



Evolutionary v. Evolved Ethics

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Philosophy, Vol. 58, No. 225. (Jul., 1983), pp. 289-302.

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Evolutionary v. Evolved Ethics

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1. Introduction

Kant writes:

If . . . the only aim of Nature regarding some creature possessed of reason and a will were its preservation, its well-being, in a word its happiness, then she would have come to a very bad arrangement in choosing its reason as executor of that aim. For all actions that it had to execute in this her intention, and the whole regulation of its behaviour would have been able to be prescribed to it much more precisely by instinct, and that aim thereby much more certainly maintained, than ever could happen through reason . . .¹

Reason could exercise only a 'weak and deceptive control' over the appetitive constitution. Nature would have

prevented reason from creeping into practical employment, and from having the temerity to design on its own, with its weak insights, the model of happiness and of the means to achieve it; Nature would herself have taken over not only the choice of goals but also that of the means, and would with wise foresight have entrusted both solely to instinct.

One of Kant's successors in the chair at Königsberg, Konrad Lorenz, would disagree. He prefers to account in Darwinian fashion for the gradual evolution of reason and consciousness from pre-existing instinctual components and learning pathways.² There is no great divide between instinct and reason; nor any battle between them for control. Both can contribute to well-being and happiness, to the choice of proper ends and means. Evolution builds a meticulous mosaic of sentient, behavioural and cognitive faculties from which, by 'fulguration', new patterns leap to the eye. Reason is recruited immediately to the service of self-interest, as are, obviously, sensations of pain and satiation. The biologically realistic picture of sentience, appetite and reason is one of interpenetrating overlays. It is a theme taken up by Mary Midgley.³ In her book, however, she con-

¹ *Groundwork of the Metaphysic of Morals*, author's translation from Akademie-Ausgabe Bd IV (1911), 397.

² *Behind the Mirror* (London: Methuen, 1977).

³ *Beast and Man* (Ithaca: Cornell University Press, 1978).

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cerns herself mainly with the impact of ethology on our philosophical view of man. In a more recent paper she has harshly criticized Dawkins' understanding of gene-selectionism and of its implications for the discussion of egoism and altruism.⁴ But in attacking his misleading metaphors and personification of 'little bits of goo', she obscures the proper focus of debate over the question whether moral philosophy has anything to gain from contemporary biology. I do not wish to suggest that we should feast too hastily on the rich fruits of sociobiology; at least one philosopher seems to have come down with indigestion. But I do think that the problem of altruism should be re-located, and that a great deal of controversy in theoretical biology is of immediate relevance here. So my project is to provide some conceptual links between moral theory and biology.

2. The Distinction Between Evolutionary Ethics and the Evolution of Ethics

A system of evolutionary ethics is one based on a criterion of value purportedly derived from the evolutionary theory of the origin and proliferation of life on earth. It was in this connection that Social Darwinists became notorious. In putting forward theories of this type they committed the naturalistic fallacy in a form so crude that even modern doubts as to its general fallaciousness would afford no defence. Moreover, they took their fallacious step from very questionable premises, from distorted slogans summarizing infant theory. That life was a competition in which the fittest survived by dint of superior strength, cunning and aggression was somehow to yield a justification for the laws of the socio-economic jungle. But cannot some systems of evolutionary ethics do a little better? Can we not discern in the evolutionary process, knowing what we do about the underlying selective mechanisms, some criterion of value on which an ethical code might be based?

Quinton's measured conclusion is 'No'.⁵ According to him, evolutionary theory affords at most 'technical' values, which can, in certain cases, conflict with one another. They must therefore be subject to some final value. He maintains that in the writings of Huxley, Waddington and similar theorists there is always an implicit appeal in the final analysis to some notion of value of this kind, assumed to exist but transcending all objective biological standards. The inadequate technical values that always need such supplementation all have an implicit appetitive element and are anyway vague and ambiguous. Values such as survival of the species or the pro-

⁴ 'Gene-Juggling', *Philosophy* 54 (1979), 439-458.

