents of knowledge-claims are causally produced

by social interests and structures. These three approaches are then used for generating speculative explanations for the presumed fact about economics that a ranking order obtains in which standard neoclassicism ranks highest, the new institutionalist economics ranks next, while the old institutionalism ranks lowest. Without a commitment to the particular contents of these speculations, they are offered as reminders that there is more to scientific rationality than traditional simplistic methodologies, Popperian or otherwise, suggest. The moral is that whatever rationality (and non-rationality) remains in science, it should be analysed at least partly in institutional terms. The notion of scientific rationality – not only that of economic rationality – needs to be broadened.

Part III is devoted to the concept of economic rationality and to efforts to broaden the standard notion. Each of the three chapters in this part provides a perspective on standard neoclassical rationality and its 'institutionalist' rivals. In Chapter 5, Richard Langlois and László Csontos offer a reconciliatory point of view on two lines within the new institutionalist economics, namely those of neoclassical optimizing and behavioural satisficing or rule-following. For this purpose they use the idea of situational analysis, arguing that both the optimizing neoclassicals and the satisficing Simonians may subscribe to it as a mode of explanation. They argue that situational analysis should not be equated with constrained optimization involving the standard neoclassical notion of rationality. They suggest that this combination gives only one possible version of situational explanation and that rule-following, with suitable interpretation, can also be accommodated by situational analysis. Langlois and Csontos suggest that these apparently rival conceptions of economic rationality in fact exemplify the same ideal type at two different levels of generality and realisticness. They follow Fritz Machlup in arguing that there is a trade-off between generality and realisticness in assumptions. An assumption with wide applicability is in some sense typically more unrealistic than an assumption which applies to one case or few cases only. The former depicts an 'anonymous ideal type'. The use of such simplified assumptions presupposes that most of the explanatory burden is carried by what Langlois and Csontos call a 'system constraint'. More realistic ideal types are needed when a relatively larger portion of the explanatory work is accomplished by recourse to the details of agents' behaviour. Langlois and Csontos conclude by formulating arguments for situational analysis and against its behaviouralist rival understood as the assumption of pre-programmed behaviour. They argue that situational analysis is less *ad hoc* and has more explanatory power than behaviouralism.

Chapter 6 by Christian Knudsen presents an argument to the effect that it is impossible to formulate a coherent and *non-ad hoc* process story of how equilibrium states emerge as results of substantively

rational activities of economic agents (that is, activities characterized by what was above called outcomes rationality) and that therefore the adoption of the notion of procedural rationality is ultimately unavoidable in economics. He provides two characterizations of this impossibility, one methodological, the other substantive. The methodological characterization amounts to recognizing the alleged failure of the notion of substantive or outcomes rationality as an internal conceptual problem within standard neoclassical economics. Knudsen rightly points out the inability of Popperian and Lakatosian methodologies to incorporate the decisive role of conceptual problems in theory development. The substantive characterization of this failure amounts to regarding it as an example of the general problem of self-reference, briefly discussed by Langlois and Csontos also. This problem is often generated by attempts to introduce optimization costs to the optimization calculus based on the notion of substantive rationality. Once we try to incorporate the idea of optimizing on the costs of optimization, we are led to an infinite regress: to make decision *A* is costly, therefore decision *B* has to be made whether decision *A* is worth making, but since *B* is costly too, decision *C* has to be made as to whether *B* is beneficial, and so on and so forth. This regress can be stopped only by dogmatic interruption or by a vicious circle. An optimal, substantively rational, solution to the decision problem is impossible. This observation on the level of the individual decision maker can be used as an argument for adopting the notion of procedural rationality. Knudsen then argues that the self-reference problem provides an even stronger argument on the level of systems of interdependent decision makers. He points out the manifestations of the problem in the cases of the theories of perfect competition, oligopoly, rational expectations, and non-cooperative games. In each case, the respective theory is unable to show how equilibria emerge out of substantively rational actions by individual agents.

In Chapter 7, Viktor Vanberg presents a lucid discussion of the relationship between two conceptions of the rationality of individual behaviour, namely the standard rational maximization approach and the rule-following approach. While the former is based on the idea of case-by-case maximization, the latter invokes routines and habits. Vanberg argues that the latter provides a notion of rational choice which retains both the methodological individualism and the self-interest assumption of the former. These two models provide different accounts of regularities in individual behaviour. The case-by-case maximization model depicts each choice as a deliberately maximizing response to unique situations where the chooser's past experience has no effect on present behaviour. A behavioural regularity consists in the person making the same maximizing choice in each of a set of recurring situations after having assessed each single situation separately. The rule-following

