

# Discussion and Criticism<sup>1</sup>

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## On the Status of Methodological Individualism

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*What we are supplying are really remarks on the  
natural history of human beings.*

LUDWIG WITTGENSTEIN

Duran Bell (CA 36:826–30) argues that human social behaviour and food sharing by hunter-gatherers in particular cannot be explained from the standpoint known as methodological individualism. Quoting Kenneth Arrow, Bell takes this to be the pretheoretical assumption that “behaviour . . . [is] explicable in terms of individuals, not of other social categories” (p. 826). Bell criticises recent hypotheses that hunter-gatherers share meat either in return for future advantages of various kinds (Hawkes 1993, Hill and Kaplan 1993) or because they are unable to prevent others from taking it (Blurton Jones 1987). Instead, he suggests an analysis based on the characteristics of corporate groups rather than on costs and benefits accruing to individuals. My purpose in this commentary is not to discuss Bell’s analysis of this particular issue. Rather, I wish to examine the status of methodological individualism in social theory in general. Bell may be right that corporate groups are an ethnographic reality and must enter into any complete description of social life. However, it is not clear that they have any place in explanations of social behaviour. This is because of the fundamental fact that it is individuals rather than groups who live, die, and reproduce. I draw attention to the grave danger of irrelevance which faces any social theory which rejects methodological individualism as an explanatory paradigm.

As Bell rightly points out, methodological individualism as a paradigm first came to prominence in economics. He suggests that it has come to have currency in anthropology “in part because anthropology is primarily an empirical field that has left these theoretical matters to others” and in part because of the cultural primacy given to individualism and economism within Western capitalism (p. 826). This latter point seems to have its origin in a remark in Marx’s *Introduction to*

*the Critique of Political Economy* (see Tucker 1980:2). It has been made so often since that it has found its way into contemporary satire. Howard Kirk, the sociologist in Malcolm Bradbury’s *The History Man*, begins one of his books as follows (Bradbury 1975:91):

The attempt to privatize life, to suppose that it is within single, self-achieving individuals that lie the infinite recesses of being and morality that shape and define life, is a phenomenon of narrow historical significance. It belongs to a particular, and brief, phase in the evolution of bourgeois capitalism, and is the derivative of peculiar, and temporary, economic arrangements. All the signs are that this conviction about man will soon have passed away.

The many reports of the passing away of methodological individualism have, however, all been rash; it is probably more firmly established now than ever. I will argue below that there are sound scientific reasons for this.

The main thrust of Bell’s attack on methodological individualism is, however, empirical. He gives interesting examples, not just from hunter-gatherer societies but from the “heartland of methodological individualism,” the United States of America, of how people in fact enjoy a pattern of rights and responsibilities in virtue of their membership of a social group. A person feels obliged, and obliges others, to help or protect a stranger because “as a socialized member of some form of corporate group, he recognises a social responsibility to support the rights of the other” (p. 827). Methodological individualism thus fails because “it cannot reckon with the ethnographic and widespread historical incidence of resource possession and management by corporate groups” (p. 826).

Bell sees evolutionary ecologists such as Hawkes (1993) as imprisoned in an individualist paradigm for cultural-ideological reasons, unable to see the corporatist reality of human social behaviour, whilst he, unfettered, can deal with it on its own terms. It seems to me that Bell is entirely correct that humans are fundamentally social beings who solve the material problems of existence by forming corporate groups which act in a concerted way and hold resources collectively. Any true description of social life must refer to this characteristic of people. However, this is no reason to argue that methodological individualism fails. This is because Bell has not distinguished description from explanation. A description of social life must refer to corporate groups. An explanation of why those corporate groups form cannot refer to the corporate groups, for that would be a vicious circle. Nor can it just assume them, for then it

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would be no kind of explanation at all. It would seem, then, that explanatory theory must start from the level of the individual.

The holist might simply respond to this argument by maintaining that the individualist has no more right to assume the individual as a point of departure than the holist has to assume the group. However, this argument is incorrect. There are in fact compelling scientific reasons for building explanatory social theories around the individual, and these come not from ideology or the primacy of economics but from the findings of a more fundamental discipline, evolutionary biology.

It might reasonably be said that the objective of anthropology is to explain human social behaviour and the human social system. A major philosophical difficulty with such a project is finding sound starting principles from which to do this. In fact, there is only one coherent candidate for a background theory on which anthropology can be founded, and that is Darwin's theory of evolution.

With the modern theory of evolution, we have for the first time ever a genuinely explanatory, general theory of why people (and other animals) behave in the way that they do (Dennett 1995). It is genuinely explanatory because it specifies a mechanism for the production of behaviour (natural selection) which is powerful, can be shown mathematically to work, and refers only to objects whose existence we can verify directly. Furthermore, it can be used to make mathematically precise, testable predictions about behaviour, and these predictions are extremely successful over a wide range of phenomena. In fact, evolution, in its modern interpretation, has made such phenomenal progress over the past 30 years that it is now described as the second-most-successful scientific theory in history, after quantum physics (Dunbar 1995).

