

2 Agency and structure

Back in 1982, a brief but brusque exchange ... took place between James Tobin ... and Robert Nozick ... Tobin exclaimed at Nozick: 'There is nothing more dangerous than a philosopher who's learned a little bit of economics.' To which Nozick immediately responded: 'Unless it's an economist who hasn't learned any philosophy.'

Terence Hutchison, 'On the Relations Between Philosophy and Economics' (1996)

What distinguishes a human agent from automata or insects is the developed capacity to reflect and deliberate upon the context, options, purpose and possible outcomes of action. As Karl Marx (1976, p. 284) wrote in *Capital*: 'what distinguishes the worst architect from the best of bees is that the architect builds the cell in his mind before he constructs it in wax'. This does not imply that all human behaviour is deliberate, but that human deliberation is possible. We should also acknowledge that some non-human animals might have very partially developed this capacity.

Alongside the concept of the agent, the concept of structure is central and essential to any viable social science. A social structure is a set of significant relations between individuals that can lead to causal interactions. Social structures can involve rules, norms, meanings, communication and much else. These relations can be acknowledged or unacknowledged by the individuals involved. Furthermore, social structures can survive the demise of particular individuals that once related to them. Accordingly, the study of human social systems is more than the study of human individuals, because society embodies relations and properties in addition to those of individuals themselves. Although structures frame and condition behaviours, they are neither reducible nor ontologically equivalent to them.

Broadly, the idea that society is more than a collection of individuals has a long pedigree. Indeed, it is much older than the individualistic notion that society is merely the sum of its members. Such atomistic conceptions

date largely from the European Enlightenment of the late seventeenth and eighteenth centuries. Before that, the individual was generally regarded as being part of, or subordinate to, some greater entity or whole. For example, there is an ancient metaphor, traceable at least back to Plato and the Bible, that society is like a living organism in which the individual is a component. At the beginning of modern economics, the French physiocrat François Quesnay made use of the metaphor of blood circulating in the structure of the economic body (Foley, 1973). When Adam Smith wrote of the 'invisible hand' he was clearly suggesting that socio-economic systems have additional properties that are not reducible simply to the efforts of the individual minds and visible hands within them.

As modern social science developed in the nineteenth century, the idea of social structure strengthened and evolved. It found a prominent exponent in Marx, who fastened upon the architectural metaphors of structure and superstructure. Marx (1971, p. 20) wrote in 1859 in his famous Preface to *A Contribution to the Critique of Political Economy*:

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of the material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness.

Law and politics thus rested on the 'economic' structure. While Marx failed to define what he meant by 'economic' here, in his writings the concept of a structure reached a high point of development. Instead of understanding social reality simply in terms of the wills and personalities of the individuals involved, his concept of structure hinted at the powerful interests, incentives and institutions that might constrain or mould individual human agency.

The idea of social structure also developed within the writings of the German historical school of economists. Some of the nineteenth-century German historicists used the old idea of society as an organism to connote the existence of social structure above constituent individuals (Hutter, 1994; Hodgson, 2001c). There the structure metaphor often assumed a biological form, like the physiology of an organism. Herbert Spencer (1877) likewise embraced an explicit concept of social structure and also described society as an organism. However, Spencer (1881, pp. 48–9) believed that 'the character of the aggregate is determined by the characters of the units' and that social structures emerge because of 'a proclivity towards the structure' in the 'substance' of each individual. Hence Spencer's notions of social structure or social organism did not amount to much more than the aggregate of individual attributes.

The French sociologist Émile Durkheim went much further, to emphasize that society is more than the sum of its parts. Durkheim developed his own distinctive argument that social facts were not reducible merely to individuals or their psychology. A concept of social structure is also traceable in the writings of Max Weber, but there it does not play such a strong and embracing role as in the works of Durkheim or Marx.

In some discourses the essential issues are addressed using different terms. A specific type of social structure, described as an institution, pervades the writings of institutional economists such as Thorstein Veblen, John R. Commons and Wesley Mitchell. A broad and inclusive conception of institutions is widely accepted by social scientists and is adopted here. We may define institutions broadly as durable systems of established and embedded social rules that structure social interactions.

The term 'rule' is broadly understood as an injunction or disposition, that in circumstances X do Y.¹ Hence it includes norms of behaviour and social conventions, as well as legal or formal rules. By their nature, institutions must involve some shared conceptions, in order to make rules operative. According to this definition, systems of language, money, law, weights and measures, traffic conventions, table manners, firms (and all other organizations) are all institutions.²

As Alan Wells (1970, p. 3) put it: 'Social institutions form an element in a more general concept, known as social structure.' The original institutional economists understood institutions as a special type of social structure with the potential to change agents, including changes to their purposes or preferences.³ I have described this possibility as 'reconstitutive downward causation' and attempted to specify its causal processes (Hodgson, 2002a,

1 Rules are not necessarily explicit. As M. Weber (1978, p. 105) pointed out in 1907, rules are often followed 'without any subjective formulation in thought of the "rule"'. Hayek (1967, pp. 66–7) also emphasized non-articulated rules: 'it should be clearly understood that the term "rule" is used for a statement by which a regularity of the conduct of individuals can be described, irrespective of whether such a rule is "known" to the individuals in any other sense than they normally act in accordance with it.' However, Hayek (1979, p. 159) overly extended the term 'rule' to instincts, which are not necessarily culturally or socially embedded, as required in my definition of an institution. Notably, all culturally embedded rules are in principle codifiable, in which case breaches of rules can be more readily detected. In which case, mental representations of rules become significant (Searle, 1995). See Ostrom (1986) and Crawford and Ostrom (1995) for detailed analyses of the nature of institutional rules.

2 Note that Schmoller (1900, p. 61) defined an institution similarly as 'a partial order for community life which serves specific purposes and which has the capacity to undergo further evolution independently. It offers a firm basis for shaping social actions over long periods of time; as for example property, slavery, serfhood, marriage, guardianship, market system, coinage system, freedom of trade.' (Translated and quoted in Furubotn and Richter, 1997, p. 6.)

3 However, some institutionalists such as J. F. Foster (1981, p. 908) have misleadingly defined institutions as 'prescribed patterns of correlated behavior'. T. Lawson (2003a, pp. 189–94) rightly points out a difficulty in this conception: if institutions are behaviour, then how can changes in behaviour be explained? A related argument was devised by Aristotle in his critique of 'the Megaric view'. See footnote 29 on p.170 below.

2003b; Hodgson and Knudsen, 2004). These ideas will be addressed and developed in the present work.

Although it is familiar to Marxists and modern sociologists, the use of the term 'social structure' has not been universal in the social sciences as a whole. Its use, for much of the nineteenth and twentieth centuries, was not that frequent, and the term was rarely defined. During the twentieth century, it was largely within the rising discipline of sociology that the term began to be used more frequently. It was prominent in the work of some early American sociologists, such as Lester Frank Ward (1903), but others made less use of the term.

The American sociologist Talcott Parsons inherited a concept of structure principally from European forerunners – including Marx and Durkheim – and it retained a pivotal role in his theory of social action (Parsons, 1937). It was then developed by Robert Merton (1949) and in the 'structural sociology' of Peter Blau (1975) and others. Structure was given special attention by those influenced by Marxism, such as the Frankfurt School in Germany, and by the schools of structuralism in France founded by the anthropologist Claude Lévi-Strauss and by the Marxist theorist Louis Althusser.

It is disturbing to note that the agency–structure problem is evaded by some fashionable developments in contemporary social theory. In particular, there have been recent attempts by post-modernists and post-structuralists to dismiss or transcend this issue. In response, Nicos Mouzelis (1995, pp. 69–70) rightly assessed 'attempts to dismiss the agency–structure distinction ... either by conflating the two notions, or by ... deriving the one from the other' as leading to a theoretical impasse. Notably, many of these evasive attempts involve 'the reintroduction of the distinction by the back door ... by keeping the logic of the agent–structure dichotomy while expressing it through a different terminology'. The solution to the agency–structure problem is not to walk away from it, or to pretend it does not exist. Such strategies have notably ended up with the readmission of the problem in another form.

At the risk of oversimplifying matters, we may classify several types of treatment, or evasion, of the problem. The first group includes those approaches that claim that individuals are the ultimate explanatory or ontological elements. As noted in the next section, this 'methodological individualism' can itself be subdivided. A second group reverses the conflation: structures are regarded as the ultimate explanatory units. A succeeding section is devoted to this 'methodological collectivism'. A third group attempts what Margaret Archer (1995, p. 61) criticizes as a 'central conflation', by erecting a concept of 'structuration' that encompasses both structures and agents. This in some ways represents an advance on the preceding two positions. A fourth group shares with structuration theory the idea that agent and structure are mutually constitutive of each other. But in contrast to structuration theory, it disassociates agent from structure

by insisting on their differences. However, this group limits the acknowledgement or explanation of their causal interaction in a manner explained below.

