

Individualism in the Social Sciences

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Introduction

The social sciences study the domain of human interaction – the social world. In much of our social scientific discourse, and indeed our everyday talk, we refer to social groups such as nations, families and gangs. We ascribe actions and properties to these entities. We sometimes explain why an individual is as she is because of her membership of a group; we may praise or blame groups; we may even seek to reward or punish groups. So we may talk of a nation possessing a property such as being ‘war-like’ or ‘cultured’. We might explain why a person is honourable or wicked in terms of the effect a group has had on her. A nation may be praised for its courage or compassion or blamed for events. An instructive example is the debate over whether the German Nation was to blame for the Holocaust and whether it can be appropriate to hold accountable a nation. There is a need to clarify the sense, if any, in which groups are real entities.

That need is a response to two pressures. First, in our description and understanding of the social world the truth conditions of many of our statements depend upon the existential status of groups: put starkly, are there *really* groups which we pick out when we talk of them? A proper understanding of what is said - of what we mean - turns on how we are to treat the references to social groups. Talk about groups has the same grammatical features as our talk about, say, individual persons or tables. Yet should we understand groups, individuals and tables to be real in just the same sense? Second, the justification of moral evaluation, the formation of practical judgements and the articulation of policies and action depend upon the object of such judgements or action being an appropriate one. In particular it must be the kind of thing capable of sustaining the judgements made of it and of being responsive to actions directed towards it.

Let us regard the social sciences as seeking to provide true descriptions of the nature of the social world and its constituents, explanations of the phenomena within the world and a theoretical framework of generalisations and laws in which predictions of events or states of affairs may be made. In so doing the social sciences share the approach that quite in general characterises science. One understanding of the social sciences – of such fields of enquiry as sociology, psychology, economics and anthropology – is that they are ultimately the study of individuals. This understanding of the social sciences is individualistic and finds expression in the thesis of *methodological individualism*. The descriptions, explanations and theory-based generalisations are ultimately to be understood in terms of individuals and their properties. This top-down or micro-reductionist strategy promises to elucidate the nature of the social sciences and to account for the continuity of the social and natural sciences. First it would show that notwithstanding the appearance of our ordinary and social scientific discourse we should not think that social groups as such – as entities considered in their own right - are basic to our proper understanding and description of the social world. We could in principle dispense with talk of social groups in favour of talk of individuals. Second, the reductive approach – if applied globally across all fields of science - explains the continuity of the natural and social sciences

because ultimately all fields of scientific enquiry can be reductively analysed in terms of the most basic or fundamental of all sciences, physics.

I shall explain that there is a serious challenge to such a reductive understanding of the social sciences. We cannot reduce our references to social groups such as nations, families or gangs to references to individuals. The view that groups need to feature in social scientific discourse as entities in their own right is *holism*. If holism is true in the social sciences then it suggests that the model of science as unified through reduction to physics is one that ought to be rejected. Or, alternatively, we might preserve the possibility of the unity of science by abandoning the claim that the social sciences ought to be regarded as sciences.

Reduction

Individualism in the social sciences sees groups as composed of individuals and as being individuated through the predication of properties and facts about them. Individuals, though, remain ontologically and explanatorily prior to or more fundamental than groups. The properties of a group, the social generalisations or laws that are predicated of it and in virtue of which it is individuated, are reduced to the properties and generalisations predicable of its individual members. Reduction is an approach whereby one domain of things is shown to be absorbable into or dispensable in favour of another domain.¹

The truths about groups are held to be expressible, without loss, as truths about individuals. The reductionist about groups accepts that there are groups, but that the science or body of generalisations in which facts about groups are explained can be reduced. Typically this takes the form of the reduction of the social sciences to the psychology of the individual (plus certain aspects of other relevant bodies of knowledge such as biology and ecology). Through this procedure one domain is said to be reduced to the other. Examples of reductionist programmes include the reduction of numbers to sets, chemical properties (e.g. solubility) to the properties of molecules and atoms, mental properties to physical properties, and the laws of 'special' sciences (in effect all of the sciences apart from physics) to those of physics. Similarly, it has been proposed that social groups, properties and the laws of the social sciences can be analysed in reductive terms. Indeed Pettit has noted that the standard tradition of recent individualism takes the regularities of social science to be reducible to intentional regularities (i.e. mental states such as beliefs, desires, attitudes and so on), with the social-structural properties involved in social regularities being defined in terms of intentional psychology.² The appeal of reduction is held to be its ontological economy and conceptual unity in promoting explanations and descriptions couched in unifactorial terms. It may appear, moreover, to touch deep epistemological and ontological truths in revealing to us the gap between our ways of talking and the structure of the world.