Now, the claim that the theory of evolution must underwrite social theory is not a claim that human behaviour is genetically determined. Neither is it a claim that human societies are underlyingly similar to those of other animals; that would be as nonsensical as the idea that viruses and horses must be structurally similar because they are both products of evolution. All the claim amounts to is the following: Human beings live and die in the material world, and some of them live longer and leave more descendants than others. Differential reproductive success has been shown to be a strong influence on populations even within relatively short historical time-frames (Borgerhoff Mulder 1987, Voland 1990). People's propensities to behave are partially heritable. The fact that the mechanisms by which propensities are inherited involve cultural learning more than genetic transmission is not particularly important: replication with variation is all that is required by the theory of evolution. Thus, all the conditions for natural selection to operate are fulfilled in human societies, and so human beings fall within the scope of the theory of evolution.

Though the ultimate actors in evolutionary theory are genes (Dawkins 1989), the replicating vehicles by

which they act are individuals, who maximise their lifetime reproductive success (defined in an appropriately inclusive way). It is individuals who adopt different behavioural strategies, individuals who survive and reproduce or fail to do so. Individuals are thus actors in evolutionary history in a more important and concrete way than groups. This conclusion has not been arrived at because of some cultural prejudice or postulated *a priori*. Alternatives in which groups are the evolving entities just do not work mathematically, except in highly restricted circumstances, because selection on individuals disrupts evolution at the level above (Williams 1966, Levin and Kilmer 1974, Wade 1978). Individuals whose behaviour contributes to the fitness of their group rather than their own when the two are in conflict will be reproduced out of existence.

Dawkins (1995) gives a striking illustration of this fact. All living people have a continuous chain of progenitors stretching back thousands of generations to the origin of humanity. Take the chain of progenitors of a !Kung San hunter-gatherer living today. Of those 30,000 or more individuals, we know that not one died in infancy, though infant mortality has always been extremely high. Not one was too nutritionally stressed to reproduce, though this is common. Not one failed to find a mate. Not one forwent his or her own reproductive opportunity for the sake of the band. Many individuals have no doubt lived whose pro-group behaviour was at considerable cost to their own welfare. However, unless there was some compensatory benefit, this would have reduced their reproductive success and they would have been gradually driven out of populations. They are not, therefore, the people whose kind are around today.

By contrast, consider the fate of corporate groups over those thousands of generations. Many of our hunter-gatherer's progenitors joined groups which later split or dispersed; many progenitors subscribed to cultural norms which led to misery and were abandoned. Countless forms of social and political organisation came and went. Where *individuals* made the right decisions and survived, they have kin in the world today. Whether *corporate groups* failed has negligible influence on subsequent human evolution except insofar as it determined the fate of individuals.<sup>2</sup> Thus the most promising putative explanation for any behaviour which we observe in the world today is that it somehow enhanced the welfare and hence the reproductive success of the individuals who started to do it. This is a deceptively simple statement which nonetheless is more powerful and important than many anthropologists acknowledge.

Bell's comments about anthropology's failure to develop theory of its own seem to advocate that each discipline should pull itself up by its own boot-straps, deriving theories inductively through close attention to

2. Soltis, Boyd, and Richerson (1995) give the most generous treatment possible to cultural group selection as a factor in social evolution and still conclude that its influence is slight at best.

the phenomena it studies. Now, the observation and categorisation of structures and correlations in the world are certainly part of the knowledge-gathering process. However, if we stop at that stage forever we are left with what Gale (1979) calls "cookbook science": a set of empirical generalisations which refer only to constructs within the discourse. Only if we go on to show why those regularities and structures exist, by showing how they arise from something which is both more basic and better understood, can we achieve real "explanatory science." If there is one type of ball which, when released from the leaning tower of Pisa, flies upward rather than dropping, we do not develop a separate discipline, the physics of rising balls, which explains the behaviour of these objects using whatever assumptions are needed. Once we have catalogued rising balls on their own terms, we must go on to seek an explanation in terms of the background theory (gravitation) of why just those objects under just those conditions rise (for example, because they contain helium, whose mass is less than that of the surrounding air). Only then has explanation been achieved. Sadly, the distinction between description and explanation is not properly made in "interpretive" social science traditions; one even finds the strange claim that "to *identify* a piece of behaviour . . . is sometimes to explain it" (Lukes 1968:125) passing without comment.