The fourth approach is more sophisticated than the preceding three. A primary aim of this book is to indicate that an institutional economics that builds on Darwinian and Veblenian ideas holds the promise of a fifth, superior approach. This would be both non-conflationary and causally interactive, in a fuller sense to be explained and explored at length. The key innovations in the fifth approach are to extend the requirements of causal explanation, and to place the issue in an over-arching evolutionary framework.⁴

Methodological individualism

There is a long-standing tradition in social theory, to attempt to explain social structures, institutions, and other collective phenomena, solely in terms of the individuals involved. This approach is promoted with mainstream economics and elsewhere. Some, even sociologists, simply take for granted ‘the methodological individualism of scientific practice’ (Lopreato and Crippen, 1999, p. 209) without even defining the phrase. But the substance and validity of ‘methodological individualism’ is widely contested. There is not even strict agreement on the definition of this term (Udéhn, 2001).⁵

Broadly, methodological individualism emphasizes the human agent over social structures. Ludwig Lachmann (1969, p. 94) asserted that methodological individualism means ‘that we shall not be satisfied with any type of explanation of social phenomena which does not lead us ultimately to a human plan’. But very few social scientists would deny the role of individual intentions in the explanation of social phenomena. In another attempt Jon Elster (1982, p. 453) defined methodological individualism as ‘the doctrine that all social phenomena (their structure and their change) are in principle explicable only in terms of individuals – their properties, goals, and beliefs’. Being less banal, this definition also is insufficiently precise, as it fails to clarify whether interactions between individuals or social structures are ‘properties ... of individuals’ or not. If individual

4 As well as the term ‘evolutionary’, the notion of ‘causal explanation’ itself requires specification and clarification. For useful accounts see Bunge (1959) and Lipton (1991). Some further remarks on causality are found below.

5 Schumpeter (1908, pp. 64–8, 77–9, 85–7, 154–5, 261, 541–7) first coined the term ‘methodological individualism’. However, Schumpeter did not argue that *all* explanations in social science must necessarily and exclusively be in terms of individuals. Instead, he argued that it was the role of *economics* to start from given, rational individuals. For Schumpeter, this explanatory constraint was optional, once we moved outside ‘pure economics’. As Udéhn (2001) shows, Schumpeter’s use of the term is far from universal. The definition adopted in the present work is in terms of a general methodological injunction, rather than Schumpeter’s methodological option or disciplinary demarcation criterion.

interactions or social structures are not 'properties of individuals', then this narrower and more meaningful notion of methodological individualism must be deemed inoperable, for the reasons given below.⁶

Much of the confusion in the debate over methodological individualism stems from whether methodological individualism means explanations (a) in terms of individuals alone, or (b) in terms of individuals plus individual interactions or social structures. If it were meant to mean (b), then few would disagree. Such an inclusive notion would not warrant the title of methodological individualism any more than the description 'methodological structuralism'. If social structures or interactions between individuals are also an essential part of the doctrine, then it is misleading to give the individual exclusive representation in the label.

Attempts to conflate socio-structural phenomena upon the individual generally flounder. There are three types of problem involved here, depending on the type of argument and version of methodological individualism involved. The first type of problem results from giving the individual too much of the explanatory burden. For example, Stephen Jones (1984) and Ekkehart Schlicht (1998) provide interesting theories of conformism and custom. However, the explanation of the emergence of customs and conventions depends crucially on an assumption that individuals exhibit 'rule preference' or a 'preference for conformism'. The problem of institutional emergence is thus 'solved' by making properties of institutions also the properties of individual preferences. In a manner reminiscent of Spencer's idea (1881, pp. 48–9) that social structures emerge because of 'a proclivity towards the structure' in each individual, the social phenomena are conflated upon the individual. The explanation carries force only because individuals have been obliged to take on board factors that properly relate to social structure. Crucially, what such theories do not explain is how individuals acquire these socially infused preferences.

There are many other examples of a similar conflation of social structures and their effects upon individuals. Howard Margolis (1982) and Kenneth Koford and Jeffrey Miller (1991), view institutions as resulting from features of individual preferences, such as for cooperation, for altruism, for conformism, or for the observance of social norms. Robert Frank (1988) and Amitai Etzioni (1988), emphasize individual emotions or add moral

6 Claimed supporters of some version of methodological individualism include Popper (1945, 1960), Hayek (1943, 1948, 1952b), von Mises (1949), Arrow (1968, 1994), Ghiselin (1974), Boudon (1981), Elster (1982), Coleman (1990), Furubotn and Richter (1997) and Schlicht (1998). Critics include Lukes (1973), Giddens (1984), Hodgson (1988), Bhaskar (1989), Douglas (1990), Kontopoulos (1993), Archer (1995), T. Lawson (1997, 2003b), Storper and Salais (1997), Bunge (1998) and Udéhn (2001). In apparently conciliatory statements, Sober (1981) and Kincaid (1997, 1998a) argue that the validity or invalidity of methodological individualism is ultimately an empirical issue. If that is the case, then the evidence is against the narrow version. No significant explanation of social phenomena in terms of individuals alone has yet been advanced. In practice there is always a social and relational residual that is not reduced entirely to individual terms.

norms in attempts to give individual preferences more substance and meaning. Still others propose the 'multiple self' in which the individual is treated like a social organization of multiple wills (Elster, 1986). Again, these works contain valuable insights. But the problem is that an augmented individual is constructed to carry the entire explanatory burden of social phenomena. As Archer (1995, p. 251) observes: 'What is going wrong here is the desperate incorporation of all emergent and aggregate social properties into the individual.' In all these cases, the key omission is a failure to explain how and why the individual acquires the assumed 'social' characteristics. It is not clear how these assumed individual characteristics could themselves be explained without reference to social relations or structures.

In a second case, it is fatally admitted that individuals can be somehow changed by social institutions, in which case the inevitable result is that narrow methodological individualism is abandoned. The injunction to explain all social phenomena solely in terms of given individuals founders, once it is admitted that social institutions can change individuals. For example, Friedrich Hayek (1943, 1948, 1952b) has been regarded by some as a promoter of methodological individualism. At the same time he admitted that people are formed by society, just as individuals (intentionally or unintentionally) form society through their combined actions. Thus Hayek (1948, p. 6) sought explanations of 'social phenomena ... through our understanding of individual action' but declared on the very same page that society is composed of 'men whose whole nature and character is determined by their existence in society'. As much as providing an 'individualistic analysis' of social phenomena, Hayek also conceded that individuals have to be understood in terms of their social circumstances. Hence the individual alone was not given ultimate explanatory primacy. This made it impossible for Hayek to be a methodological individualist, at least in the strict and narrow sense above. If it is believed that 'social phenomena' are explained by 'individual action' and the individual is 'determined by ... society', then the causality goes both ways. There is no warrant to describe this as 'methodological individualism' any more than 'methodological collectivism'.

The notion that individuals are socially determined must undermine any attempt to give the individual explanatory priority over social structures. The reason for this is that a socially determined individual cannot provide the ultimate explanatory bedrock that methodological individualism requires. Elster's suggestion that 'all social phenomena' have to be explained 'only in terms of individuals' is untenable if individuals themselves are then to be explained in terms other than individuals alone. If institutional influences on individuals are admitted, then these too are worthy of explanation. In turn, the explanation of those may be in terms of other purposeful individuals. But where should the analysis stop? The purposes of an individual could be partly explained by relevant

institutions, culture and so on. These, in their turn, would be partly explained in terms of other individuals. But these individual purposes and actions could then be partly explained by cultural and institutional factors, and so on, indefinitely. We are involved in an apparently infinite regress, similar to the puzzle 'which came first, the chicken or the egg?' Such an analysis never reaches an end point.

It is simply arbitrary to stop at one particular stage in the explanation and say 'it is all reducible to individuals' just as much as to say it is 'all social and institutional'. The key point is that in this infinite regress, neither individual nor institutional factors have legitimate explanatory primacy. The idea that all explanations have ultimately to be in terms of individuals (or institutions) is thus unfounded. Once we admit that the individual is socially determined then we have an explanatory infinite regress, and neither individuals nor institutions can be the legitimate final term. Hence methodological individualism – in any adequately meaningful sense – has to be abandoned (Nozick, 1977; Hodgson, 1988).

