Abstract

Dualism - the division of an object of study into separate, paired elements - is widespread in economic and social theorising: key examples are the divisions between agency and structure, the individual and society, mind and body, values and facts, and knowledge and practice. In recent years, dualism has been criticised as exaggerating conceptual divisions and promoting an oversimplified, reductive outlook. A possible alternative to dualism is the notion of duality, whereby the two elements are interdependent and no longer separate or opposed, although they remain conceptually distinct. This paper argues that duality, if handled carefully, can provide a superior framework to dualism for dealing with the complexity of economic and social institutions.

Keywords: dualism, duality, complexity, institutions, economic theory
Introduction

Dualism - the division of an object of study into two paired elements - has been adopted widely by economic and social theorists. Setting up a dualism offers the simplest form of categorisation and an easy way to draw the contrast between separate and perhaps opposed aspects of a single topic. Key dualisms, around which much social science has been organised, are the divisions between agency and structure, the individual and society, and micro and macro levels of analysis. At times theorising has converged on one pole of a dualism and neglected the other: mainstream economics, for instance, has favoured individualistic ideas, while mainstream sociology has favoured a structural emphasis. Dualisms can provide symmetrical frameworks that simplify academic work, supposedly capture crucial facets of reality, and partition a discipline into separate areas, such as microeconomics and macroeconomics, within which specialised study can take place. Dualistic modes of thought have become so ingrained in academic work that theorists often employ them unconsciously without asking whether or not they are desirable.

In recent years, the dualistic approach to social science has been heavily criticised. The appeal to two separate, unchanging elements seems oversimplified and may be too restrictive to encompass the complexity and diversity of modern societies. A strict contrast and opposition of elements limits the possible interrelationships within social theory. Responding to these criticisms, social theorists have explored new approaches that transcend the traditional dualisms underlying social analysis. One such approach relies on the concept of duality, which envisages stronger and richer interactions of paired elements than occur in a dualism. Whether duality-based and other non-dualistic approaches represent a major advance is debatable, but they do at least provoke theorists to think about the nature and value of dualism. The simplicity of conventional dualisms might have been bought at too great a cost.

The debates over dualism are relevant to all social science, including economics, despite the fact that mainstream economics, wedded as it is to neoclassical methods, has been
oblivious of them. This paper considers the role of dualism in economics and the case for adopting non-dualistic theory through concepts like duality. Economic and social theorists, it will be argued, have a better chance of depicting the complexity of economic institutions if they understand the drawbacks of dualism and seek alternatives to dualistic thought.

**Dualism**

Dualism has several features present in virtually all dualistic approaches. Its first and defining feature is its doubleness: analysis proceeds by identifying two basic elements. These must, of course, be different from each other, and the dualism usually aims to make a vital contrast that throws light on the topic under discussion. The contrast must be clear-cut and decisive in order to justify the dualism's twofold character. Dualism involves separation of the two elements, so that they have a well-defined boundary and no shared territory: connections between them are either non-existent or of a modest kind that leaves them unchanged and preserves their essential separation. Often separation becomes synonymous with opposition and potential conflict between the two elements. Opposition may not be inherent in dualism, but many dualistic approaches embody internal frictions. Dualism creates a cleavage and thereby encourages tension between the two parts of the object of study.

For a dualism to work properly, it must be comprehensive. It can have no middle ground between the two elements; otherwise the direct contrast would be lost and the analysis would no longer be dualistic. When it addresses a single object of study, the object must be divided cleanly into two separate parts that adjoin each other and exclude any middle ground. When it has a classificatory function, objects must be divided unambiguously between classes with no cases belonging to both. Successful dualistic classes should be
mutually exclusive and exhaustive. As well as there being no middle ground, there must be no external ground beyond the two elements in question. If an object of study falls outside the dualism, then there will be at least one other element and analysis can no longer be conducted in dualistic terms. Anyone hoping to set up a dualism has to ensure that the two elements cover the whole of the object of study and do not overlap.