The social sciences have been dogged by the assumption by various groups of practitioners that their paradigms need only be internally consistent, not answerable to our understanding of life in general. This assumption is convenient for social scientists, as it frees them to a large extent from accountability to the rest of the community, but it is far from justified. A successful theory of the social system of one species must show how that system arose from the general principles which govern the social systems of all species (and organic life more generally). I do not claim that this is easy. Examples of "ultrasociality" such as Bell's are indeed very difficult to explain in terms of concrete benefits accruing to selfish individuals. In fact, the emergence of collectivities has always been a central problem of social theory (see, for example, Hobbes's [1909[1651]] *Leviathan*), and it is only recently, with the intellectual tools made available by neo-Darwinism, that theoreticians have begun to examine possible mechanisms by which this may occur (Boyd and Richerson 1989, 1992; Binmore and Samuelson 1994; Knight, Power, and Watts 1995; Nettle and Dunbar 1997).

In sum, although the cohesion and power of human corporate groups *do seem* to be at odds with the assumption that those groups are made up of atomised individuals seeking selfish gain, we should not simply abandon the overall explanatory program and found our own theory on ad hoc principles. If every subdiscipline did that, the sciences would, to borrow a metaphor from Eric Wolf (1982), be left like the Danae sisters of Greek mythology, each one of whom was consigned forever to pour water into her own separate bottomless container. Anthropological theory should seek to show how and

under what conditions human social behaviour can evolve and be maintained, and when the models do not fit the data they should be iteratively refined until they do. Although I cannot speak for evolutionary ecologists like Hawkes and Hill and Kaplan, it seems to me that that is what they are doing: far from denying the existence of corporate groups, they are trying to explain how they could have emerged in the first place.

Adoption of the individualistic paradigm is not acceptance of a neoliberal prognosis for society, as Bell may fear (Tucker 1980). On the contrary, one of the major findings of behavioural biology has been just how much animals may benefit from cooperating with each other when the right conditions are created, leading to the emergence of coordination amongst atomised individuals. Evolution can thus be a metaphor for socialist thought just as much as for neoliberalism (Kropotkin 1972). The ultimate motive force behind socialist programs has always been the enhanced freedom and self-realisation that they can deliver, through collective action, *to the individual*. This is clear in Marx's *Theories of Surplus Value*. Like Hobbes before him, Marx (quoted in Bottomore 1991: 256) recognised the class of problems known as the prisoner's dilemma, which is treated as central to social theory by modern evolutionists (Axelrod and Hamilton 1984, Maynard Smith and Szathmari 1995); to be better off in the long run, everyone has to be persuaded to take lower payoffs in the short run: "Although at first the development of the human species takes place at the cost of the majority of human individuals . . . in the end it breaks through this contradiction and coincides with the development of the individual; the higher development of the individual is only achieved through a historical process in which individuals are sacrificed."

A credible body of anthropological theory would be of great value because it might suggest how different modes of social organisation can evolve and be adaptive under certain conditions. However, an anthropological theory which writes its own ground-rules, incommensurate with those of natural history, will convince only those who are already initiates, and anthropology will face a slow retreat before the advance of more realistic disciplines such as history, economics, sociobiology, and evolutionary psychology. This would be greatly to the detriment of our understanding of society, as no other discipline brings such a breadth of context and experience to bear on the subject as anthropology.

Methodological individualism stemmed from economics. Perhaps we can also borrow some lessons about what to do with it. The critiques of economics by the so-called behavioural economists are very much like that which Bell employs in anthropology: they point out numerous instances in which actual human behaviour fails to correspond to the model of the rational, utility-maximising individual provided by the theory. However, rejecting the theoretical framework outright in favour of a loose systemisation of empirical knowledge just leads to a fruitless "balkanization" of the discipline (Schlicht 1990, Hermann-Pillath 1994), whilst

failing to offer any new core ideas. Theorists and fieldworkers should instead cooperate in seeking higher-level theories or expansions of theory which can account for the data. I thus return Bell's metaphor to him (p. 830): he and Hawkes are "separated by a plate of glass much like the separation between visitors and prisoners at the county jail." Rather than seeing Hawkes as the prisoner—of her ideologically imposed individualist paradigm—I see Bell as the prisoner, of a kind of disciplinary parochialism. If we want to explain the rich data which anthropologists collect and see anthropology develop as an enriching part of the intellectual mainstream rather than a marginal and eccentric activity, we should think carefully about abandoning methodological individualism.