In a third case – which is found in the 'new institutional economics' – attempts are made to explain the origin of institutions from interacting individuals, starting from an institution-free 'state of nature'. For example, Carl Menger (1871) pioneered a basic analysis of how institutions evolve. His chosen example was the institution of money. Menger saw money as emanating in an undesigned manner from the communications and interactions of individual agents. He started with a barter economy. The well-known problem with barter is the lack of a general 'double coincidence of wants'. To deal with this problem, traders look for a convenient and frequently exchanged commodity to use in their exchanges with others. Once such usages become prominent, a circular process of institutional self-reinforcement takes place. Emerging to overcome the difficulties of barter, a money commodity is chosen because it is frequent and convenient, and it is all the more convenient and frequent because it is chosen. This circular, positive feedback leads to the emergence of the institution of money.

Menger argued that there is a basic division between institutions that emerge spontaneously and those that result from a process involving overall, deliberate design. Menger's discussion of money has been interpreted as an attempt to show how some institutions could emerge spontaneously from the interactions of individuals in an institution-free 'state of nature'. This type of explanation is evident in the 'new' institutional economics of Oliver Williamson (1975, 1985), Richard Posner (1973), Mancur Olson (1965) and many others. This type of work is concerned to show how spontaneous institutions can emerge, simply out of the interactions of individuals, each pursuing their given purposes and preferences. Andrew Schotter (1981, p. 5) went so far as to define 'economics as the study of how individual economic agents pursuing their own selfish ends evolve institutions as a means to satisfy them' (emphasis removed). The stress is on a 'bottom up'

approach: given a set of interacting individuals, how do institutions emerge?

The value of all this work should not be denied. Substantial heuristic insights about the development of institutions and conventions have been gained on the basis of the assumption of given, rational individuals. But even in its own terms there are serious problems with this approach. Alexander Field (1979, 1981, 1984) has advanced a fundamental criticism. In attempting to explain the origin of social institutions, the new institutional economics always has to presume given individuals acting in a certain context. Along with the assumption of given individuals, is the supposition of given rules of behaviour governing their interaction. What is sometimes forgotten is that in the presumed 'state of nature' from which institutions are seen to have emerged, a number of weighty rules, institutions and cultural and social norms have already been (implicitly or explicitly) assumed. These original institutions, rules and norms are unavoidable; even in an unreal 'thought experiment' we can never properly envisage an original 'state of nature' without them.

For example, in attempting to explain the origin of institutions through game theory, Field pointed out that several constraints, norms and rules must inevitably be presumed at the start. There can be no games without constraints or rules, and thus game theory can never explain the elemental constraints or rules themselves. As Field (1984) argued, game theory may be used to explain the emergence of some institutions, but to do so it has to assume at the beginning a significant number of rules and constraints. Even in a sequence of repeated games, or of games about other (nested) games, at least one game or meta-game, with a structure and payoffs, must be assumed at the outset. Any such attempt to deal with history in terms of sequential or nested games is thus involved in a problem of infinite regress: even with games about games about games to the n th degree there is still one preceding game left to be explained.

As another illustrative example, Williamson (1975, p. 20; 1985, p. 143) wrote that 'in the beginning there were markets'. However, the market itself is an institution. The market involves social norms and customs, instituted exchange relations, and information networks that themselves have to be explained. All market and exchange relations involve complex rules and thus markets cannot be an institution-free 'beginning'. As Viktor Vanberg (1986, p. 75) put it: 'What we call a market is always a system of social interaction characterized by a specific *institutional framework*, that is, by a set of rules defining certain restrictions on the behavior of market participants.' Like others, Williamson failed to explain the evolution of the firm from an institution-free 'state of nature'. In a comparative-statics approach, he implicitly assumed one institutional framework and explicitly attempted to derive another. Accordingly, the project of starting simply from given individuals was implicitly abandoned.

Numerous critical studies have confirmed a similar defect. In the claimed 'methodological individualism' of Karl Popper (1945), 'the social phenomena have not really been eliminated; they have been swept under the carpet' (Lukes, 1973, pp. 121–2). Likewise, in neoclassical economics, claims to implement 'methodological individualism' in fact reveal hidden assumptions concerning social structures (Kincaid, 1997). Mario Bunge (1998, p. 80) argued that proclaimed attempts of methodological individualism often have 'a hidden holistic component'. Similarly, Kyriakos Kontopoulos (1993, p. 79) noted that 'a methodological individualist strategy necessarily incorporates references to social relations'. As these critics have showed, claimed methodological individualists never start from individuals alone.

The strict and narrow methodological individualist has a problem of potentially infinite regress: attempts to explain each emergent layer of institutions always rely on previous institutions and rules. According to the Mengerian research programme, these in turn have to be explained. Unless an institution-free state of nature can be discovered, the idea of explaining all institutions in terms of individual interactions alone faces an infinite chain of links to be revealed.

There is a particular and fundamental reason why the idea of explaining all institutions in terms of the interactions of individuals, starting from an institution-free state of nature, must be abandoned. This is because *all* individual interactions depend unavoidably on some – at least rudimentary – form of language. Language itself is an institution. Individuals rely on customs, norms, and the institution of language, in order to interact. Interpersonal communication, which is essential to all stories of institutional emergence, itself depends on linguistic and other rules and norms.⁷ The institution-free state of nature is unattainable, in minimally adequate theory as well as in reality.

Individual choice requires a conceptual framework to make sense of the world. The reception of information by an individual requires a paradigm or cognitive frame to process and make sense of that information. The acquisition of this cognitive apparatus involves processes of socialization and education, involving extensive interaction with others (Cooley, 1902, 1922; Mead, 1934; Fleck, 1979; Burge, 1986; Douglas, 1986; Hodgson, 1988; Bogdan, 2000). As well as language, these interactions require other, pre-existing institutions. The means and mechanisms of our understanding of the world are necessarily acquired through social interaction. Cognition is a social as well as an individual process. Individual choice is impossible without these institutions and interactions. We cannot understand the

7 Bovill (1958) noted that the Moors and Ashanti traded salt for gold without a verbal language, by placing their products on opposite banks of the river and withdrawing, taking the merchandise back if the other offer was not deemed to be satisfactory. Nevertheless, even in this case there was a form of communication with shared interpretations and meanings. Otherwise trade would not be possible.

world without concepts and we cannot communicate without some form of language.

What is being contested here is the possibility of using given individuals as the institution-free starting point in the explanation. The above arguments show that attempts to start simply from individuals must actually start from individuals plus institutions. The canons of narrow methodological individualism may be proclaimed, but they are not followed.

All theories must first build from elements which are taken as given. However, the particular problems identified here undermine any claim that the explanation of the emergence of institutions can start from some kind of institution-free ensemble of (rational) individuals in which there is supposedly no rule or institution to be explained. Consequently, the project to explain the emergence of institutions on the basis of given individuals runs into difficulties, particularly with regard to the conceptualization of the initial state of nature from which institutions are supposed to emerge (Hodgson, 1998a).

Overall, while methodological individualism is a popular mantra, in narrow terms it is never actually achieved. Explanations are never reduced to individuals alone. The advocates of this approach fail to carry out their own prescriptions.

A reformulated project would stress the evolution of institutions, in part from other institutions, rather than from a hypothetical, institution-free 'state of nature'. Notably, in recent years, a number of significant studies have developed in this direction. Accordingly, Jack Knight (1992) criticized much of the new institutionalist literature for neglecting the importance of distributional and power considerations in the emergence and development of institutions. Even more clearly, Masahiko Aoki (2001) identified the problem of infinite regress in much of the former literature and developed a novel approach. He not only took individuals as given, but also assumed a historically bestowed set of institutions. With these materials, he explored the evolution of further institutions. With these studies, the goal of narrow methodological individualism is abandoned. Some institutions are taken as given, rather than attempting to conflate their explanation upon the individual.⁸

8 This is what game theory essentially does. A payoff matrix is assumed that expresses *not only* individual preferences *but also* institutional circumstances, rules or constraints. The starting point in game theory always involves – and unavoidably so – *both* individuals and institutions. As Shubik (1982, p. 8) put it, in game theory 'the rules of the game include not only the move and information structure and the physical consequences of all decisions, but also the preference systems of all the players'. However, the treatment of institutional constraints as given challenges the widespread but unelaborated genuflections to 'methodological individualism'. From a post-Darwinian and institutionalist viewpoint, a crucial question concerns the causal explanation of the presumed individual payoffs and their individual and institutional underpinnings. That which is assumed by the game theorist must at some stage be explained.