Most dualisms are intended to be fundamental, so as to draw universal contrasts relevant in all times and places. Exceptions to a dualism imply that its elements are partial and capable of relaxation, losing their generality and with it much of their value. If the dualistic elements in a particular application can change, transform themselves and shed their doubleness, then the rationale of dualism is undermined. The elements of a dualism frequently seem to be in conflict, yet their opposition cannot culminate in one defeating the other or both undergoing essential changes. Dualistic methods are not dialectical, that is to say, they do not allow for the conflict of opposites leading to a synthesis that removes the initial dualism. Normally, dualisms say little about dynamics or historical change: the conditions for change remain unspecified. Fluidity of the elements might destabilise the analysis and, if it went far enough, threaten the existence of the dualism.

The dualisms observed in social theory have strong affinities and tend to reinforce one another. Parallel dualisms are the divisions between people and nature, the individual and society, subjective and objective, thought and action, idealism and materialism, mind and body, knowledge and practice, and values and facts (Sayer, 1992, Chapter 1). In all of these cases, the first term has a humanistic, idealist slant, whereas the second has a natural, material slant. Meanings derived from one dualism spill over into the related dualisms, causing dualistic thought to pervade large areas of social science. Taken together, the dualisms yield a broad conceptual gulf separating individual human beings from their social and natural context. Once established, dualism becomes habit forming and may be presupposed without deliberation. It has a transformative quality which allows it to appear in many guises that nevertheless reflect a common dualistic vision.
Dualism goes with a formal, rationalist style of academic work. The fixed elements and universality of dualistic thought exemplify the closed, Cartesian methods found widely in the natural and social sciences. By pointing out simple but fundamental properties of their objects of study, dualisms hope to attain the ultimate goal of uncomplicated, accurate explanatory theorising. Through formal theory alone, they can supposedly reveal reality, and nothing can come from outside the model to challenge the basic theoretical conclusions. If they are to take in all observed events and historical changes without themselves changing, dualisms must be constructed in the most general terms. Dualism is sometimes regarded as the epitome of the Cartesian, rationalist method and set against more open-ended alternatives (Dow, 1985, 1990). Strictly speaking, dualism is not equivalent to rationalism, and one can be a rationalist without being a dualist or a dualist without being a rationalist. Most dualisms do, however, fit into the rationalist tradition of formal theoretical explanation.

Dualistic thought in economics

Economics, imitating the natural sciences, has always been receptive to dualistic approaches. Neoclassical economics in particular has placed a high value on formal theoretical foundations, which has left it prone to the influence of dualistic thought. Constructing theories from axiomatic first principles means that the underlying assumptions must be simple or else theorising would be impossible. Dualism is one of the simplest theoretical abstractions, and so axiomatic theorising is often dualistic. Most neoclassical economists are probably unaware of their dualistic stance and do not overtly promote dualism, but they do, all the same, uphold dualism in both their theory and their methods: examples are the divisions between microeconomics and macroeconomics,
markets and planning, theoretical and empirical work, and normative and positive economics. Discussion here will concentrate on the dualism of agency and structure, only one dualism among others but at the heart of economic and social theory.

The basic neoclassical model starts free of social structure by assuming a population of rational, utility maximising agents. As the aim is to build complete axiomatic models from individualistic first principles, the ideal neoclassical case would eliminate structural concepts from economic theory. Much neoclassical work fails to attain this aim and at some stage has to accommodate structural ideas, either directly through institutional restrictions on individual behaviour or indirectly through, say, informational deficiencies or exogenous expectations. Within the individualistic framework of neoclassical economics, social structures can appear only as constraints on rational individual behaviour. Recourse to structural arguments embarrasses neoclassical economists because it stops them from reaching their aim of individualistic explanation and destroys the purity and elegance of the neoclassical model. They admit social structure only reluctantly as an ad hoc imperfection that may be convenient for certain localised purposes but should be avoided wherever possible and never assimilated with their theoretical vision. In models built up from a given set of rational individuals, agency and structure must be separate and opposed. The neoclassical wish for individualistic theory guarantees that the individualistic side of this dualism is dominant and structural ideas have only a precarious foothold.