## References Cited

- AXELROD, R., AND W. HAMILTON. 1984. *The evolution of cooperation*. New York: Basic Books.
- BELL, D. 1995. On the nature of sharing: Beyond the range of methodological individualism. *CURRENT ANTHROPOLOGY* 36: 826–30.
- BINMORE, K., AND L. SAMUELSON. 1994. An economist's perspective on the evolution of norms. *Journal of Institutional and Theoretical Economics* 150:112–13.
- BLURTON JONES, N. 1987. Tolerated theft: Suggestions about the ecology and evolution of sharing, hoarding, and scrounging. *Social Science Information* 26:31–54.
- BORGERHOFF MULDER, M. 1987. On cultural and reproductive success: Kipsigis evidence. *American Anthropologist* 89: 617–34.
- BOTTOMORE, T. 1991. 2d edition. *A dictionary of Marxist thought*. Oxford: Basil Blackwell.
- BOYD, R., AND P. J. RICHERSON. 1989. The evolution of indirect reciprocity. *Social Networks* 11:213–36.
- . 1992. Punishment allows the evolution of cooperation (or anything else) in sizeable groups. *Ethology and Sociobiology* 13:171–95.
- BRADBURY, M. 1975. *The history man*. London: Secker and Warburg.
- DAWKINS, R. 1989. 2d edition. *The selfish gene*. Oxford: Oxford University Press.
- . 1995. *River out of Eden*. London: Weidenfeld and Nicholson.
- DENNETT, D. 1995. *Darwin's dangerous idea*. Harmondsworth: Penguin.
- DUNBAR, R. I. M. 1995. *The trouble with science*. London: Faber and Faber.
- GALE, G. 1979. *Theory of science*. Toronto: McGraw-Hill.
- HAWKES, K. 1993. Why hunter-gatherers work: An ancient version of the problem of public goods. *CURRENT ANTHROPOLOGY* 34:341–51.
- HERMANN-PILLATH, C. 1994. Evolutionary rationality, "Homo Economicus," and the foundations of the social order. *Journal of Social and Evolutionary Systems* 17:41–69.
- HILL, K., AND H. KAPLAN. 1993. On why male foragers hunt and share food. *CURRENT ANTHROPOLOGY* 34:701–6.
- HOBBS, T. 1909 [1651]. *Leviathan*. Oxford: Oxford University Press.
- KNIGHT, C., C. POWER, AND I. WATTS. 1995. The human symbolic revolution: A Darwinian account. *Cambridge Archaeological Journal* 5:75–114.
- KROPOTKIN, P. 1972. *Mutual aid: A factor of evolution*. London: Penguin.
- LEVIN, B. R., AND W. L. KILMER. 1974. Interdemic selection and the evolution of altruism: A computer simulation study. *Evolution* 28:527–45.
- LUKES, S. 1968. Methodological individualism reconsidered. *British Journal of Sociology* 19:119–29.
- MAYNARD SMITH, J., AND E. SZATHMARY. 1995. *The major transitions in evolution*. Oxford: W. H. Freeman.
- NETTLE, D., AND R. I. M. DUNBAR. 1997. Social markers and the evolution of reciprocal exchange. *CURRENT ANTHROPOLOGY* 38:93–99.
- SCHLICHT, E. 1990. Rationality, bounded or not, and institutional analysis. *Journal of Institutional and Theoretical Economics* 146:703–19.
- SOLTIS, J., R. BOYD, AND P. J. RICHERSON. 1995. Can group-functional behaviours evolve by cultural group selection? An empirical test. *CURRENT ANTHROPOLOGY* 36:473–94.
- TUCKER, D. F. B. 1980. *Marxism and individualism*. Oxford: Basil Blackwell.
- VOLAND, E. 1990. Differential reproductive success within the Krummhörn population (Germany, 18th and 19th centuries). *Behavioural Ecology and Sociobiology* 26:65–72.
- WADE, M. J. 1978. A critical review of group-selection models. *Quarterly Review of Biology* 53:101–14.
- WILLIAMS, G. C. 1966. *Adaptation and natural selection: A critique of some current evolutionary thought*. Princeton: Princeton University Press.
- WITTGENSTEIN, L. 1953. *Philosophical investigations*. Oxford: Basil Blackwell.
- WOLF, E. 1982. *Europe and the people without history*. Berkeley: University of California Press.

## On Anthropology and the Internet

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The Internet as a topic has taken over our professional lives as much as the Internet as a reality. Its application to anthropology deserves a timely and thorough exploration. The article on it by Brian Schwimmer (CA 37: 561–68) is dated December 1995, and in the absence of information on how recently the research was conducted it is difficult to determine the accuracy and completeness of the information that is presented. It is unclear, furthermore, whether Schwimmer worked from printed resources (which are not cited) or searched the Internet directly. If the latter, it would be helpful to know whether he used a web-search engine or examined Internet sites that select and point to other sites. He criticizes the American Anthropological Association and the Human Relations Area Files for not taking advantage of the Internet, but he does not say whether he surveyed organizations or institutions as to their intentions to do so. From personal communication with a staff member at the HRAF I have learned that this organization was never consulted about its plans.

Schwimmer provides no Internet addresses or relevant citations and often does not give the full names of the resources he lists. Though they are subject to change, addresses are essential for accessing resources accurately and easily. The references cited are very few and do not include published (print) articles on anthro-