In sum, attempts to conflate explanations of social phenomena upon the individual have generally failed, because some 'social' aspect of the individual is simply assumed and cannot conceivably be explained without reference to social relations or structures, or because it is admitted that individuals are moulded by social circumstances, or because the theorist never actually starts from individuals alone.

Methodological collectivism

Today, warnings of the dangers of methodological collectivism (sometimes called methodological holism) are relatively commonplace.⁹ By reversing the aforementioned (narrow) definition of methodological individualism, methodological collectivism can be defined symmetrically as the notion that *all* individual intentions or behaviour should be explained entirely in terms of social, structural, cultural or institutional phenomena.¹⁰

As with methodological individualism, we are concerned with doctrines that might come close to this extreme case. Hence methodological collectivism may suggest versions of 'structural determinism', 'cultural determinism', 'economic determinism' and 'technological determinism'. The versions that are close to methodological collectivism see individual thought or behaviour as being determined largely by structural, cultural or technological factors. In turn 'structure', 'culture', 'economy' or 'technology' are often seen as having a powerful logic and dynamic of their own. Social, cultural or technological systems are seen to dominate any individual motives or behaviours. Such systems are upheld to have their own teleology. They act somehow upon individual actors, who are dragged in their wake.

Examples or hints of methodological collectivism are found in Marxism, in the sociology of Durkheim, in structuralist or functionalist sociology or anthropology, and even in some versions of postmodernism. For instance, structure is asked to accomplish most or all of the explanatory work in the structuralist anthropology of Claude Lévi-Strauss (1962) and in the

9 The first appearance of the term 'methodological collectivism' may be in Hayek's (1943, p. 42) critique of attempts to treat 'social phenomena not as something of which the human mind is a part'. But this, misleadingly, is primarily an ontological rather than a methodological statement.

10 Note that such terms are sometimes used in different ways. For instance, Dugger and Sherman (1994, p. 107) claim that 'institutionalism relies on methodological collectivism rather than on methodological individualism. Since institutionalism is a cultural science, the individual is seen as a product of culture.' However, they immediately go on to write: 'The individual is not a cultural marionette, because individuals can and do transform their culture through collective action and even through individual action.' This somewhat qualifies the former statement and implies that explanations *entirely* in terms of social phenomena such as culture would be generally inadequate. Hence Dugger and Sherman do not advocate methodological collectivism in the strict sense that I define it here.

functionalist sociology of Talcott Parsons (1937). The ‘postmodernist’ Jean-François Lyotard (1984, p. 15) wrote: ‘A *self* does not amount to much.’ The tendencies in such accounts are to downgrade the human subject and to see everything that is human as entirely derivative from society.¹¹

If Marx is accused of being a methodological collectivist, then his defenders will point out in response that he acknowledged the role of the individual. Nevertheless, there are some highly misleading passages. For example, Marx wrote in 1845: ‘But the human essence is no abstraction inherent in each single individual. In its reality it is the ensemble of the social relations’ (Marx and Engels, 1976a, p. 4). The danger in this assertion is that the individual could be regarded as no more than an expression of social relations. Similarly, in a section of the *German Ideology* written at about the same time, Karl Marx and Frederick Engels (1976a, p. 59) wrote: ‘The ruling ideas are nothing more than the ideal expressions of the dominant material relations’. The similar pitfall here is that ideas and volitions could be seen simply as expressions of the ‘material relations’ of the social structure. These problematic formulations are not confined to their early works. In the 1860s Marx (1976, p. 989) described how the actions of the capitalist are ‘no more’ than the manifestation of capitalist structures:

The *functions* fulfilled by the capitalist are no more than the functions of capital ... executed *consciously* and *willingly*. The capitalist functions only as *personified* capital, capital as a person, just as the worker is no more than *labour* personified.¹²

A similar idea is repeated in the third volume of *Capital*. Marx (1981, pp. 1019–20, emphasis added) wrote:

The principal agents of this mode of production itself, the capitalist and the wage-labourer, are as such *simply* embodiments and personifications of capital and wage-labour – specific social characters that the social production process stamps on individuals, products of these specific social relations of production.

The problem here is that explanations of individual agency seem to be conflated entirely upon ‘material relations’ and ‘social structures’, without recognition of individual diversity, cultural variation or discretionary possibilities. Although multiple interpretations of these passages are possible,

11 Elements of postmodernism that lead to a downgrading of the human subject are criticized at length in Archer (2000, pp. 18–50).

12 This Marxist view of the capitalist as severely constrained by capitalist structures is contested in Hodgson (1999a) where I propose greater consequential differences between capitalist institutions and national cultures. Capitalists have a significant zone of discretion and their behaviour is not entirely dominated by capitalist structures. Consequently, an infinite variety of different types and trajectories of capitalism are possible.

Marx did not do enough to guard against a methodological collectivist interpretation.

A related difficulty in Marx's writing is his divination of social or 'productive forces' that, at least in some accounts, seem to have powers over and above individuals. For example, in the famous Preface to *A Contribution to the Critique of Political Economy* of 1859, Marx (1971, p. 21) wrote that 'the material productive forces of society come into conflict with the existing relations of production'. Such phrases have suggested that Marx was underplaying the role of the individual and making largely mysterious and undetailed 'productive forces' do the entire work of explanation of social change. On the other hand, the formulation in the Preface does have its relatively sophisticated defenders (G. Cohen, 1978). Furthermore, Marx and Engels (1975, p. 93) wrote in 1845 that 'history is nothing but the activity of man pursuing his aims'. But this apparent rejection of ontological collectivism was not enough to prevent his work being interpreted in methodologically collectivist terms.

Some of Marx's followers were less circumspect. For example, Nicolai Bukharin (1969, p. 40) wrote in a Soviet Russian textbook of 1921 that: 'Social phenomena determine at any given moment the will of the various individuals.' Much later, in his structural determinist account of Marxism, Louis Althusser gave explanatory priority to structure, while downgrading the human subject. He wrote: 'The true "subjects" are ... the relations of production' (Althusser and Balibar, 1970, p. 180). There are many similar Marxist examples of such a conflation of the individual with social relations or structures.

Turning to Durkheim, he too was strongly influenced by Marx but he reacted against the 'materialist' aspects of Marx's thought. Against Marx's notion that economic or material factors somehow determined individual thought or action, Durkheim (1982, p. 247) wrote in 1908: 'In social life, everything consists of representations, ideas and sentiments'. But in 1897 Durkheim (1982, p. 171) also insisted that:

We believe it is a fruitful idea that social life must be explained not by the conception of it formed by those who participate in it, but by the profound causes which escape their consciousness. We also think that these causes must be sought mainly in the way in which individuals associating together are formed in groups.

But this clearly created a problem for Durkheim.¹³ First, the character of these profound causes is not clear. To be consistent with the 1908 statement, these causes must also be 'representations, ideas and sentiments' – possibly those shared within groups or widely dispersed among society.

13 The following discussion draws heavily on Lukes's excellent introduction to a translation of Durkheim's *Rules of Sociological Method* (Durkheim, 1982).

Durkheim failed to resolve this problem and took refuge in unelaborated metaphorical phrases, such as ‘collective forces’ and ‘social currents’. Durkheim (1982, p. 59, emphasis removed) defined his basic concept of the ‘social fact’ in the following terms:

The social fact is any way of acting, whether fixed or not, capable of exerting over the individual an external constraint ... which is general over the whole of a given society whilst having an existence of its own, independent of its individual manifestations.

But there is a big difference between seeing such emergent phenomena as independent of *any one* individual, or external to *all* individuals. The above quotation is ambiguous. Permitted by such ambiguities and aided by his social metaphors, Durkheim sometimes slid towards a methodological collectivism, where society and ‘social forces’ somehow stand above and manipulate all individuals.

Like Marxism, Durkheimian sociology lacks a developed micro-theory of how social structures affect, and are affected by, individual purposes or dispositions. Marx seemed to make psychology redundant, by declaring that the human essence was nothing more than the ‘ensemble of the social relations’. More explicitly, Durkheim (1982, p. 129) banned psychology from social science with his famous declaration in 1901 that ‘every time a social phenomenon is directly explained by a psychological phenomenon, we may rest assured that the explanation is false’. The consequences of such neglects or prohibitions are highly damaging for social theory.