In policy debates, the opposition between individual agency and social structure translates into an opposition between markets and planning. According to neoclassical doctrine, rational individuals interact via markets or market-like transactions to produce Pareto-efficient outcomes. Neoclassical theory, with its idealised view of efficient markets, underpins the mainstream case for a market economy. Governments or any intermediate institutions are omitted from the basic model and play no part in the attainment of economic efficiency. The smallest amount of government planning would be enough to spoil the perfection of market equilibria: markets and planning are incompatible. Those
neoclassical models that include government intervention and other imperfections operate in a 'second-best' environment clearly distinguished from the 'first-best' environment of a perfectly competitive economy. Second-best models, as adopted for example in public economics, acknowledge that government intervention may offset other imperfections, but they lack the theoretical elegance of the standard model and soon become analytically intractable when a more realistic institutional setting is introduced. Always in the background lies the belief that second-best situations are, indeed, second best and that the ideal option would be to remove imperfections and return to the first-best case. Paradoxically, if one replaces perfect competition with perfect central planning by an omniscient and omnipotent government, then the outcome will still be Pareto efficient. Neoclassical theory could have been used to advocate central planning under assumptions that are implausible but not dramatically more so than perfect competition. The framework of neoclassical economics is well suited to the neat, idealised modelling of the extreme cases of perfect competition and perfect central planning; it finds it much harder to cope with the messy middle ground where markets and planning are combined. Unfortunately for neoclassical economics, actual economies - whether they are nominally market, mixed or planned - are located in this middle ground.

Institutional and non-neoclassical economics differ from the mainstream in (among other things) the greater importance they ascribe to institutions and social structure. Institutional economics has generally turned away from strict individualism towards a more structural outlook, in which the social and institutional context exerts a prime influence on economic activity. The preference for structural approaches is by no means inevitable, however; the 'new institutional economics' keeps faith with individualistic, neoclassical theory (Dugger, 1990; Hodgson, 1989; Rutherford, 1994). When institutional approaches do reject individualism and put forward structural arguments, they will not necessarily reject dualism. As structure acquires greater importance, institutional economics may converge on the structurally dominated modes of thought that have characterised mainstream sociology. A theory where structure governs behaviour stands at the opposite pole of the
agency/structure dualism to that occupied by neoclassical economics; institutions restrain individuals and emasculate human agency. While undeniably 'institutional', a purely structural outlook is no less one-sided than the individualism of neoclassical economics. If institutional and other non-neoclassical approaches are to escape dualism, they cannot rely solely on structural arguments as the means to accentuate institutions. Overcoming dualism requires a truly non-dualistic framework, and the idea of duality may supply this.

Duality

Duality as an alternative to dualism is set out in Giddens's writings on the 'duality of structure' (Giddens, 1976, 1979, 1984). A duality resembles a dualism in that it retains two essential elements but, unlike a dualism, the two elements are interdependent and no longer separate or opposed, even though they are conceptually distinct (otherwise the duality would be a unity). Social theorists who invoke duality can maintain conceptual distinctions without being committed to a rigid antagonism or separation of the two elements being distinguished. Compared with traditional dualisms, duality should give rise to more even-handed, less restrictive accounts of social and economic behaviour. The objective is to preserve the valuable attributes of dualism and improve on its less valuable attributes.

Dualism forms part of Giddens's structuration theory, which has greatly influenced recent sociology (Giddens, 1984). The theory aims to transcend the old dualistic approaches that usually endorsed a structural view and left hardly any leeway for individual agency. Structuration theory strengthens agency against structure by looking towards the more interpretative, individualistic strands in sociology. The concept of structuration refers to the conditions governing the continuity or transformation of social structures. Instead of agency and structure standing separate and opposed, they are brought together in a 'duality
of structure': structures can be reproduced and transformed only through agency, and agents can come into existence only within a structured environment. Agency and structure are treated as distinct but thoroughly interdependent; they cannot exist separately and are best portrayed as a duality, not a dualism. In traditional social theory, as well as neoclassical economics, structure merely restricts or moulds agents, so that the agency/structure relation is an opposition. In structuration theory, structures can play an enabling role: people's capabilities depend on their social surroundings. Structure may at times constrain agents, but it is also pivotal to the enhancement of their powers and the development of culture. Once structure no longer opposes agency, the pressures to move to one dualistic pole or the other are reduced. Duality, as interpreted by Giddens, pulls structure and agency closer together and stresses their interdependence without going as far as to merge them into a single entity.