⁵ A. Quinton, 'Ethics and the Theory of Evolution', in *Biology and Personality*, I. T. Ramsey (ed.) (Oxford: Oxford University Press, 1965), 197-231.

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gressive complexity of living forms deliver themselves of deductive endorsement of ethical laws only with the greatest difficulty, if at all. More recently, Flew⁶ arrives at similar conclusions.

Quinton, however, is off-beam on two points of biological theory. He fails to draw the distinction between positive eugenics (breeding for a trait) and negative eugenics (breeding out a trait). Many unwanted traits are recessive, so breeding them out would be a practical impossibility. Sterilization of all homozygotes would only halve the frequency of the recessive gene in 500 generations. Secondly, he maintains that

the evolving and naturally selected human characteristics which are principally relevant to ethics and social policy are socially acquired and not genetically inherited.

This statement is obscure and unsupported. It now appears fragile and dated before the wave of recent theorizing in sociobiology.

This brings us to the second half of our distinction. Sociobiology is the evolutionary theory of the origin and stability of social behaviour in all species. When fully developed, it may account for the evolution of ethics, rather than purport to derive an ethical code from the theory of our evolution. In so far as our ethical codes are manifest in our behaviour towards our fellows, the sociobiologist feels himself entitled to call certain dispositions 'moral', and to frame evolutionary explanations of their origin and stability. They thus postulate genetical bases for various kinds of 'altruism' and account for their prevalence and constancy in our species in terms of the selective advantage they confer. The advantage will generally depend on the environment, and the main problem is to identify the 'carriers' to which it accrues. The carriers might be genes, gene complexes, individual organisms, groups of organisms, or whole species. It matters not that so far only very simple 'one-gene' or 'two-gene' bases for these behavioural dispositions have been considered (*pace* Midgley). That there is a genetical basis to the behavioural dispositions concerned is a matter of routine hypothesis in behavioural genetics nowadays. It does not matter how many genes are involved, nor how complicated their interactions might be. If the trait displays heritability and variability in a population of differentially reproducing individuals then it will respond in distribution to selective pressure. *This* is the central unpalatable 'tautology' of neo-Darwinism.

The sociobiologists are definitely not offering any criteria of value or normative laws. Their laws are descriptive—and, in some cases, cynically re-descriptive, especially in the case of altruism. This sort of evolutionary

⁶ A. G. N. Flew, *Evolutionary Ethics* (London: Macmillan, 1967).

theory of ethics has been the focus of a major media controversy in North America; and of recent papers by Mackie and McGinn.⁷ The latter is especially concerned to see this theory against the historical opposition of, roughly, the Humean and Kantian accounts of our moral constitution, and to re-locate the relevance of biology to ethics in so doing.

3. Mackie and McGinn on Group Selection

Both these writers are impressed by Dawkins' recent popularization of the theory of gene selection.⁸ Mackie thinks it 'admirable and fascinating'. McGinn recommends a reading of this 'excellent book' to 'be disabused of the group-selectionist error that encourages [the] view . . . that animals are designed to behave for the "good of the species" '.

Now it is a common misconception on the part of some engaged in the 'selection debate' to regard one and only one of the forces of gene-, individual- or group-selection to be at work in evolutionary processes of all kinds. This is perhaps fostered by paying too much attention to those cases—such as altruistic behaviour—in which it is *prima facie* plausible that individual- and group-selection would be opposed forces. Thus Mackie erroneously claims that

the issue is this: is there natural selection by and for group survival or species survival *as opposed to* selection by and for individual survival (or, as we shall see, gene survival)? Is behaviour that helps the group or the species, *rather than* the individual animal, rewarded by the natural selection which determines the course of evolution? (My italics.)

This is a bogus opposition. Mackie oversimplifies the issue. We can correct matters quite simply by replacing the italicized phrases by 'as well as'. For the forces of gene- and group-selection can work in the same direction.