In the absence of a theory of how society may lead to the reconstitution of individual preferences or purposes, a temptation is to explain individual action primarily by reference to the *constraints* imposed by the evolving social organism upon the individual. Institutional constraints have effects, but without necessarily changing individual inclinations. For Durkheim (1982, p. 144) ‘social life presents itself to the individual under the form of constraint’. His concept of ‘constraint’ seems to include anything from legal rules and their sanctions to matters of mere convenience, communication or coordination.

With such a concept of social constraint, there is some notion of the power that social institutions can hold over the individual. However, Durkheim’s concept of social power is itself incomplete. As Steven Lukes (1974) argues in a classic study, power itself has multiple dimensions. One possibility is that power may be exercised by ‘coercion, influence, authority, force or manipulation’ (Lukes, 1974, p. 17) but these mechanisms do not necessarily involve the alteration of individual preferences, purposes or values. For Lukes, the overemphasis on the coercive aspect of power ignores the way that it is often exercised more subtly, and often without overt conflict. Lukes (1974, p. 23) thus wrote:

To put the matter sharply, *A* may exercise power over *B* by getting him to do what he does not want to do, but he also exercises power over him by influencing, shaping or determining his very wants. Indeed, is it not the supreme exercise of power to get another or others to have the desires you want them to have – that is, to secure their compliance by controlling their thoughts and desires?

Consider an example. If a criminal desists from crime, simply because they fear the risk of apprehension and punishment, then behaviour is changed through the force of deterrence and potential constraint. On the other hand, if someone persuades the criminal that wrongdoing is evil, and that there are morally superior ways of earning a living, then the released criminal will desist from crime, even if the constraints and perceived penalties are ineffective. The preferences and purposes of the criminal would have been changed through persuasion.¹⁴

Both Durkheim and Marx lacked an adequate account of how individual dispositions are moulded. Such accounts must necessarily include psychological mechanisms. In their absence the temptation is to place the emphasis on social constraints, rather than on the additional reconstitution of individuals themselves. This emphasis on constraints diminishes and denudes the concept of social power, including the dimension of power where individual purposes and preferences may be changed.

Many social theorists have criticized methodological collectivism for making the individual the mere puppet of social forces. In addition, it is argued here that the main problem is that methodological collectivism not only diminishes the individual, but it also pays insufficient attention to the processes and mechanisms by which the individual is fundamentally altered. One consequence of conflating the individual into the structure is to lose sight, not simply of the individual, but also of the mechanisms of social power and influence that may help to reconstitute individual purposes or preferences. It may appear paradoxical, but only by rescuing the individual from its conflation into the social, can the social determination of individuality be fully appreciated.

Part of the solution is to bring psychology back into the picture. But strangely this is absent from much of social theory. There is very little psychology in Marxism, partly because the subject was so underdeveloped during Marx's time. Durkheim himself bears part of the responsibility for the exclusion of psychology from the main currents of twentieth-century sociology. The influential Talcott Parsons (1937) was persuaded partly by Durkheim in this and other respects. Instead of psychology, and in a

14 Alternatively, Stigler and Becker (1977) would argue that no change in the preference function took place. Instead the persuader simply revealed new information to the actor. However, Stigler and Becker assumed a (meta-)preference function that is capable of accommodating an immense number of contingencies, certainly exceeding the computational and memory storage capacities of any human brain.

manner highly reminiscent of Durkheim, Parsons emphasized the power of social norms.¹⁵

Some influential neoclassical economists also abandoned psychology at about the same time. Lionel Robbins (1932) recast economics as 'the science of choice'. Individual ends were taken as given, economics was to be all about the rational choice of appropriate means. Because individual preferences were taken as given, psychology no longer had a significant role in this reconstruction of the subject (Hodgson, 2001c).

After their common rejection of psychological and other underpinnings, economics and sociology went their separate ways. Proclamations of methodological individualism were more prominent in economics, and of methodological collectivism in sociology. The social sciences as a whole were characterized as an apparent dilemma between an Adam Smith-like and incentive-driven view of action, on the one hand, and a Durkheim-like and norm-propelled view, on the other. In one discipline there appeared the 'self-contained', 'under-socialized', 'atomistic' and 'asocial' individual; in the other the individual seemed sometimes to be the 'over-socialized' puppet of 'social forces'.

However, despite the century-long battle between methodological individualists and methodological collectivists, they have much more in common than is typically admitted. Methodological individualism conflates the social upon the individual, thus losing sight of key mechanisms of social influence, and is consequently impelled to take the purposes and preferences of the individual as given. Methodological collectivism conflates the individual upon society and thereby lacks an explanation or adequate recognition of how individual purposes or preferences may be changed. The explanatory moves are different but the results are similar in some vital respects: there is no adequate explanation of how social institutions may reconstitute individual purposes and preferences. Typically, both approaches disregard the value and role of psychology in the explanation of social phenomena. Both methodologies end up with a diminished concept of social power, and an analytical overemphasis on overt coercion and constraint, rather than more subtle mechanisms of social influence.

Accordingly, as long as the debate within social theory simply moves back and forth along the line between these two positions then it will be incapacitated by a failure to examine, and escape from, their common presuppositions. They are two mutually implicated poles of a misconceived and unsustainable dualism; they have both demonstrably failed to bring social theory out of its twentieth-century impasse.

15 See Hodgson (2001c) for an account of how Parsons was also partly persuaded in this respect by his teacher Ayres. The institutional economist Ayres is discussed later and at length in the present work.

Reductionism and reduction

Methodological individualism and methodological collectivism are both different versions of reductionism, by which is meant the more general doctrine that all aspects of a complex phenomenon should be completely explained in terms of one level, or type of unit. This is a strong definition of reductionism, involving a universal imperative of explanation. But it is not lacking in adherents, such as Elster (1983, pp. 20–4): ‘Generally speaking, the scientific practice is to seek an explanation at a lower level than the explanandum. ... The *search for micro-foundations* ... is in reality a pervasive and omnipresent feature of science.’ A major theme of this book is to criticize the reductionist view that such outcomes are generally attainable and always necessary.¹⁶

The definition here of reductionism in terms of explanation should be distinguished from ontological and epistemological reductionisms. Ontological reductionism involves the claim that wholes are nothing but their parts (or vice versa). Epistemological reductionism claims that we know of the whole entirely by knowledge of the parts (or vice versa). Such doctrines exist (and are vulnerable to criticism) but they are different from the definition here of reductionism in terms of explanations of nature and origin. We can find many pronouncements of (explanatory) reductionism. Biological reductionism proposes that (social) phenomena should be explained solely in terms of biological characteristics. Physical reductionism requires that (biological, chemical or other) phenomena should be explained solely in terms of physical characteristics. Neurological reductionism proposes that psychic phenomena should be explained entirely in neurological terms. Methodological individualism pursues universal explanations of social phenomena in terms of individuals, and methodological collectivism the reverse.

Reductionism should also be distinguished from reduction. Emphatically, some degree of reduction to elemental units is inevitable and desirable in science. Even measurement is an act of reduction. Science cannot proceed without some dissection and some analysis of parts. However, although some reduction is unavoidable, complete analytical reductions are generally impossible. They are beset by analytical explosions in the number of combinations of elements; they are cursed by the ubiquitous phenomenon of complexity. Complete analytical reductions are rarely, if ever, achieved.

16 Several authors have incorrectly identified Quine (1951) as the origin of the term ‘reductionism’. Earlier uses include Urban (1926, p. 110) – who wrote of the ‘revolt of Emergent Evolution against reductionism’ – as well as Werkmeister (1937), Alpert (1938) and several others. The term is used in several different ways, but here I follow the usage of the term in classic presentation of the reductionist case, in Oppenheim and Putnam (1968), who advocated a reductionism in which explanations of phenomena were derived successively from scientific laws at lower ontological levels. Agazzi (1991) provides a useful set of essays on reduction and reductionism in science. See also Dupré (1993).

The strong version of reductionism criticized here cannot be refuted in principle, because any explanatory deficit might sometime be remedied in the future. In no science are the canons of reductionism strictly enforced. Yet the sciences achieve results. Although we can never be sure that someday a missing explanation will be found, and a further explanatory reduction might be possible, there is sufficient evidence from the sciences to undermine the reductionist dogma and to diminish reductionist ambitions. While reduction is a worthwhile and important aim, the sciences do not need 100 per cent reductionism to qualify as science.¹⁷

Few reductionists acknowledge a fateful consequence of their own doctrine. If reductionism were viable, and complete analytical reduction to lower levels were possible, then the result would not be methodological individualism but the dissolution of all sciences except subatomic physics. Everything would have been brought down and explained in its terms. There would be no mechanics, no thermodynamics, no chemistry, no biology and no social science. All sciences would be reduced to one. The reason why we have different sciences is that complete explanatory reduction is generally beyond reach, and multiple levels of explanation are both appropriate and powerful. It should now be clearly seen that reductionist ambitions are at best, wildly optimistic, and at worst, dogmatic and diversionary.