approach pictures individual choices as responses to situations perceived not as unique but as exemplifying a more general type of situation, as similar in some respects to other situations in a larger class. A behavioural regularity is generated on the basis of the chooser's past experience of following one and the same course of action in recurring and relevantly similar situations. As different exemplifications of the rule-following approach Vanberg reviews Heiner's theory of imperfect choice, Simon's notion of bounded or adaptive rationality and Hayek's argument from the limits of reason. Vanberg then suggests that in order for the rule-following approach to gain more adherence, it has to provide a unified theory of human behaviour which conforms to our common experience of its functionality and adaptiveness. He next outlines a generalized model of evolutionary learning which might satisfy these requirements. This model provides a framework for studying the processes of generation and selection of rules in a variety of contexts and levels, including biological evolution, individual learning, and cultural evolution. Evolutionary learning or adaptive rationality is backward-looking, based on past failures and successes, whereas case-by-case maximization is forward-looking, based on purposeful calculation and design.

Part IV provides three different perspectives on institutions and their evolution. Chapter 8 by Brian Loasby covers a variety of relevant topics from several perspectives. He experiments with and develops Kelly's idea of treating people as scientists engaged in a pursuit of epistemic and practical goals as a socially coordinated activity. From the point of view of this analogy, Loasby discusses the institutions of science and the institutions of the economy, and the twin role of institutions and their evolution as both causes and effects of individual human behaviour. He suggests that both scientists and economic agents conjecture, use, test, revise and replace hypotheses, and that this process is guided by institutional frameworks which consist of rules or conventions. They are akin to Kuhnian paradigms or Lakatosian research programmes, institutionally conceived. These frameworks constrain and coordinate the formation of hypotheses and the interpretation of evidence within the relevant communities. This amounts to recognizing the socially or institutionally conditioned character of action, both within and outside science. Loasby also points out that the emergence and evolution of these institutional frameworks themselves are the unintended or at most partly intended consequences of boundedly rational actions by agents. He discusses the business organization as a cluster of routines or research programmes, analogous to a 'visible college', and the market network as constituting an interactive system or research programme which functions as a means of organizing the search for knowledge, analogous to the 'invisible college' of academic science. Since the research programmes of science, business organizations and the market

are imperfectly specified, they function so as to combine coordination and flexibility, continuity and creativity, in varying combinations.

The evolutionary perspective on institutions, discussed already by Vanberg, is discussed more thoroughly in Chapter 9 by Geoffrey Hodgson. He examines critically the nature and implications of the evolutionary analogy as used in economics. His first major suggestion is concerned with the character of the outcomes of evolutionary processes. He argues that recent work in evolutionary biology shows that evolution is not identical with progress to higher forms of organization, that it does not represent some kind of optimizing procedure: natural selection does not necessarily lead to survival, and survival is not necessarily an indication of efficiency. Therefore, as against Oliver Williamson, Milton Friedman, and others, Hodgson suggests that the evolutionary analogy does not unambiguously serve as an argument for the notion that competition leads to efficient forms of organization. He concludes that sometimes there may be room for 'the judicious intervention of the invisible hand'. Hodgson's second major suggestion is about the appropriate unit of selection and the nature of the evolutionary process. Appealing to recent work in biology again, he argues against explanatory individualistic reductionism that treats the individual gene as the basic unit; instead, he maintains, selection may be considered to operate on various kinds of unit at different hierarchical levels (gene, organism, species), depending on the time scale and the kind of selection process. In economics, the relevant units comprise individuals, habits, groups, institutions, routines, and whole socio-economic systems. The selection process is multi-layered and comprises learning and imitation; hence, it has a Lamarckian character. Such multiplicity, Hodgson suggests, can be used as an argument against methodological individualism and for the viability of a mixed economy. Many of Hodgson's suggestions are in a sense compromises between some aspects of the 'old' and the 'new' lines of institutionalism, but they also indicate how easily these labels can be rendered more or less irrelevant.

In Chapter 10 Douglass North provides a concise account of his approach to the study of institutions. His focus is on how institutions affect the performance of economies. He outlines a framework for articulating the idea that institutions serve to structure the incentives of economic and political agents and that these incentives shape the evolution of economies. Institutions comprise formal rules, informal constraints and their enforcement properties. Together with the traditional constraints of standard theory, they define the opportunity set. They all affect the costs of transacting and have to be taken into account in the analysis (in contrast to the property rights approach which deals only with formal rules). Furthermore, North argues that the effectiveness of the enforcement of contracts is the most important determinant

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of economic performance. Also, unlike many other recent writers on transaction cost economics, he points out that not only do institutions affect transaction costs, they also affect production costs. In North's model the agents respond to the existing institutionally shaped incentive structure, and if this institutional structure is such that it rewards productive activity, the economy grows, but if it rewards redistributive and rent-seeking activities, the economy does not grow. North also outlines a model of institutional change in which the entrepreneurial agents of organizations, by pursuing profitable opportunities shaped by existing institutions, gradually alter the institutional constraints of their action. North emphasizes that inefficient economic institutions are the rule, not the exception, and that there is no process of evolutionary selection that would result in efficient institutions and weed out the inefficient ones. Here he agrees on one of Hodgson's claims. North's chapter is concluded by a brief, lucid account of the intellectual benefits of institutional analysis.