Reductionism is associated with a global thesis that every domain can be reduced ultimately to that of physics. The belief that science can constitute a single unified project has come to be known as the 'unity of science'. Such unity has been presented as a 'working hypothesis' supposing there to be an hierarchical organisation of objects in which the objects at each level are formed through the complex arrangement of objects at the next lower level. We can thus envisage an increasing complexity of

organisation as we move 'up' from elementary particles through atoms, molecules, living cells, multi-cellular organisms to social groups. Oppenheim and Putnam were especially influential in developing the case for a reductive approach.³ Advances in physics and molecular biology appeared to them to confirm the robustness of a reductive research program aiming to explain macro-phenomena in terms of their micro-structure (e.g. the reduction of thermodynamics to statistical mechanics, optics to electromagnetics). Associated with micro-reduction is the idea of theoretical reduction.⁴ Roughly, this posits a hierarchy of theories. A theory about one level of objects is derivable from another theory about simpler entities and identities between entities of the reduced (higher level) theory and structures of entities of the reducing theory.

Each level is then subject to a programme(s) of investigation governed by the principles and practices of a particular domain of science aiming to uncover the principles and laws governing the behaviour of the objects at that level. A proper whole within the terms of discourse at a level N is reducible into proper parts in a universe of discourse at a lower level N-1. This reduction also consists in the derivation of the laws governing the behaviour of entities at each higher level from those governing objects at the next lower level. Such reduction calls for the knowledge of bridge principles or laws identifying kinds of objects at the higher or reduced level with arrangements or organisations of objects at the lower or reducing level. Through the transitivity of the reductive relations a unity of science is taken to hold, with the laws of the 'special sciences' being ultimately derivable from those of fundamental physics and the bridge principles.

At bottom this is an empirical hypothesis and reduction is an empirical achievement resulting from the identification of suitable bridge principles.⁵ We should note that the possibility of reduction is not hostage to the state of our scientific practices or the epistemological limitations of creatures like us. It could be a property of the world that one domain is reducible to another. Whether its reduction becomes part of our body of knowledge depends upon our capacities and our adopting a suitable perspective or theoretical interest to discover the reduction. I assume here that our knowledge and the construction of theories depends at least in part on a world independent of our theory construction, conventions and attitudes. Now, there has been no programme establishing universal and systematic connections between types of entities, properties and laws at different levels, all of which are ultimately connected through the transitivity imparted by bridging principles between adjacent levels.⁶ This does not in itself deny the possibility of the reductions of one type of entity to some other type, but to point at the very least to the absence of any practical advance demonstrating that the types of one level are systematically connected to those of another. Sometimes we may find systematic links between kinds at different levels, but the practical endorsement of the global reductionist claim here *is* hostage to counterexample. Furthermore the model of a unified scientific project has been criticised as being thoroughly unsupported by consideration of and reflection upon our practices and standards of taxonomy and of the laws and generalisations employed in different scientific domains. Models of the world distinctly at odds with the hierarchy, determination and predictability (in principle) of reduction include an ontologically promiscuous realism of countless (cross classifying) ways of ordering nature and a patchwork of laws governing local domains.⁷

I have sketched in the barest outline the thesis of global reduction because if it were to prove our best model of the world, then there would be a sense in which individuals are more fundamental than groups. Equally, though there would be yet more ontologically and explanatorily fundamental levels relevant to our understanding of the social domain. Nonetheless, the dispute between holism and individualism is perhaps best construed as a 'local' one, which seeks to cast light on the descriptive, explanatory and evaluative forms at a particular level of discourse. As such, then, the question is whether there is a persuasive case for a local reduction of social groups to individuals. Naturally, if we feel warranted in recognising the irreducibility of groups, so doubts will grow about the global reductionist programme.

We must remember that it is not the compositional claim at issue here. Groups are just individuals in a compositional sense; just as individuals are composed of their arms, legs, torsos, organs and so on; and these are composed of flesh, muscle, sinews, blood and bones; and these are composed of... and so on. The reduction of groups to individuals is the reductive analysis of the properties, facts, events, generalisations or (social scientific) laws through which groups are individuated as entities in their own right and in which groups figure. It is sufficient for (a weak) individualism to show that the properties of, facts about or generalisations or laws applying to groups can be reduced to properties, facts or laws applying to individuals. Note that this neither requires nor entails a semantic reduction of group terms or predicates to individual ones. That is, individualism need not demonstrate that the meaning of group terms can be reduced to the meaning of individual terms. The success of reduction could be said to turn on whether it can show that groups lack causal and explanatory potency in their own right. The idea that for something to be real it must possess causal powers is clearly captured by Alexander:

...to suppose something to exist in nature which has nothing to do, no purpose to serve, a species of noblesse, which depends on the work of its inferiors, but is kept for show, might as well, as undoubtedly would in time, be abolished.⁸

Reduction must therefore explain the (apparent) causal and explanatory role of groups in terms of the properties of and generalisations pertaining to individuals as such.⁹ A reduction of groups to individuals (or more precisely group properties, facts about groups, generalisations or laws within a theory about them) would take the form of an explanation of facts about the group in terms of the dispositions, beliefs, actions, resources, interrelations and situations of individuals. This reductive strategy is at the core of Methodological Individualism. Thus, a characteristic statement of the approach holds that,

(E)very complex social situation, institution or event is a result of a particular configuration of individuals, their dispositions, situations, beliefs and physical resources and environment. There may be unfinished or half-way explanations of large-scale social phenomena (say, inflation) in terms of other large-scale phenomena (say, full employment); but we shall not have arrived at rock-bottom explanations of such large scale phenomena until we have deduced an account of them from statements about the dispositions, beliefs, resources and interrelations of individuals.¹⁰

Methodological Individualism has been criticised as lacking precision in its formulation.¹¹ For the present, though, it is sufficient to see Methodological Individualism as a suitable framework in which a reductive analysis of groups could be pursued.

The individualistic analysis need not be framed in terms of the actual individual members, but in terms of 'ideal types' or 'anonymous individuals' who characterise the membership of that group. One constructs an ideal type by 'discerning the form of typical, socially significant dispositions and then by demonstrating how, in various typical situations, these lead to certain principles of social behaviour'.¹² The notion of an ideal type, introduced by Weber and employed by Watkins, is used to explain social phenomena in general. An ideal or hypothetical type is an abstraction from the personal preferences, different kinds of individual knowledge persons possess in a particular context, and typical relations between individuals and between individuals and resources.¹³ The abstraction is conceived by Watkins to be to an ideal actor, probably without an empirical counterpart, in terms of whose attitudes, beliefs, dispositions, relations, and contextual setting a particular social phenomenon or fact can be examined. Thus a range of social facts or phenomena could be analysed such as the process of capital accumulation within a market economy, or the tendency of a particular group to display certain properties such as the mercantile spirit of French Huguenots. Within this framework groups can be conceived as entities individuated through their instantiation of patterns of social behaviour and of particular properties. A reductionist programme would aim to explain facts and states of affairs about and associated with the group by correlating a kind of group, say trade unions or peoples, with a kind of individual. The facts about the group would be cashed out in terms of the individual's dispositions, attitudes, actions and relations with others.

This strategy to establish the ontological and explanatory priority of the individual will face problems if we are unable to establish the right kind of connections between the group or social types and the individual types. In the next section I shall explain that reduction in the social sciences is a flawed approach because the same kind of group can be realised through multiply various forms of interrelations, which are not amenable to abstraction to a single ideal kind or family of relations.¹⁴

Problems for Reduction

If reductionism is to proceed by systematically linking kinds of group with kinds of individuals or kinds of relations, which when individuals stand in those relations constitute such a group, the kinds of the higher level must be co-extensive with those of the lower level. In attacking the global reductionist programme Fodor defines the natural kind predicates of a science as those whose terms are the bound variables in its proper laws, and notes that if (global) reductionism is true, 'then *every* natural kind is, or is co-extensive with, a physical natural kind'.¹⁵ The simple idea is that a natural kind represents a real division or cleavage in the world to which our schemes of categorisation must conform if they are to accurately report the ordering of things. A natural kind records a real distinction in natural or social worlds around which theories are constructed. Using an example of Fodor's, we might remark on the implausibility of reducing Gresham's Law to physics.

Gresham's Law makes a generalisation about monetary exchanges in certain conditions – bad money drives out good money. Those exchanges can take an indefinitely large number of distinct forms - the exchange of beads, pieces of paper designated as dollar bills, pieces of paper issued as cheques and so on. It looks unlikely that a disjunction of physical predicates covering all such events expresses a physical natural kind with which monetary exchange could be identified. The reasons Fodor suggests for thinking it 'intolerable' that every natural kind term of a special science must correspond to a physical natural kind term apply directly to the case for rejecting the identification of social or group terms with individualistic ones. Adjusting Fodor's original for the 'local' social scientific case we could say that the reasons it is unlikely that every social or group kind corresponds to an individual kind or kind of interrelations between individuals are that:

- (a) interesting generalisations (e.g. counterfactual supporting ones¹⁶) can often be made about groups, their properties, relations and associated events whose individualistic descriptions have nothing in common;
- (b) it is often the case that whether the individual events, properties or relations subsumed by such generalisations have anything in common is irrelevant to the truth of the generalisations, their interest or significance from the point of view of the science or perspective in question;

The social sciences attempt to establish (to some degree of approximation to practical and predictive usefulness) counterfactual supporting generalisations about groups such as the ruling class, the poor, tribes, families, gangs, work units, cultures and religious communities. Understanding a group may involve an analysis of the individual beliefs and values. However, generalisations about a (kind of) group can not always be reduced to generalisations about individuals, their relations, beliefs and practices. Consider religious groups or communities. The methodological individualist is committed to the view that religious groups can be reductively analysed in terms of the kind of individual or set of relations between individuals.

There should then be a correspondence between group type and types of interrelations individuals when we consider the diversity of religious groups and institutions. However, we may doubt that a social kind 'religious group' can be identified with any kind or ideal type of individual or pattern of relations. This is because the beliefs, interrelations and dispositions of the individuals who together constitute a religious group could vary considerably. For example, the kind of individual ideal type constituting a single kind of group could vary considerably. One set of individuals may be characterised by monotheistic beliefs, focusing on a principle of resurrection and by a disposition to defer to the authority of those individuals playing certain roles within the doctrine of the religion. This would contrast with individuals committed to polytheism, blood sacrifice and disposed to follow the dictates of the priest of their favourite deity. Of course they share the property of being members of a religious group, and as such their behaviour under certain conditions may be predictable. For example, members of religious groups may tend to respond to external threats in a way that gives the fullest expression to the central tenets of the religious doctrine.

This kind of response can vary in form and, moreover, it seems to be an explanation couched in terms presupposing the explanatory salience or autonomy of the group.

Individualism faces a difficulty in establishing the priority of individual dispositions and beliefs so that the explanatory currency of the social sciences is coined in individuals alone. Moreover, if reductionism were committed to an identity of kinds it must regard a potentially indefinite disjunction of kinds of individual beliefs, practices and dispositions as fitting the right hand side of statements such as:

x is a religious group if and only if I_1 or I_2 or... or I_n

where each of I_1 etc. represent a kind of combination of individual dispositions, practices, beliefs and relations that constitute religious groups.

We can formulate generalisations such as ‘the increasing formality of religious groups correlates with an increased bureaucratic sophistication of secular governance’. For example, the conversion of pagan kingdoms to Christianity in Saxon England may have been directly linked to the rapid growth of kingly power, centralisation and the revival (in part) of a sophisticated Romano-British taxation system.¹⁷ The association of the secular authority with spiritual authority and the organisational infrastructure of the church enhanced the capacity of the secular ruling groups, because the nature of those groups underwent certain important changes through the conversion. On the basis of these kinds of generalisations social science can engage in counterfactual analysis. Historians and sociologists may find, for example, that generally it is true that whenever religious groups are characterised by a formalised set of practices secular government grows in its bureaucratic sophistication. However, short of a complete enumeration of the ideal or constructed kinds that form religious groups we will not analyse the claims reductively, where reduction entails generalising from one disjunction of individual facts type-correlated with group ones to another disjunction of individual facts type-related to another group fact. This model of type reduction in social science would look like this where S1 and S2 are facts about groups, and I1 etc. facts about the beliefs, dispositions and actions of individuals:

$$\begin{array}{ccc} S1 & \Rightarrow & S2 \\ \Downarrow & & \Downarrow \\ (I_1 \text{ or } I_2 \text{ or... } I_n) & \Rightarrow & (I^*_1 \text{ or } I^*_2 \text{ or... } I^*_n) \end{array}$$

The problem here is not with whether there need be a strict nomological (law-like) link between the social and the individual kinds. Rather, and leaving that issue to one side, the criticism is that the reduction of a social or group level generalisation does not *explain* what is happening at the social level. The reduction just tells us that any one of a whole set of individual facts could give rise to or ‘realise’ the fact about the group via the generalisation between one set of individual kinds and another. To gather such individual facts together as a kind does not furnish any explanatory gain. In particular it does not secure an explanation of why the generalisation is a valid one at the group level. Now, to the extent this casts a shadow over the identification of kinds of groups, or kinds of facts about groups, with kinds of individual dispositions, beliefs and actions and facts about them, it is not yet an argument that can secure holism. Individualism can hold that groups are eliminable from our best explanations just because they do not function in any causally salient fashion, and so there are no generalisations about the social world in which reference to groups is anything other than metaphorical. Or, and perhaps more promisingly, individualism may accept the

failure of type-type identity and embrace what we may call 'non-reductive individualism'.