Central conflation

In the 1980s, largely as a result of the stimulating work of Anthony Giddens (1976, 1979, 1984), debates on the problem of agency and structure were given a welcome impetus. Giddens's 'structuration theory' is an attempt to steer a middle course between structural determinism and functionalism, on the one hand, and voluntarist, individualist and subjectivist formulations, on the other. Its attraction is to propose an alternative to the extremes of both methodological individualism and methodological collectivism. Giddens countered the widespread belief that the only alternative to methodological individualism is the slippery slope to methodological collectivism, or vice versa. He argued that social theory should focus exclusively neither on the social totality nor simply on the experiences or behaviours of individual actors. Instead, social theory should

17 Dennett's (1995, pp. 80–3) condemnation of the sin of 'greedy reductionism' is confusing because reductionism by its nature is gluttonous. All reductionism is greedy, as it desires beyond possibility and need. According to Dennett, those who are guilty of 'greedy reductionism ... underestimate the complexities, trying to skip whole layers or levels of theory in their rush to fasten everything securely and neatly to the foundation'. However, such persons are not simply guilty of the sin of greed, but also of haste and sloppiness. Dennett's rejection of 'greedy reductionism' is essentially a doomed attempt to cleanse reductionism of its reckless deviants and to retain respectable reductionist credentials. Symptomatically, Dennett does not admit that complete explanatory reductions are generally unattainable in science. He is thus charged by his own indictment.

take its starting point as 'recursive social practice' and consider the ways in which such practices are sustained through time and space.¹⁸

At the heart of his structuration theory is the notion of 'duality of structure'. For Giddens, the idea of a duality is contrasted with that of a dualism. The two elements of a dualism are regarded as mutually exclusive or separable (Dow, 1990). By contrast, in a duality the parts are interdependent: each element may actually help to constitute or sustain the other. Giddens regarded agent and structure as a duality: where both human subjects and social institutions are jointly constituted in and through recurrent practices, and where no element has ontological or analytical priority over the other. In Giddens's theory, structure and agency are mutually and symmetrically constitutive of each other.

In structuration theory, the idea of structure is tied up with ongoing processes and capabilities. Structure is less an objective thing; more a 'virtual order' of 'transformative relations'. In short, Giddens (1982, p. 35) saw structures as 'recursively organized rules and resources'. For Giddens, agency is both free and constrained. Human beings are reflective of, and reactive to, their circumstances, as well as being conditioned by them. Equally, instead of the prominent idea that the 'structural properties of society form constraining influences over action ... structuration theory is based on the proposition that structure is always both enabling and constraining' (Giddens, 1984, p. 169).

Social life is reproduced by drawing upon social structures, just as social structures are reproduced (intentionally or unintentionally) through the practices of social life. Structure refers to the 'structuring properties' that make it possible for similar social practices to endure in time and extend in space. Hence, in structuration theory, 'structure' is as much a verb as a noun.

In the idea of structuration, no stress is placed on the existence of different ontological or analytical levels. Instead, agent and structure are regarded as different aspects of the same process. As Ian Craib (1992, pp. 3–4) put it in his commentary on Giddens, structure and agency are not treated as 'separate and opposing things in the world or as mutually exclusive ways of thinking about the world' but as 'simply two sides of the same coin. If we look at social practices in one way, we can see actors and actions;

18 As well as Cooley (1902), who is discussed later below, in some respects there are also similarities with the work of Bourdieu (1990) and Elias (1991, 2000), who attempted to escape similar dichotomies. The concept of *habitus* in the works of Bourdieu (1990) and Elias (1991) has some similarities with Giddens's concept of routinization. Storper and Salais (1997) have tried to synthesize the approach of Giddens with that of Bourdieu. Elias, like Giddens, emphasized process, and the mutual reconstitution of individual and society. American authors including Boas, Cooley, Ellwood, James, G. H. Mead, Small and Sumner influenced Elias. When Elias (2000, p. 455) wrote: 'concepts such as "individual" and "society" do not relate to two objects separately but to two different yet inseparable aspects of the same human beings', he suggested a dual aspect formulation, similar to that of Cooley and Giddens. For simplicity, we focus solely on the work of Giddens in this section.

if we look at them in another way we can see structures.’ In fact, there is little to stop Giddens’s duality of agent and structure collapsing into the more special case of a ‘dual aspect theory’, where agent and structure become different facets of a unity. As noted later below, other versions of dual aspect theory appear in the sociologies of Charles Horton Cooley (1902) and in attempted solutions to the mind–body problem.

What is missing in Giddens’s account? In contrast to structuration and dual aspect theory, several philosophers have proposed an ontology in which reality is irreducibly layered: successively with physical, molecular, organic, mental, human individual and social layers.¹⁹ Everything belongs to a level and each level has, within bounds, some autonomy and stability. However, no level is disconnected from others: each layer is linked to, and dependent upon, other layers. Such a stratified ontology is essentially absent from structuration theory. The individual and the social levels are conflated into the central ground of the recursive structure.

Essentially, in stratified ontologies, what separates one layer from another is the existence of *emergent properties* at the higher level. Units exist at higher levels that are not mere epiphenomena of lower-level units. A viable and irreducible hierarchical ontology depends upon the notion of emergent properties. As related in later chapters, the concept of emergent properties was developed by the philosopher George Henry Lewes (1875), the psychologist and philosopher of biology Conway Lloyd Morgan (1923), and several others. A property may be said to be *emergent* if its existence and nature depend upon entities at a lower level, but the property is neither reducible to, nor predictable from, properties of entities found at the lower level.²⁰

Significantly, in his conflationary strategy, Giddens makes no significant or explicit use of the idea of emergent properties. Indeed, in one passage he rejected such a concept by suggesting that ‘human actors ... do not come together *ex nihilo* to form a new entity by fusion or association’ (Giddens, 1984, p. 171). This denial creates a serious problem. Central to Giddens’s structuration theory are notions such as self-reflexivity and consciousness. But if neural entities ‘do not come together *ex nihilo* to form a new entity by fusion or association’, then how can human consciousness or self-reflexivity be explained? Arguably, consciousness is an emergent property of interactions in the human neurosystem. We have to rely on emergent properties to sustain notions such as consciousness and self-reflexivity, which are central to structuration theory. Likewise, the existence

19 See, for example, Broad (1925), Sellars (1926), Bunge (1973a, 1973b) and Bhaskar (1975). Emergentist philosophy is discussed later in the present work.

20 The idea of emergent properties is similar in some respects to the concepts of ‘creative synthesis’ (Wundt, 1895; Ward, 1903; Sellars, 1918, 1922) and ‘synergy’ (Ward, 1903; Ansoff, 1965; Corning, 1983, 2000a). The origin of, and relation between, these three concepts is discussed in later chapters below.

of a social structure depends upon emergent properties; otherwise it would be reducible to the individuals involved.

Third, a consequence of Giddens's rejection of emergent properties is not only the rejection of a higher and social level of analysis with their own emergent properties, but also the analytical neglect of the natural and physical world as the essential substratum and context of human activity. The denial of emergent properties forces structuration theory to accept a *single* level of reality, with nothing (social or otherwise) 'above' it, and nothing (natural or otherwise) 'below'. One consequence of this is the denudation of the concept of social structure. Another is the neglect of the natural and biological substratum of all human activity.

If structuration theory accepts a singular plane of being, then where is it? Giddens is explicit about this. For him, 'structure exists ... only in its instantiations of such [social] practices and as memory traces orienting the conduct of knowledgeable human agents' (Giddens, 1984, p. 17). Symptomatically, the formulation is repeated elsewhere: 'Structure exists only as memory traces, the organic basis of human knowledgeability, and as instantiated in action' (Giddens, 1984, p. 377). And again, in another work, for Giddens (1989, p. 256), structure 'exists only in a virtual way, as memory traces and as the instantiation of rules in the situated activities of agents'. An agent carries 'structural properties' in its memory, which may be transmitted through practice from one agent to another. Commentators on Giddens's theory thus observe that 'if structures have a locus of existence, it is in the heads of social actors' (Craib, 1992, p. 42). Richard Kilminster (1991, p. 96) made a similar point: "'structure" in Giddens' theory is *internal* to actors'.