The contributions to this book and to the economics of institutions in general exemplify a number of at least partly rival or complementary approaches, which is why the reader may find it difficult to find his or her way through the intellectual landscape. The book is concluded by a chapter which should bring some help to the situation. Chapter 11 by Christian Knudsen classifies and discusses some of the alternative explanatory modes within the economic study of institutions.

NOTES

- 1 I wish to thank Christian Knudsen and Markku Ollikainen for comments on an earlier draft of this chapter.
- 2 There now exist fairly good general overviews of the recent developments in the economics of institutions, including methodological discussions. See, for example, Langlois 1986a, Hodgson 1988, Eggertson 1991, and the final chapter (Chapter 11) of this volume by Christian Knudsen.
- 3 One can also argue in more general terms that methodological research should enjoy a legitimate position in economics. This is what Bruce Caldwell does in Chapter 2 of this book.
- 4 For fresh accounts of the current situation in economic methodology, see Caldwell in the present volume (Chapter 2); Salanti 1989; Hands 1990; Mäki 1990a.
- 5 For examples of the Popperian dominance, see Latsis 1976a; Blaug 1980; Boland 1982, 1989; Klant 1984; Weintraub 1985; de Marchi 1988; de Marchi and Blaug 1991; for criticisms of Popperian views of science in the context of economics, see Caldwell 1982, 1984, 1991; Hands 1992; Hausman 1985, 1988; for criticisms of the Popperian dominance itself, see Mäki 1990a.
- 6 Popper, of course, is a realist himself, but his realism seems not sufficiently rich and powerful to be helpful for economic methodologists in detailed studies of the realist option in economics.
- 7 In Mäki (1989), I coined the term '(un)realisticness' in order to distinguish

it from '(non-)realism' and thereby to suggest a correction of an established but misleading practice among economists of talking about the 'realism' of their theories. While varieties of 'realisticness' and 'unrealisticness' designate attributes of representations such as the 'assumptions' of economic theories, varieties of 'realism' and 'non-realism' designate philosophical theses about the world, language, knowledge, etc.

- 8 Understandably perhaps, no established and unambiguous terminology for labelling schools or streams of institutionalist thought is available. The distinction between the 'new' and the 'old' strands represents one recent usage. (For a useful source of insights into what is formulated as the confrontation between the 'old' and the 'new' institutionalism, see a special issue of *Review of Political Economy*, November 1989, containing contributions by Geoffrey Hodgson, Richard Langlois, Malcolm Rutherford, Anne Mayhew, Viktor Vanberg, and Charles Leathers.) For another usage, see Eggertsson (1990: 6–9), who suggests the further distinction between what he calls '*neoinstitutionalist*' economics and the '*new institutionalist*' economics; while neoinstitutionalists subscribe to the neoclassical notion of rational optimization (and stable preferences and equilibria), the new institutionalists employ Simon's idea of satisficing or some other non-neoclassical behavioural assumption. One problem with this usage is that some of the present-day 'old' institutionalists also identify themselves as 'neoinstitutionalists' (e.g. Tool 1986). I suggest that what Eggertsson calls 'neoinstitutionalism' should more appropriately be called *neoclassical institutionalism*. In what follows, no emphasis is placed upon the distinction between neoclassical institutionalism and the new institutionalist economics.
- 9 Comparing the three themes to [MinI], we notice that Langlois's list is richer in that it comprises general statements on the nature of rationality and explanation. This does not yet imply that his list is also more specific; that is, it is possible that themes 1 and 2 are prerequisites for minimal institutionalism. If this were the case, [MinI] would be more parsimonious but contain roughly the same information as Langlois's list of themes. If this were not the case, his list would be more specific and thus more restrictive than [MinI].
- 10 Langlois rightly has a reservation on that part of Schotter's definition which says that the regularity 'is agreed to by all members of society'. Indeed, such a requirement would lead to an unnecessarily restricted notion of institution.
- 11 While Langlois's definition of the concept of institution in terms of a simple concept of a rule is very general, Douglass North formulates a definition which is specific and restrictive: 'Institutions are a set of rules, compliance procedures, and moral and ethical behavioral norms designed to constrain the behavior of individuals in the interests of maximizing the wealth or utility of principals' (North 1981: 201–2).
- 12 Note that if institutions consisted simply of rules of the form 'always react in manner *X* to event *Y*', then the standard formulations of Popper's and Lakatos's methodologies would immediately count as institutionalist philosophies of science. Popper is usually thought of as stating rules such as 'always regard the hypothesis under test as falsified if it faces negative evidence'. Lakatos has the notion of heuristics, sets of rules of some sort; negative heuristics, for instance, prescribes 'never reject the hard-core statements in the face of negative evidence'. If it is suggested that such rules make up the institutions of science and that this is all there is to the institutional aspect of science, then at least two questions arise. First, the