What is clearly needed is an analysis of what it means to say that a selective force of such-and-such a kind is at work. We must be wary of any uniqueness claim for sway over all species. We must instead investigate in detail the composition of the vector of evolutionary force from the various kinds of selection. Of course, this is only metaphor, and the question of quantification or magnitude can hardly yet arise. But the qualitative problem is clear. Williams's classic study is an admirable example of the

⁷ J. L. Mackie, 'The Law of the Jungle: Moral Alternatives and Principles of Evolution', *Philosophy* 53 (1978); C. McGinn, 'Evolution, Animals and the Basis of Morality', *Inquiry* 22 (1979), 81–99.

⁸ R. Dawkins, *The Selfish Gene* (Oxford University Press, 1976).

way the considerations can be weighed.⁹ (Dawkins' popularization of his views more than a decade later should hardly be the focus for serious philosophical criticism.) Williams argues that in almost all cases the force of gene-selection predominates to such an extent that the others can, to within tolerable margins, be left out of the explanatory picture. He advances a principle of parsimony that this be done wherever possible. But pending a satisfactory analysis of the different kinds of selection we cannot deny the operation of certain kinds merely on the ground that some one favoured kind yields reasonable explanations.

The best conceptual analysis to date of the different kinds of selection is that of Sober.¹⁰ After reviewing three compelling examples where it must be admitted that group-selection is operating in an important way—the case of the myxoma virus in Australian rabbits, Wade's group-selection experiments on the flour beetle *Tribolium*, and a segregator–distorter gene in the house mouse—one can appreciate the finesse of his proposed definition of group-selection:

A set of populations is subject to group-selection if, and only if, there is a force acting on the populations which makes it the case that, for each population, there exists a property of that population which determines one component of the fitness of every organism in the population.

The ramifications of this analysis need not detain us here. The journal literature in theoretical biology is replete with models of group selection.¹¹ We must exercise considerable caution over any dogmatic pronouncements on group-selection based on a reading of Dawkins. Some of these models are serious contenders for widespread application to plants and to social animals with dispersal and mating patterns satisfying certain broad conditions. The interested reader can review this literature himself. He will no doubt form the impression that the idealizing assumptions in pursuit of descriptive fidelity can be complex; the relevant parameters numerous; and the calculations of evolutionary cost and benefit counter-intuitive. In short, no amount of informal explanation at the level of McGinn's 'it is easy to see why a gene for group-directed altruism would not stay around for long' can be a reliable substitute for the combinatorial reasoning and computer simulations.

⁹ G. C. Williams, *Adaptation and Natural Selection* (Princeton University Press, 1966).

¹⁰ E. Sober, 'Significant Units and the Group Selection Controversy', *Proceedings of the Philosophy of Science Association* (forthcoming).

¹¹ See M. Wade, 'A Critical Review of the Models of Group Selection,' *Quarterly Review of Biology* 53 (1978), 101–114, and the references cited therein.

4. The General Form of an Evolutionary Theory of Ethics

Would resolving the selection controversy even in its crude form be at all relevant to our theorizing about human morality? Is not altruism altruism, under any causal account?

First we need a phenomenologically correct account of group life using our everyday vocabulary of 'altruism', 'selfishness', 'spite', etc. Even these first order descriptions of behaviour will be hard to agree upon. There are all the problems of translation in the jungle cases, of self-deception and rationalization and intentionality and so on. In agreeing on a description of a stretch of group behaviour we are distilling important dispositions. Then we must ask whether any causal explanation of these in evolutionary terms has to save appearances. Will mother love be any the less loving for our having a compelling story of its evolution via 'selfish' genes?