However, a discussion of how the individualist response goes must await another day. I have attempted to motivate a case against a reductive understanding of social scientific discourse. The importance of this issue goes beyond the philosophy of science, and as is often the case in philosophy we find that a range of concerns connect in perhaps surprising ways. For what we mean when we refer to social groups impacts upon how we should understand not just the sociologist, but what we mean in much of our descriptions, explanations and recommendations of, about and for the sphere of human interaction. In order to have knowledge of, and perhaps even some degree of influence over, our world we had better be clear about what kinds of thing there are in that world.

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¹ c.f. J. Kim in his 'The Myth of Non-reductive Materialism', *Proceedings and Addresses of The American Philosophical Association* 63 (1989) pp. 31-47 and 'Downward Causation and Emergence' in Beckermann, A., Flohr, H., Kim, J., (edd.) *Emergence or Reduction: Essays on the Prospects for Non-reductive Physicalism* (Berlin: de Gruyter & Co., 1992).

² C.f. P. Pettit, *The Common Mind (With Postscript)* (New York: Oxford University Press, 1996) p.145

³ The *locus classicus* of this notion of 'micro' reduction is P. Oppenheim and H. Putnam, 'The Unity of Science As A Working Hypothesis', *Minnesota Studies in The Philosophy of Science* II (1958) edd. H. Feigl et al.

⁴ c.f. J. Kemeny and P. Oppenheim, 'On Reduction', *Philosophical Studies* 7 (1956) pp. 6-19

⁵ C.f. D. Mellor, 'The Reduction of Society', *Philosophy* 57 (1980) pp. 51-75 (esp. pp.51-2).

⁶ For arguments against unity as a working hypothesis see e.g. J. Fodor, 'Special Sciences (Or The Disunity of Science As A Working Hypothesis)', *Synthese* 28 (1974) pp.97-115; J. Dupré *The Disorder of Things* (Cambridge, Mass.: Harvard University Press, 1993).

⁷ By Dupré *op cit* and N. Cartwright (in e.g. 'Fundamentalism vs. The Patchwork of Laws', *Proceedings of The Aristotelian Society* (1994) pp. 279-92) respectively.

⁸ Alexander *Space, Time and Deity*, vol II (London: Macmillan, 1920) quoted in Kim (1992) p.134.

⁹ For generalisation one can read 'ceteris paribus, special science or higher level law'. Unlike the laws of physics those of say biology, engineering and sociology are not exceptionless. Whether the laws of physics should be regarded as exceptionless or truly basic is itself subject to much debate (c.f. Cartwright *op cit*, Dupré *op cit*).

¹⁰ J. Watkins 'Historical Explanation in the Social Sciences', *The British Journal for the Philosophy of Science*, 8 (1957) pp. 104-117. repr. J. O'Neill, *Modes of Individualism and Collectivism* (London: Heineman 1973) p.168. Watkins provides classic statements of the principle of methodological individualism. Also see his 'Ideal Types and Historical Explanation', *The British Journal for the Philosophy of Science*, 3 (1952) pp. 22-43. and 'Methodological Individualism: A Reply', *Philosophy of Science*, Vol 22 (1955) pp. 58-62.

¹¹ For example D. Ruben *The Metaphysics of The Social World*, (London Routledge & Kegan Paul, 1985); A. Carter, 'On Individualism, Collectivism and Interrelationism', *Heythrop Journal* XXXI (1990) pp. 23-38.

¹² Watkins ((1955) repr. O'Neill (1973) p.165)

¹³ Watkins ((1952) repr. O'Neill (1973) p.144)

¹⁴ The reductive approach will also be undermined if it turns out that the best explanation of the nature of the individuals and their relations is cast in terms of the influence on them of the groups to which they belong. For a discussion of the explanatory indispensability of social groups see e.g. P. Sheehy, 'Social Groups, Explanation and Ontological Holism' *Philosophical Papers*, forthcoming July 2003.

¹⁵ Fodor *op cit* p.102.

¹⁶ A counterfactual conditional is one in the form: if it were the case that p, then it would be the case that q. For example: if Oswald had not shot Kennedy, someone else would have. Or, if the German nation had not been ruled by Hitler, it would have been ruled by another anti- Semitic nationalist.

¹⁷ For a discussion of this period see e.g. J. Campbell, *Essays in Anglo- Saxon History* (London: The Hambledon Press 1986).