Giddens is not the only author to argue for the reconciliation of agency and structure: such considerations have been widespread in recent sociological debate. The various versions of the argument are expressed in different terminology and do not correspond exactly, but they share the goal of overcoming the agency/structure dualism. Within sociology, the work of Elias and Bourdieu contains the chief alternative accounts to that of Giddens. Elias's social theory centres on the concept of 'figuration', which refers to actual agents and their interactions, rather than the institutional structures found in traditional approaches (Elias, 1991). Figuration avoids a dichotomy of agency and structure, as it relies on the direct relations among agents; individuals can be understood only through their place in social networks, and nothing can be gained by analysing individuals in isolation from their social context or society in isolation from individual agents. Bourdieu's writings that address the agency/structure issue are based on the idea of 'habitus', defined as the individual's stock of accumulated social knowledge and experience (Bourdieu, 1977, 1990). According to Bourdieu, habitus can explain human conduct: people's internal dispositions derived from their past socialisation ensure the constancy of social practices over time. As with the work of Elias, this approach claims to study individual agents while
giving due attention to their social surroundings, thereby avoiding the agency/structure
dualism. Another example of non-dualistic social theorising, coming this time from outside
sociology, is the 'transformational model of social activity' (Bhaskar, 1979). Bhaskar's
model, part of his realist interpretation of social science, resembles structuration theory in
viewing social structure as the ever-present condition and continually reproduced outcome
of human agency. Despite substantial differences of detail and terminology, all of these
non-dualistic, non-reductionist approaches to social theory stem from the same perceived
problems and argue for similar methods of tackling them. The close resemblance of
independently produced work shows the general desire for a new, non-dualistic perspective.

Cultural theory provides a further source of non-dualistic ideas. Culture, when defined
as a process, denotes the growth of individual agents within society and hence links
individual agency to social structure. In fact, non-reductionist social theory uses culture as
the connecting tissue in its duality (without always acknowledging this) and mirrors
modern, sociological approaches to culture, which argue that all aspects of human
behaviour, from high culture to everyday life, are cultural in character (Williams, 1981).
With its broad outlook, cultural theory goes somewhat beyond the bounds of Giddens's
model, especially when it roots human behaviour in material nature, yielding the cultural
materialism that has informed both anthropological and literary work on culture (Jackson,
1996). Non-dualistic social theory can be embedded in a general, stratified conception of
reality, a view put forward explicitly in the realist social science of Bhaskar (1979) and
implicitly in the cultural materialism of Williams (1977) and Harris (1979). The notion of
duality, which has emerged only in the last twenty years or so, chimes with much older
traditions of cultural theorising. At present, 'cultural studies' is a rapidly expanding
discipline, and the revived interest in culture can be taken to indicate the significance of
new, non-dualistic modes of analysis.
Arguments against duality

The recent work on duality and related concepts has been discussed extensively in the sociological literature. Many sociologists have welcomed duality and accepted that it can redress structural biases, but it has nonetheless been much criticised. The central argument of most critics is that, in curtailing the role of social structure, duality-based approaches go too far in the other direction and end up with social theory dominated by individual agency. While happy with a shift towards agency, the critics claim that duality fails to find the right balance between agency and structure.

Giddens's work on the duality of structure faces difficulties over his definition of structure, which differs from the normal sociological one. The normal use of the word 'structure' hinges on an analogy with physical structures external to individual agents; social structure constitutes the social system of institutions within which individuals act. Giddens, however, distinguishes social structure from the social system and defines structure as the rules and resources exploited by agents in producing and reproducing a social system over time; rules receive pride of place as the medium and outcome of social interaction. When Giddens writes of the 'duality of structure', he is concerned with structures underlying human behaviour, rather than any particular set of institutions. The definition of structure comes nearer to that in structural linguistics or anthropology than to that in sociology. Giddens's definition, his critics argue, can be misleading and too narrow to be useful in social theorising (Callinicos, 1985; Layder, 1987, 1994). If the duality of structure does not apply to conventional notions of structure, then its relevance for social theory diminishes correspondingly and it will confuse social theory instead of clarifying it. Giddens's rule-bound, linguistic concept of structure has been seen as too close to human agency, on which it depends for its efficacy. Although structure can both enable and constrain human behaviour, the constraints take the limited form of rules and resources affecting individual conduct and are therefore internalised to human action. The possibility of structure being an external constraint on individual behaviour has been lost and, as a
result, structure has been seriously weakened. These criticisms pertain to Giddens's concept of structure and do not extend to the basic principles of duality: most critics approve of close agency/structure interdependence, with structure defined more conventionally.