This is no more than the well-known problem of theory dependent description. But it is surely not as bad as Midgley would have us believe. She insists that the 'selfish' gene account is powerless to explain the apparently one way, unreciprocated tender loving care that parents heap on their offspring (in many species).¹² She appears to be quite oblivious of the adequate explanations of parental devotion to be had from kin-selection theorists. Moreover, as Trivers has shown, this brand of gene-selectionism can go some way to explaining why the little devils can be such ingrates!¹³ Another problem in this context is that of warning cries among birds. There are as many different theories of its evolution as there are conflicting descriptions of it as 'altruistic', 'selfishly opportunistic', etc.¹⁴

As Ruse has said, sociobiology must sometimes be protected from the sociobiologists.¹⁵ Ghiselin's 'Scratch an altruist, and watch a hypocrite bleed' would strike most as ill-advised re-description in the light of theory, to say the least.¹⁶ On the other hand, one must approach with caution McGinn's own dogmatic assertion of the existence of 'pure, disinterested altruism' in human beings, and his faith in the 'power of genuinely moral ideals in human thought and action'. His insistence, moreover, on the importance of the cognitive aspect of morality follows only upon his peculiar attribution to group-selectionists of the view that group-selection

¹² In 'Gene-Juggling'.

¹³ R. Trivers, 'Parent-Offspring Conflict', *American Zoologist* **14** (1974), 249-264.

¹⁴ See A. Zahavi, 'Reliability in Communication Systems and the Evolution of Altruism', *Evolutionary Ecology*, B. Stonehouse and C. M. Perrins (eds) (London: Macmillan, 1977), 253-259.

¹⁵ M. Ruse, *Sociobiology: Sense or Nonsense?* (Dordrecht: Reidel, 1979).

¹⁶ M. Ghiselin, *The Economy of Nature and the Evolution of Sex* (University of California Press, 1974), 247.

has produced or would produce a morality based on a wholly appetitive foundation.

The issues need some untangling here. The selectionist controversy and its outcome are independent of the cognitivist–emotivist debate. We have to get the behavioural descriptions and philosophical analysis right before bringing biology to bear in any interesting way. All four possibilities appear to be open:

- (i) gene-selection alone might have produced morality with a wholly appetitive basis;
- (ii) group-selection likewise;
- (iii) gene-selection might have produced morality with a wholly cognitive basis (either in its own independent right, or as a by-product of evolutionarily useful intelligence (McGinn)); and
- (iv) group-selection likewise.

A fifth possibility, however, presents itself in all its painfully obvious catholicity. Both gene-selection and group-selection might have been at work, producing a morality based on appetitive and cognitive faculties inextricably spliced after aeons of evolution. (One might also add that modern brain research lends support to this view.¹⁷) Humeans and Kantians cannot bend biology to decide between their analyses of morality. It is difficult, if not impossible, to conceive of a purely cognitive creature possessed of a will for which one could make Kant's distinction between merely '*pflichtmässigen*' actions and actions '*aus Pflicht*'. Even when McGinn describes such a creature in his thought experiment, he feels compelled to endow it at least with the egoistic desires for food and sex. But if all arithmetic gets going with 0 and 1, who can tell what nuances might be wrought by an alchemy of desire working on those two powerful ingredients! Who can rule out the possibility of an Epicurean frame with just the two axes of sex and food, adequate to every desire in the Shakespearean corpus?

The fifth possibility outlined above is by far the most plausible. It does not matter whether morality evolved by one selective force rather than another. Gene-selectionism lends no support to cynicism about altruism; nor group-selectionism to confidence in the same. For the biologist, X-directed altruism on the part of A increases the biological fitness of (members of) X at the expense of A's fitness. Group-directed altruism, produced by group-selection, can take the form of cannibalizing one's young (a form of reproductive restraint in the interest of the group). Some forms of kin-directed altruism resulting from gene-selection can take the form of a 'racism' or 'xenophobia' of Kamikazean intensity. For

¹⁷ See Constance Holden, 'Paul MacLean and the Triune Brain', *Science* 204 (1979), 1066–1068.

the purposes of group-selection, 'breeding group' and not 'species' is the term to feature. The forms of biological altruism at issue in the selectionist debate bear at best a troubled relationship to the altruism of everyday moral parlance—which entails lack of individual self-interest (not necessarily in the sense of biological inclusive fitness) and, surely, the non-violation of the rights of persons.