- empirical criticism levelled against the theories of Popper and Lakatos according to which the normative rules they have formulated are not obeyed by actual scientists implies that the Popperian and Lakatosian scientific institutions are fictions of some sort. Second, it may be suggested that there is more to the institutions of science than rules of the Popperian and Lakatosian sort. There are other kinds of powerful rules and there are social organizations. Third, while institutionalist economists are often preoccupied with how institutions emerge and develop, some of the most basic rules of science are fixed in Popper and Lakatos.
- 13 In note 14 of chapter 5 in the present volume, Langlois and Csontos appear to suggest that Simon's behaviouralist approach is concerned, not with human action, but with behaviour devoid of intentionality. This is inconsistent with Simon's own characterization of bounded rationality but more easily reconcilable with Langlois's and Csontos's special characterization of behaviouralism as an approach which assumes that economic agents are either 'hard-headed rule-followers' or 'preprogrammed satisficers *ab ovo*'.
 - 14 Regarding the *explanandum* of economic explanations, it is interesting to recognize a latent tension in formulations even within the present volume. While Wade Hands (in his note 19) writes that 'according to Popper's situational analysis view of social science, the action of an individual agent is explained', Langlois and Csontos imply a criticism of this idea when they say that economics using situational analysis 'does not seek to explain individual behavior *per se* . . . Rather, economic theory most often *uses* assumptions about individual behavior' (115) in the attempt to explain market phenomena. Note, however, that in [SA] the *explanandum* [SA4] concerns individual behaviour. Indeed, it is evident that [SA] and its variations have to be supplemented by something else to attain invisible-hand explanations of the kind endorsed by some versions of the new institutionalist economics. The discussion of situational analysis by Langlois does not seem to be sufficiently clear about this. For a discussion of a parallel problem, see Mäki 1990c. There I point out that the so-called practical syllogism which comes close to situational analysis is insufficient for explaining both individual entrepreneurial action and its unintended consequences mediated by the invisible hand.
 - 15 It is notable that in their discussion of the neoclassical mode of explanation in Chapter 5, Langlois and Csontos use Popper's term 'situational analysis' and avoid using Latsis's term 'situational determinism'. This may make it easier for them to argue that situational analysis respects the 'free will' of economic agents, whereas Latsis (1976b: 6–7, 16) found it somewhat paradoxical that the general ideology of the free will and a situationally determinist approach to rational action combine in neoclassical economics. To Latsis, neoclassical agents are just puppets which do not act – they merely react.
 - 16 McCloskey continues: 'The applied economist can be viewed as a realistic novelist or a realistic playwright – a Thomas Hardy or a George Bernard Shaw. The theorist, too, may be viewed as a teller of stories, though a non-realist – whose plots and characters have the same relation to truth as those in *Gulliver's Travels* or *A Midsummer Night's Dream*. Most economics is saturated with narration' (McCloskey 1991: 64).
 - 17 It is another question whether Williamson's theoretical work actually lives up to this meta-theoretical statement. This is related to the presumed functionalism of his approach.

- 18 Mark Blaug has suggested, albeit without documentation, that this characterization may apply, within the old institutionalist camp, to Veblen, Ayres and Myrdal, but not to Commons, Mitchell and Galbraith. He also suggests that 'a much better description of the working methodology of institutionalists is . . . storytelling' (Blaug 1980: 126–7). As we noticed, however, in Wilber and Harrison's characterization pattern modelling is *one variety of* storytelling.
- 19 Those wishing to take the task on should consult works such as Diesing (1971), Boland (1982, Ch. 2) and Hodgson (1988, Ch. 3) among those few that are available.
- 20 Note that Hejdra *et al.* here evoke Popper's falsificationism as providing a criterion of demarcation between science and non-science. In Chapter 3, Wade Hands suggests that this has not been the main role of Popper's meta-theory in economics – instead, it has usually been used for prescribing canons of theory choice.

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