A related criticism of duality is that the bringing together of agency and structure is vulnerable to a reductionism whereby one (usually agency) dominates the other. Giddens took his ideas from interpretative approaches to sociology and aimed quite explicitly to upgrade agency, thus redressing the bias towards structural methods. This could, according to critics, have gone too far; when structures are rules and exist only by virtue of individual agency, then the theory seems to have become individualistic in character and abandoned the prospect of structures constraining action (Archer, 1990; Callinicos, 1985; Thompson, 1989). If so, then Giddens may have conceded too much to interpretative, subjectivist methods and lost the benefits of a proper concept of structure. The attempt to transcend the agency/structure dualism could merely reinstate it in different terminology and diminish the role of structure to a point where the theory collapses into subjectivist individualism. Achieving a duality requires a delicate touch and, it is argued, Giddens has pushed things too far towards agency. The argument, as before, is over the particular content of Giddens's approach, not the idea of duality. Alternative duality-based theories, such as that of Bhaskar, can sustain a stronger notion of social structure and give more credence to its negative role in constraining individual agency (Bhaskar, 1993, Chapter 2). Giddens's critics accuse him of merging agency and structure into a unity, notwithstanding his choice of the term 'duality' and his declared intention to be even-handed (Layder, 1994). Whatever the truth of the argument, there remains the need to complete Giddens's task and achieve a genuine duality in social theorising.

Other critics have suggested that dualism and duality can coexist and that neither on its own suffices as the basis for social theorising (Mouzelis, 1989, 1995). From this perspective, people in different social locations experience different relations between
agency and structure. People in authority at the top of a social hierarchy are likely to experience a duality of structure: they have a personal involvement in formulating policy, and their individual and collective agency is closely tied to the production and reproduction of the social institutions around them. People at the bottom of a hierarchy are likely to experience a dualism: they do not identify with the institutions around them, have little influence on the formation of policy, and feel constrained by the social environment in which they live and work. Duality and dualism may be relevant in different circumstances, and the social theorist should be free to invoke either according to the object of study. Duality, Mouzelis argues, is a valuable idea but less general in its applicability than Giddens and other social theorists have implied; some aspects of social and economic analysis might still benefit from the older ideas of dualism, with their stronger, externalised versions of structure and an opposition between structure and agency. Once again, the main concern is to defend a sturdier notion of structure and recognise that people can be restricted by external institutional constraints.

Both the proponents and critics of duality in social theory have realised the need for a thoroughgoing interdependence of agency and structure. Their disagreements boil down to the precise definition of social structures and the place of individual agency in renewing or changing them. Agency/structure interdependence may still permit a continuum of emphases varying with the theoretical views of the investigator and perhaps also the topic under investigation. The debate over duality is partly a question of semantics. For some commentators, duality merges agency and structure to make them different sides of a single thing, whereas dualism keeps two separate elements of agency and structure that could nevertheless be interdependent (Layder, 1994). These definitions contradict the ones adopted in the present paper, which treats duality as two distinct, interdependent elements and dualism as two distinct, unrelated or opposed elements. Presumably some critics of 'single-thing' duality would be happy with 'interdependent-elements' duality, and in the end it matters little whether one refers to a duality or an interdependent dualism (though it seems better to reserve the term duality for this particular sort of dualism). The main
arguments in social theory seem to be about the nature and strength of the interdependence within a duality (or, if one prefers, dualism), not about whether the interdependence should exist at all.

**Ways of dealing with complexity**

Social and economic theory tries to portray a complex reality in a clear, manageable fashion capable of illuminating the object of study. The theory should not be so restrictive that it permanently excludes important features of reality, but should not be so general that it lacks content. This is the perennial dilemma of social theory: general approaches may say little and appear vacuous, while specific approaches may foster reductionism. When formulating general theory, one should be cautious and retain an open, non-reductionist framework that embraces more detailed theorising for particular applications and prevents the overall perspective from being unduly restrictive. Regardless of the disputes over dualism and duality, social theorists mostly agree on looking for a non-reductive compromise between agency and structure. As societies become increasingly complex, social theory must be able to deal with complexity; reductive approaches are oversimplified and ill-equipped to represent modern economies or societies.