The interesting question about altruism in the context of biological theory is not what form of selection might or might not have produced it. It is rather the question whether there *is* any such trait as pure disinterested altruism that is genetically based (and environmentally shaped) and occurs in a form prevalent and stable enough to call for evolutionary explanation. Thus Hardin:¹⁸

Pure altruism, by definition, does not benefit the actor; in its extreme form, it may even harm him. Does pure altruism exist? We can grant that any behaviour, no matter how remarkable, must occur now and then. Mere existence is not the important question: what matters is persistence. Can altruistic behaviour persist and increase, perhaps ultimately becoming the norm to which egocentric behaviour is the exception? Such is the dream of compassionate people. Is it a realistic dream?

A hard-headed empirical look could yield some benefits here. E. O. Wilson sees our behavioural repertoire (in connection with the issue of altruism) as not very different from that of any other diploid social species.¹⁹ Man, like lions and chimpanzees, kills and eats conspecifics under certain conditions. For the most part he conducts himself in accordance with a set of implicit values shaped by evolution for his survival. What sets him apart is only his ability to talk about this with his fellows. Can his linguistic reflectiveness now allow him to alter the values inherited through evolution?

Certainly our values can be coaxed into verbal form. They can have great potency in the personal and social consciousness. But, according to Campbell, they attain to this in the course of a process that has a sound evolutionary basis, albeit a cultural one.²⁰ For Campbell, the language of uncompromised absolutes in the moral sphere can be understood as having evolved in order to counter-balance the egoistic tendencies which he thinks biological selection favours. The result of this tension or opposition is that admixture of self-interest and moral concern for others which has given rise to, and now presumably continues to be selected by, our complex

¹⁸ G. Hardin, *The Limits of Altruism: An Ecologist's View of Survival* (University of Indiana Press, 1977), 5.

¹⁹ E. O. Wilson, *Sociobiology: the New Synthesis* (Harvard University Press, 1978).

²⁰ D. T. Campbell, 'On the Conflicts Between Biological and Social Evolution and Between Psychology and Moral Tradition', *Zygon* **11** (1976), 167–208.

social conditions. If Campbell is correct, then the role of language in the evolution of morality is a causal one. But it is collectivist. It has to do with conditioning and indoctrination. It has helped to compromise our biological tendencies. What is not clear, however, is whether it provides a logical grounding of moral categories, or whether the deliverances of reflective reason that it enables could ever allow man—individually or collectively—to ‘transcend’ his biology.

It need not be, as according to McGinn out of Kant, that, once equipped with reason and intelligence, we must acknowledge the moral claims of other rational beings. We might simply be genetically rigged and culturally conditioned so to acknowledge. There need be no logically compelling transition, such as is urged by Sprigge, between a proper cognitive grasp of the reality of other persons and having the wish expressed by the imperative to treat other persons as ends.²¹ The gene or genes responsible for the former might be responsible for the latter, in which case the grasp and the wish would have no internal logical relation to one another. And as one might expect from man’s symbiotic evolution with domestic animals, there could be polygenes resulting in a small fringe calling themselves animal liberationists.

The synthetic *a priori* in the moral domain has possibly been as crucial to our survival, especially in an increasingly complex social order, as have those to do with the perception of objects in space and time. If genetically based, it matters not what kind of selection produced it. As Quinton has observed, ‘evolutionary considerations do not rule out a moral sense theory which conceives the moral sense in rather close analogy to the physical senses’.²² But in so far as established traits in a population are concerned, no one has yet provided a convincing argument that the types of altruism that could evolve through gene-selection (namely kin-directed and reciprocal altruism) do not exhaust those to be found in our species. The ‘added extra’ of pure disinterested altruism remains existential dogma.

For the purpose of an empirical study of morals we must attend not only to the first order transactions eligible for ethical labels, but also to the higher order ones. These range from the very simplest statements we make about moral matters to children, through articulations of codes, to conceptual analysis and the search for fundamental categories and axioms in moral theory. These higher order phenomena are unique to man by virtue of his having language. Evolutionary biology, however, will make us reluctant to accept exaggerated claims for man’s moral values in so far as these are to be submitted to science for explanation and authentication. Our ethical systems may be no more than cultural embellishments of a geneti-

²¹ T. L. S. Sprigge, ‘Metaphysics, Physicalism and Animal Rights’, *Inquiry* 22 (1979), 101–143.