A problem with the idea that social structure is entirely mental and internal is that it downplays the fact that structure consists not merely of persons or things, but also of interactive relations between persons, in a social and material context. Hence questions such as 'where is social structure?' are essentially misconceived, as a relation between two individuals separated in space has no singular, meaningful location. A relation is real, but it is an association, not a singular entity. Individuals may confront these structures, even if they do not have the memories, ideas or habits that are associated with them. Newborn infants face a social structure, even if they have little understanding of it. Rebels and heretics confront a social structure, when failing to follow its rules or adopt its associated ideas.

Overall, for structuration theory, the single level of being is human knowledge and action. Structuration theory either takes structure as mental and internal to actors, or it has few defences to prevent such a conflation. The problem with this modern solipsist philosophy is much the same as that which troubled Bishop George Berkeley in the eighteenth century, who was also tempted to find reality inside the mind. Berkeley asked: if the world consists merely of our knowledge or perceptions, then how do we explain the *persistence* of objects when we do not apprehend them?

Berkeley's solution was that they endured through time in the perception of God.

Similarly, Giddens had to explain the persistence of social structures. He searched for a secular solution to this Berkeleyian puzzle. He found it in the centrality and persistence of routinized practice. Indeed, for Giddens (1984, p. 60), the 'concept of *routinization*, as grounded in practical consciousness, is vital to the theory of structuration. ... An examination of routinization ... provides the master key'. But the next question is how can the existence of routinization itself be explained? Giddens's (1984, p. 50) answer seems essentially to lie in his concept of 'ontological security'. This allegedly has its origins 'in basic anxiety-controlling mechanisms' that in turn are acquired by the individual as a result of 'predictable and caring routines established by parental figures'.

However, this argument is incomplete and has a strong functionalist flavour: the replication of routines is explained in terms of their function. The explanation for the persistence of routines is seen as the search for ontological security, which in turn results from the persistence of (parental) routines. However, no adequate explanation is given for the persistence of these 'caring routines established by parental figures'. These routines may be handed down from generation to generation, but why would this be so? No adequate explanation of the origin or persistence of routines is given, and Giddens's discussion of ontological security does not provide it.²¹

Despite these omissions, the stress on routinization in structuration theory has affinities with the 'evolutionary economics' of Richard Nelson and Sidney Winter (1982, 2002), which – redolent of the institutionalism of Veblen and Commons – also stresses routines. However, Giddens (1984, pp. 228–43) has been a critic of evolutionism in the social sciences and has rejected 'evolutionary' ideas in that domain.²²

Related to Giddens's abandonment of evolutionary theory is his inadequate treatment of historical time. This defect has been identified by 'critical realists' Roy Bhaskar (1989) and Margaret Archer (1995). For Bhaskar and Archer, but not for Giddens, human agents and structures are not different aspects of the same things or processes, but *different entities*. Although structures, of course, contain individuals, and structure and agent

21 Another problem with Giddens's explanation in terms of 'ontological security' is that a highly stable ontology could have unstable, chaotic or unpredictable outcomes. Also routines themselves can have highly disruptive effects, for example when they are embodied in a military organization. What might matter most for the agent would be epistemological rather than ontological security.

22 In teleological and pre-Darwinian terms, Giddens (1979, p. 233) described evolution as 'social change as *the progressive emergence of traits that a particular type of society is presumed to have within itself from its inception*'. This epigenetic or 'unfolding' conception of evolution is non-Darwinian and very different from the evolutionary economics of Veblen (1899a, 1919a) or of Nelson and Winter (1982). These accounts see economic evolution as an ongoing, imperfect and non-teleological process of competitive selection, acting upon a varied population of institutions, habits, customs and routines. Evolution in this conception is not necessarily progressive, and is not vulnerable to Giddens's critique.

are interdependent, they are different and distinct. This separation of actor and structure stems from the fact that, for any particular actor, social structure always exists prior to her engagement with the world.²³ As Bhaskar (1989, p. 36) wrote:

people do not create society. For it always pre-exists them and is a necessary condition for their activity. Rather, society must be regarded as an ensemble of structures, practices and conventions which individuals reproduce and transform, but which would not exist unless they did so. Society does not exist independently of human activity (the error of reification). But it is not the product of it (the error of voluntarism).

Hence any given individual is preceded by the social structures into which they are born. In recognizing the temporal priority of structure, Bhaskar and Archer took their cue from Marx. In 1852, Marx (1973, p. 146) wrote that: 'Men make their own history, but not ... under circumstances they themselves have chosen but under the given and inherited circumstances with which they are directly confronted.' Durkheim made a similar point at the beginning of the twentieth century. In his *Rules of Sociological Method*, Durkheim (1982, p. 51) pointed out that the social actor must learn pre-existing beliefs, laws, customs and so on: 'if they existed before he did, it follows that they exist outside him. The system of signs ... the monetary system ... the credit instruments ... practices ... all function independently of the use I make of them.' In a particularly useful study of social structure, Kyriakos Kontopoulos (1993, p. 211) similarly insisted that 'institutions are "always already there" and, thus, become the parameters of new actions and systems of interaction'.

It is in the work of Archer that the implications of the temporal priority of structure over the individual are drawn out most clearly. Following Marx, Durkheim and Bhaskar, Archer (1995, p. 72) wrote: 'This is the human condition, to be born into a social context (of language, beliefs and organization) which was not of our making.' She criticized Giddens's structuration theory as involving a 'central conflation' because it conflates structure and agency into processes acting together at a single level. Giddens's duality of structure wrongly treats structure and agency as not only mutually constitutive but also *conjoined*.

Archer thus exposed a major difficulty in structuration theory: it cannot incorporate historical time. Because it resists untying structure from

²³ There was an earlier, insufficiently acknowledged but contrasting tradition in American philosophy describing itself as 'critical realism'. This is discussed in a later chapter below. See also Sellars (1908, 1916, 1922), Drake *et al.* (1920), Bode (1922), Moore (1922) and Werkmeister (1949). By 'critical realism' in the contemporary context I refer to the writings of Bhaskar (1975, 1989), Archer (1995, 2000) and others. C. Lawson (1994, 1996), T. Lawson (1997, 2002, 2003a, 2003b), Runde (1998) and others have applied insights from this perspective to economics.

action, it cannot recognize that structure and agency work on different time intervals. As individuals, we are born into a set of structures that are not of our making. Acting within them, they may be changed or sustained by our actions. We then bequeath them to others. However, Archer did not conflate individual into structure, giving the latter the sole burden of explanation. Indeed, the reproduction of social structure depends upon the actions of the individuals involved. She aimed for 'a theoretical approach which is capable of *linking* structure and agency rather than *sinking* one into the other' (Archer, 1995, p. 65).²⁴

However, the differentiation of structure from agent is valid if structure is seen as external to any given individual, but not if it is regarded as external to *all* individuals. Structure does not exist apart from all individuals, but it may exist apart from any given individual. In some accounts – such as Durkheim's – this distinction is not always given sufficient stress. The danger, as a consequence, is that the concept of structure may be reified.

Non-conflation but incomplete explanation

In her alternative approach to social theory, Archer (1995, p. 91) proposed a 'morphogenetic cycle' involving first (a) a given structure, then (b) social interaction, then (c) structural elaboration or modification. The cycle then indefinitely repeats itself through these three phases. She criticized other approaches for downplaying particular phases of this cycle. For example, methodological individualism misses out the first step (a) and then moves simply from (b) to (c). In contrast to both methodological individualism and methodological collectivism, all three elements in the cycle are important.

To recapitulate: as acknowledged above, the work of Giddens was a major attempt to transcend the dichotomy between methodological individualism and methodological collectivism. However, Bhaskar and Archer criticized Giddens for conflating structure and agency. They developed an approach that likewise transcended the dichotomy between methodological individualism and methodological collectivism, but emphasized that structure and agency were different entities. Like Marx and Durkheim, it asserted that structures historically pre-exist each individual. Archer thus developed her 'morphogenetic' approach that moved cyclically, from

24 Archer (1995, 2000) also introduced the terms 'upwards conflation' and 'downwards conflation'. By 'upwards conflation' she meant accounts where 'structure is held to be the creature of agency' (Archer, 1995, p. 84) and by 'downwards conflation' she referred to theories where structural forces drive the system and 'agents are never admitted to touch the steering wheel' (Archer, 1985, p. 81). However, her terminology is ambiguous as the reverse choice of terms could apply. Devolving structural explanations down to the characteristics of individuals (methodological individualism) could just as well be described as 'downwards conflation', just as methodological collectivism could be described as 'upwards conflation'.

structure to social interaction, back to the (modified) structure. A process of structural evolution was suggested.