Most social theories revolve around the two conceptual elements of agency and structure or a variant of them, such as the individual and society or micro and macro levels of analysis. The intention is to depict the relations between the part and the whole, that is, between the individual human being and the society or social institution to which he or she belongs. Two conceptual elements are the minimum possible for a pluralist, non-monist scheme, and theories with more than two elements or with additional superimposed dualisms would inevitably be more complex. Even for theories with two elements, the
relation between the elements is often a vexed question, as the dualism/duality controversy demonstrates. When the number of conceptual elements increases, the number of relations rises dramatically and so does the difficulty of modelling. Unless one single relation dominates, there will be far more interrelationships or combinations of characteristics to be modelled. Greater intricacy and difficulty of theory offsets the prospect of greater richness, breadth and depth.

The agency/structure dualism possesses an attractive simplicity and might be felt to delineate the bedrock of human behaviour without the need for additional or alternative concepts. It would be a little surprising, though, if social theory with only two conceptual elements could encompass all human behaviour. The 'law of requisite variety', when applied to social theorising, suggests that a complex object of study will require complex, diverse theory with a sufficiently large number of conceptual elements (Ashby, 1968). Many aspects of human behaviour and social institutions are not well portrayed by agency or structure. Consider, for example, the influence of human biology on the physical and mental capabilities of individuals. All human beings experience biological ageing that influences their behaviour but is due to neither agency - people do not choose to grow old - nor structure - social institutions do not cause ageing. The rate at which people's capabilities decline with age depends partly on their behaviour and social context, but a third factor outside agency and structure determines biological ageing. Another example of a third factor is the influence of nature and the environment. Human behaviour can never be cut off from the material world, and the interdependence of behaviour and the environment may be germane to social analysis. Relying exclusively on the agency/structure dualism (or duality) can easily become anthropocentric and overlook the natural context within which behaviour takes place; consciously adopting a naturalistic perspective can reduce this danger (Jackson, 1995; Khalil, 1995). To situate human behaviour in its natural context will entail stratified modelling in which human agents and social structure are just two levels of analysis among others. Levels can be treated as interdependent and characterised by emergent powers, so that any one level cannot be
reduced to the others. Within this framework, two interdependent levels might be singled out for analytical purposes as a dualism or duality, but they do not exist in isolation from the framework as a whole and will be subject to extraneous influences from the other, missing levels.

Besides adding levels, one can also subdivide structure and agency to give a more extensive analytical framework. Structure, in particular, may benefit from theoretical elaboration. It may be worth distinguishing between 'institutional structures' that bind together institutions and 'figurational structures' that bind together individual agents; the former correspond to the structural concepts of Talcott Parsons and much conventional sociology, the latter to Elias's notion of a 'figuration' (Mouzelis, 1995). Introducing this distinction raises the issue of how institutional and figurational structures are connected and weakens the simple agency/structure pairing. Duality of structure should ideally cover both types of structure and not dwell on one or the other. A further theoretical elaboration would be to delve deeper into the nature of structural relationships. The grid-group model of Mary Douglas, for instance, classifies societies according to their grid properties, the externally imposed restrictions on individuals, and their group properties, the extent to which individuals are incorporated in groups (Douglas, 1982; Thompson et al., 1990). The properties can be combined, and a model with high and low levels of each property has four combinations, plus a fifth case where neither property holds. Individuals or social groups can be located anywhere within the scheme or outside it; they can move between the compartments, and a society may comprise different proportions of individuals in different compartments. The agency/structure question is augmented by the additional question of a person's location within the non-dualistic grid-group scheme. Social structure has grown from a single concept to a fourfold typology.