²² Loc. cit.

cally programmed set of '*Sollwerte*' which, in all their flat neutrality, may be wired into any decision-making system like the human brain. (Such is the view adopted by Pugh.²³) Thinking of our values as anything grander than this may of course have survival value, giving us talkative animals the selective edge. But moral self-congratulation will never flatten the Gaussian hump of normal behaviour. Our moral values, in so far as they govern statistically significant behaviour calling for evolutionary explanation, are no more elevated than, and are of a genetic piece with, the behavioural programmes of other social species. The pure disinterested altruists among us—should any exist—form too insignificant a minority, despite the historical potency of their accumulated actions, to call for special confirmation in the evolutionary order. Like the colour blind, the cannibals and gifted idiots in our midst they form a deviant residue. Their dispositions to such extreme altruistic behaviour will be genetically based. But this genetic basis will consist in rare combinations of certain genes. Only the statistically frequent ones, however, have evolutionary significance.

5. A Modern Humean Programme

It is the whole spectrum of our social behaviour from which we are to extract that system or systems of '*Sollwerte*' constitutive of our humanity biologically understood. We must not confine our attention only to that part of linguistic behaviour to do with the formulation of codes of whatever degree of other-worldliness. There is an obvious plurality of observable *patterns* and of normative conceptions, or *codes*, of behaviour. Whether at root there is a common core or master plan to be discovered at some level of analysis, might be decided either way. Here there is an analogy with the question of a universal grammar in linguistics. Perhaps in traversing this analogy back to morals we can see in the frequent mismatch between pattern and code a performance-competence distinction. What people actually utter, with ums and ahs and other felicities, does not detract from their guiding conception of a grammatically correct sentence, even though this be a controversial notion. Similarly, how people deal with one another daily contrasts with their guiding conception—no doubt strongly determined by culture—of what constitutes virtuous behaviour.

By way of concession to the relativist we can expect the biological study of human social behaviour to issue in a classification of patterns and codes that are genuinely distinct, even though, as the ethologists have made us aware, there are common denominators of gesture and so on that one can trace back to the apes. The relativist position is even more plausible if we

²³ G. E. Pugh, *The Biological Origin of Human Values* (New York: Basic Books, 1977); G. E. Pugh, 'Values and the Theory of Motivation', *Zygon* 14 (1979), 64 and 11.

are prepared to see behavioural consequences in the likely genetic diversity between the human populations of different cultures. Here it is worth mentioning a common fallacy that should be avoided. The non-existence of moral universals across cultures does *not* show morality to be biologically undetermined. For genetic variation between the populations concerned could well underlie the variation in morality. Thus Baker:

One wants to know whether it is conceivable that members of two taxa may differ in large numbers of groups of genes affecting many parts of the body, but not at all in those that affect the nervous and sensory systems and therefore play a part in determining mental qualities.²⁴

There must be a physiological basis for our dispositions to social behaviour. One is therefore justified in asking Baker's question with respect to cross-cultural variations in morality.

Another fallacy to which some thinkers are prone when considering the links between biology and ethics is what might be called the anti-naturalistic fallacy. Quinton provides a good example:

... by treating morality and moral agency as natural phenomena, by considering morality as a functioning social institution, *and so firmly connecting it to our desires and satisfactions* [this approach] repudiates the essentially other-wordly conception of morality which is characteristic of intuitionism²⁵ (my italics).

There is no reason at all for thus downgrading, from the evolutionary standpoint, the importance of the cognitive element.