While the Archer–Bhaskar critical realist approach is an important advance, there are problems with it. In particular, while there is a general account of structural change, there is as yet no account of how individuals are changed. We are told how structures evolve, but there is no parallel explanation of the changes to individuals. In contrast to methodological collectivism, individual agency is rightly retained and emphasized. Bhaskar (1989, p. 80) and other critical realists have argued repeatedly that ‘intentional human behaviour is caused’ but ‘it is always caused by reasons, and that it is only because it is caused by reasons that it is properly characterized as intentional’. But in critical realism there is no adequate explanation of the causes of reasons or beliefs. So far, the account of agency in critical realism is incomplete (Faulkner, 2002).

Bhaskar (1975, pp. 70–1) endorsed an ‘ubiquity determinism’, meaning that every event is caused. Yet critical realism has so far failed to apply this universal principle to individual reasons or beliefs. It recognizes rightly that beliefs are part of social reality, but does not give an account of the cultural, psychological or physiological causes of beliefs or reasons themselves. In critical realism there is a general explanation of structural change, but so far no equivalent explanation of how individual agents acquire or change their beliefs, reasons, purposes or preferences. The possibility of such changes may be admitted, but as yet there is no indication in critical realism of how such changes may be explained.

As a result of this omission, a temptation is to adopt a schema in which structure somehow channels individual activity with a sufficiency to explain it, thus putting the emphasis on the role of structures as constraints on individuals. Instead, what is required is an account of individual agency that includes an explanation of how structures can lead to fundamental changes in individual reasons, beliefs or purposes.

Critical realism rightly insists that structure and agency are different entities, but in making this disassociation, a partial and inadequate account is so far provided of their interaction. There is a general account of the causal connection from individuals to structures, but not one from structures to individuals, which shows how beliefs or reasons are formed or changed. That is why I characterize the position of Bhaskar (1989) and Archer (1995) as a case of non-conflation but incomplete explanation.

While critical realism has articulated an important critique of the work of Giddens, there is a gap in the theories of Bhaskar and Archer: there is no explanation, even in principle, of the evolution of reasons or beliefs. However, this limitation is not unique to critical realism: in social science as a whole, many other approaches share this defect.

For instance, a similar problem can also be found in the writings of Marx. There is no adequate explanation in Marxism of individual motivations. They are assumed to spring in broad and mysterious terms from the

relations and forces of the system. A capitalist is said to act as a capitalist because he occupies a capitalist role within the social structure. A worker is said to act as a worker because she is obliged to take that social position. Explanations of individual action within Marxism characteristically devolve upon structure. Although Marx and Engels often rightly acknowledged that structures themselves are the result of human activity, they often describe how in a class-divided society people become prisoners of these structures. Within Marxism, the connection between social structure and individual action is made by the presumption of rational reflection upon their perceived interests acting under the constraints of social structures. Here too, structure bears the burden of the explanatory work. There is no explanation of how particular perceptions of interests and interpretations of situation may arise.

We require an explanation of how individual intentions or preferences may change. Without such an account, a danger is that structural constraints are called upon to do the main work of explaining human behaviour. As a result, the disconnection of agency and structure may end up explaining the individual solely by reference to structure, thus conflating the individual into the structure, as criticized above. In contrast, if there is a causal and psychological explanation of how structures can affect or mould individual purposes or preferences, then the role of the individual is placed alongside that of structure and becomes part of a more ample, two-way explanation. Such a spiral of causation from structure to individual, and from individual to structure, does not deny individuality; but it places the individual in their proper place within the ongoing process of social transformation.

However, while Marxism and critical realism have an inadequate explanation of individual motives, they are better than many other approaches in their recognition of the powerful role of social structures over individuals, while simultaneously attempting to retain a concept of agency. In many other cases there is an inferior explanation of structural powers and an equally inadequate explanation of individual transformations. Both methodological individualism and methodological collectivism come into this doubly defective category.

Also, much of mainstream economics has exhibited these twin failings. There are too few attempts to explain individual preference functions. Similarly, Austrian school economists take the purposes of individuals as given and do not regard their explanation as the task of economics or any other social science. As Hayek (1948, p. 67) wrote: 'If conscious action can be "explained", this is a task for psychology but not for economics ... or any other social science.' Like many others, Hayek shunned one of the central problems of social science – to explain human motivation.²⁵

Likewise, methodologically collectivist attempts to explain individuals exclusively in terms of social structures also typically fail to provide an adequate account of human motivation. It is often simply assumed that roles

or cultures or institutions affect individuals, without explaining how such social structures work their magic on individual motivations. Some have turned to behaviourist psychology, in the belief that its mechanisms of stimulus and response provide the answer. But behaviourism fails to address the inner springs of cognition and deliberation, overlooks the fact that beliefs are part of social reality, and makes the agent a puppet of its social environment.

Veblenian institutional economics relied on the non-behaviourist psychology of William James and others. The concepts of instinct and habit pointed to a fuller account of how individual motivations evolved. However, by the interwar period, instinct-habit psychology had become displaced by behaviourism. Behaviourists such as John B. Watson eschewed consciousness and intentionality as 'unscientific' concepts because they could not be observed directly. Veblen did not embrace behaviourism, but many other institutionalists, including Mitchell, adopted behaviourist psychology in the 1920s. Others, such as Commons, failed to develop any theory of human motivation. Frank Knight placed himself in an idiosyncratic minority by criticizing behaviourism while retaining many institutionalist ideas. For Knight, economics had to address both individual intentions and social institutions. In contrast, Clarence Ayres went with the flow of opinion, by embracing behaviourism and arguing that technology and institutions largely conditioned individuals. The initial, Veblenian, promise of a resolution to the problem was lost.

What is required is a framework within which the transformation of *both* individuals and structures can be explained. This approach must involve explanations of possible causal interaction and reconstitution, both from individual to structure and from structure to individual. This would mean an explanation of the evolution of individual purposes and beliefs, as well as an explanation of the evolution of structures. Preferences or purposes would be endogenously formed. Their co-evolution must be examined, without conflating one into the other. Such an evolutionary analysis provides the means by which social theory may escape from its unsustainable dichotomies and make further progress.

The development of social theory in the last quarter of the twentieth century has prepared the ground for the building of such an approach. In

25 While Hayek excluded the explanation of individual motivations simply as a consequence of disciplinary demarcation, von Mises excluded them on the grounds of perceived limits to explanation. Von Mises (1949, p. 16) argued that such phenomena as thoughts and feelings 'cannot be analyzed and traced back to other phenomena' and thus upheld an 'insurmountable methodological dualism'. However, even if thoughts and feelings defy explanation, as a result of the complexity of causes involved, this does not deny the fact that they are *caused*. Furthermore, in some cases, causes can be identified. For example, enduring personality traits may relate to experiences in childhood. In addition, we can partly explain particular mass political sentiments by economic or political events. For example, the rise of Nazism can be partly explained by the punitive reparations imposed after the First World War, plus subsequent unemployment and inflation.

particular, the transcendence of the old dichotomy between methodological individualism and methodological collectivism has created space for more sophisticated developments, including those mentioned above.

To bring evolution in, we have to learn from biology. But what we learn is not purely biological. Darwinian evolutionary theory points to a causal explanation of process, focusing both on causal links and changes at the microscopic level and their consequences in terms of transformations in structures, populations and species. This general Darwinian imperative of causal explanation requires that the evolution of individual purposes and beliefs must be explained as well as acknowledged. Ultimately, in principle, Darwinian evolutionary theory assumes no entity or characteristic as given. The emphasis is not on fixed units or relations but on the causal explanation of processes and transformations.

In particular, as elaborated in Chapter 4 below, Darwinism involves an ontological commitment to variation among members of a population. In regard to the social sciences, this 'population thinking' reinforces the premise that there is significant variation in personality and purposes between individuals, and that these variations matter in the explanation of social phenomena. Methodological individualists have long acknowledged this variation. Population thinking is another antidote to both methodological collectivism and any central conflation. But Darwinism does not sustain methodological individualism either. Not only does it insist that the individual has to be explained, but it also sustains higher levels of theorising and analysis above that of the individual.

However, the mere mention of biology will cause many social theorists to run for cover, or to reach for their guns. This prejudice among social theorists is a huge barrier to further advance. The next chapter is an attempt to forestall some likely misunderstandings and misconceptions.