One can also increase the number of conceptual elements in social theorising by avoiding false parallels between dualisms. The agency/structure dualism often becomes conflated with the individual/society and micro/macro dualisms: agency exists at the
individual, micro level, structure at the societal, macro level. Avoiding the parallel brings the prospect of macro as well as micro actors and micro as well as macro structures; a twofold scheme enlarges to give a fourfold scheme (Mouzelis, 1995). Thus, individuals who wield power in a government or multinational corporation are macro agents whose actions will have significant consequences nationally or internationally. Ordinary people, on the other hand, are micro agents whose actions have little influence beyond their immediate social circumstances. Likewise, social structures need not be macro structures and may refer to small-scale social groups or institutions. If macro agency and structure differ from their micro counterparts, then it becomes important to stress the conceptual distinction and consider the multiple relationships among the four conceptual elements. Disengaging parallel dualisms will transform a dualistic scheme into a scheme with at least four components.

What are the implications of the debates over duality for economic theorising? Most economic theory is less general than social or sociological theory and confined to those social activities perceived as being 'economic'. Even so, it remains true that economic analysis exists within a broader study of social activity and that the prevailing forms of social theory have a bearing on economic theory. Neoclassical economics sidesteps these conceptual matters when it declares the special character of economic behaviour, asserts the claims of rational-choice theory to explain such behaviour, and then divorces itself from the views of sociologists and social theorists. The upshot is the widespread dualism of agency versus structure, micro versus macro, and markets versus planning that pervades neoclassical discussion. For anyone wanting to overcome these dualisms and clear the path to a more open, less restrictive type of theorising, the context of economic behaviour is crucial and theoretical abstractions useful for some purposes should not be allowed to outstretch their usefulness and hamper the whole discipline. The duality debate can help to soften the rigidities that have marred both conventional sociological theory and neoclassical economics. In emphasising the interdependence of agency and structure, duality-based approaches ensure that both will be fully appreciated in social (and thus economic)
theorising and that neither will be neglected or minimised. Consequently, duality-based social theory can act as a non-reductionist theoretical background to institutional and non-neoclassical economics.

The chief value of duality resides in the close interdependence of its elements, not in the twinning of agency and structure. One might wish to subdivide agency and structure or introduce other factors, creating theory without a twofold character. Interdependence of factors might resemble that depicted in duality-based social theory but might not conform to a simple agency/structure duality. Little significance should be attached to the doubleness of the agency/structure juxtaposition, which does not extend to more general, stratified theory or to more specific theory in economics and elsewhere. What matters is the close interdependence, falling short of identity, of the theory's constituent elements. Complexity can best be dealt with through flexible theory that maintains conceptual distinctions but gives due weight to the diverse, multiform character of modern societies. One should be willing to expand the number of theoretical elements when necessary. Arguments against dualism should be pitted against doubleness as well as against separation and opposition. It is not enough merely to break down the internal barriers of a dualism, since this can be misrepresented as a simplifying move designed to amalgamate the two conceptual elements. The basic problem of dualism is that it oversimplifies and constrains social theory, and the remedy is to obtain the requisite degree of complexity by having intricate, two-way relations between concepts and adding further conceptual levels where appropriate. In economics this would mean a more complex vision than the neoclassical model, with more levels or elements and more complex relations among them. Such a vision does not have to take an axiomatic form and can be left as a general framework or set of guiding principles. Rejecting dualism and accepting a complex, stratified view of reality could clarify the nature of institutional economics and highlight its affinities with general social theory.
Conclusion

Duality, if handled carefully, can be preferable to dualism as a conceptual vehicle for economic theorising. It preserves the same essential distinction as the corresponding dualism, while making its conceptual elements interdependent and inseparable, and safeguards theorists against reductionism, because they cannot ignore one element of the duality and concentrate exclusively on the other. A possible risk is that the two elements become merged into a unity, leading back to reductionism, but any such risk will be minimised if the elements are clearly defined. One can bolster the distinction between agency and structure within a duality if one adopts a concept of structure stronger and broader than Giddens's. A more serious weakness of duality-based approaches is the restriction to only two elements, which may be insufficient to capture the relevant aspects of human behaviour. The duality principle can be generalised, however, as it does not depend on a single relation between paired elements. A stratified model can have more than two levels or elements that are conceptually distinct and interdependent. To deal with the complexity of modern societies and diminish the risks of reductionism, it may be desirable to increase the number of conceptual elements above two. The attraction of duality is not so much its doubleness as its ability to envisage a thoroughgoing interdependence of conceptually distinct elements.

References