Does nature . . . create a rational creature without entrusting anything to the operation of his reason?²⁶

The question has more point in the present context if we replace 'anything' with 'any part of his morality'. Hume's own advocacy of the sort of empirical programme sketched above, despite his emphasis on the appetitive and his faith in the existence of a set of universal principles, is ripe for contemporary vindication. In the literature of anthropology, psychology and sociology there must be a battery of behavioural grammars calling for comparison and classification. This is the challenging research project urged by Campbell in his Presidential Address cited above. Even if it fails to provide a set of universal principles, it would nevertheless be fair to find in Hume that cast of mind that can produce the natural explanation. For these behavioural grammars represent a group's adaptive solution to

²⁴ J. R. Baker, *Race* (Oxford University Press, 1974), 426.

²⁵ Loc cit. 128.

²⁶ D. Hume, *An Enquiry Concerning the Principles of Morals*, ed. L. A. Selby-Bigge (Oxford University Press, 1902) 2nd edn, 202.

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the challenges that have shaped its social life. And Hume himself was crucially aware of the context-dependence of these grammars:

Thus, the rules of equity or justice depend entirely on the particular state and condition in which men are placed, and owe their origin and existence to that utility, which results to the public from their strict and regular observance. Reverse, in any considerable circumstance, the condition of men: produce extreme abundance or extreme necessity: implant in the human breast perfect moderation and humanity, or perfect rapaciousness and malice: by rendering justice totally *useless*, you thereby totally destroy its essence, and suspend its obligation upon mankind.²⁷

Is this the sad story of the Ik of Uganda?²⁸ One cannot be sure of their social history in earlier, perhaps more hospitable environments. But if, as Alexander conjectures,²⁹ social structure is primarily the evolutionary response to predation and only secondarily to the exigencies of resource distribution, one might on theoretical grounds regard the dissolution of morals among the Ik (if they ever had any) as quite unsurprising. 'Under severe survival conditions, morality disappears.'³⁰

The present research by evolutionary geneticists into so-called evolutionarily stable strategies will probably lend further support to Hume's claim that 'The common situation of society is a medium among all these extremes'. That the Humean approach may thus find its full development in a theory of the evolution of ethics is very briefly suggested by Flew in the monograph cited. But recent debate over sociobiological theory shows just how wrong he was in his prediction that the notions developed in this connection would be 'relatively mild and vegetarian'.

6. A Modern Version of Kant's System

The burden of discussion has thus far been on the second side of our basic distinction. Let us return now to the question of evolutionary ethics—that is, ethics based on criteria of value purportedly revealed by evolutionary theory. In this connection it will be Kant rather than Hume who provides a classical focus. I believe also that the difference between Kant and Hume

²⁷ Op. cit. 188.

²⁸ See C. Turnbull, *The Mountain People* (London: Picador, Pan Books, 1974); and also C. Battersby, 'Morality and the Ik', *Philosophy* 53 (1978), 201–214.

²⁹ R. D. Alexander, 'The Evolution of Social Behaviour', *Annual Review of Ecology and Systematics* 5 (1974), 332–333.

³⁰ Hardin, op. cit. 79.

(at least, the Hume of the Second Enquiry) is perhaps better underlined by the distinction I have drawn than by the cognitivist–emotivist distinction. This latter one is drawn between responses to the question cluster ‘What is the source of our values? What is the basis of our moral behaviour? Whence do we derive our ethical rules?’ The broad Humean answer is ‘the emotions’, the Kantian one ‘reason’. Evolutionary theorizing, however, straddles this controversy with the answer ‘genetically based dispositions to behaviour in which both reason and the emotions play an important role’.

The more interesting distinction, in my view, that biological theory helps to draw between Hume and Kant is that the former, as shown above, lends himself to modernization in the form of evolutionary theorizing about ethics; while Kant’s system based on the categorical imperative provides a distinct possibility of resuscitating a form of evolutionary ethics.

Kant proposed his categorical imperative as the means of establishing the moral worth of the maxims by which we conduct ourselves. But in certain applications it stands in need of supplementation. As Körner has observed, we should ask not ‘whether the universalized maxim by itself is contradictory, but whether it *in conjunction with other true statements about the world* is logically impossible’.³¹ He goes on immediately to remark ‘The difficulty of this interpretation lies in the question which statements about the world are to be considered in order to judge of the morality of an action’.

Now I would suggest that an obvious candidate is the body of biological knowledge about man not just as a physical organism but also as a social animal. Population genetics is more relevant to the incest taboo than any knowledge in Kant’s day. Our modern knowledge about lethal recessives and the consequences of close inbreeding provides an immediate evolutionary explanation of the origin of the incest taboo. We need only have some criterion of value that allows that the world is a better place without unviable and unhappy mutants in order to convert the explanation into a justification.

Pugh sees the non-linearity of biological utility functions as an underlying cause of the social ideal of distributive justice. This seems in order for surplus societies. But total egalitarianism does not follow, given some ecological considerations. For Hardin argues forcefully that in ‘desperate’ communities, to avoid a population crash the guardians of resources must be better fed, etc., in order to act ‘in the interests of posterity’.³² ‘If we wish to protect posterity’s interest in poor countries we must understand that distributional justice is a luxury that cannot be afforded by a country in which population overwhelms the resource base.’

A proper assessment of the relative contributions of nature and nurture to all socially important traits is a precondition for successful policy-

³¹ S. Körner, *Kant* (Harmondsworth: Pelican, 1955), 148.

³² *Op. cit.* 79–80.

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making. On present evidence the spectrum of informed opinion appears to be as wide as ever. On the one hand Skinner advocates environmental engineering as the way to create happiness in infinitely plastic natures.³³ On the other Darlington vituperates against comprehensivists in schooling for their inability to take note of the genetic variation in educability of our children—among them, apparently, some very busy arsonists somehow dimly apprised of the same facts.³⁴ As someone has said, however, the only answer to dangerous knowledge is more knowledge. Even if our theories today indicate no definite policy directions, at least we should be beginning to appreciate the importance of a particular kind of consideration. That is that our basic behavioural biology now finds itself in newly created niches in which it is ill adapted. The hope remains that we shall be able to chart the pitfalls and avalanches on our epigenetic landscape that threaten those acting in accordance with the wrong universalized maxims. This, indeed, is what determines those maxims as wrong. In this way evolutionary theory can perhaps serve as a source of grounded wisdom about our own nature. We would thus achieve technical evaluations of our maxims in the light of biological theory. In so doing we would take just as much account of the cognitive as of the emotive. Moreover we would be deploying our reason in an evolutionarily unique role: predicting what would befall our species if, as it were, various mutant maxims were to spread in the population. Whether we would still need criteria of ultimate value in assessing the various outcomes is a question I cannot tackle. My hunch is that these criteria would be Humean, as we considered the range of hominid destinies furnished by reason. For our genes not only determine, but also determine our emotional responses to, what is alien to our nature.³⁵

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³³ B. F. Skinner, *Beyond Freedom and Dignity* (New York: Knopf, 1971).

³⁴ C. D. Darlington, *The Little Universe of Man* (Oxford University Press, 1979).

³⁵ The research for this paper was supported by a British Academy Fellowship and an Alexander von Humboldt Foundation Fellowship. I wish to thank both organizations for their help. I owe a particular intellectual debt to Dr Florian von Schilcher, of the Institut für Zoologie in Munich, for many hours of discussion on the topics of this paper. I have also benefited from comments by Vinit Haksar, Peter Jones, Mary Midgley and members of the philosophy societies at the University of Edinburgh and University College, London.

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⁴ **Gene-Juggling**

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⁷ **The Law of the Jungle: Moral Alternatives and Principles of Evolution**

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¹¹ **A Critical Review of the Models of Group Selection**

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¹⁷ **Paul MacLean and the Triune Brain**

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²⁸ **Morality and the Ik**

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<http://links.jstor.org/sici?sici=0031-8191%28197804%2953%3A204%3C201%3AMATI%3E2.0.CO%3B2-X>

²⁹ **The Evolution of Social Behavior**

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Annual Review of Ecology and Systematics, Vol. 5. (1974), pp. 325-383.

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