On the prospects of using sociobiology in shaping the law:  
A cautionary note

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Caution must be exercised in promoting the use of biological knowledge for guidance in legal policy decisions. Scientific information is frequently needed to heighten rationality, but judges often limit the place of such information; in so doing, they are not necessarily being parochial. A crucial problem for legal use of scientific knowledge concerns the boundary between scientific and normative judgment. In the *Durham v. US* (1954) decision, Judge Bazelon opened federal courts in the District of Columbia to fuller participation by psychiatrists in determining insanity than had been provided by the *M'Naghten* (1843) rule. Two decades later, the same court rejected the *Durham* rule because it led juries to abdicate judgment concerning defendants' moral responsibility.

The tendency for law to seek significant guidance on normative questions from the population, rather than from technical experts, is well grounded in our legal tradition. Even where normative agreement exists, science does not necessarily contribute to the resolution of normative questions. In a heterogeneous society, biological knowledge can be of greater use in analyzing the processes by which normative consensus can be generated through social interaction. Legal thinking has already begun to examine the ways in which law can affect the norm-generating process, but much remains to be learned concerning the capacity of human beings to control conflict, optimize satisfactions, develop standards and satisfy the sense of justice.
The task of law in reinforcing and helping to create normative order, cannot be successfully delegated to science. If scientific knowledge is to assume a place in affecting specific legal decisions and forming specific laws, it must pass close scrutiny and compete successfully with traditional sources of law. It is more likely to contribute, I suspect, at the level of general legal principles and processes than in the direct shaping of specific laws.

Guessing about future interdisciplinary contributions is necessarily a speculative activity. Whether probable utility can be determined in advance or must await evolutionary selection varies with the field in question. It is not clear whether we know enough at this stage about what biology can offer law to guide future efforts. The problem might better be approached by asking first about the absorptive capacities of law. What does law take from other fields and what does it reject? What internal processes in the development of law bear on the relevance of biological science to law?

Some light may be cast on these questions by looking at the sources of law in societies such as ours. To do so, I shall draw unsystematically on some judicial decisions and jurisprudential ideas. These are intended to illustrate (certainly not to prove) some selective propensities of our legal system.

(1) Law limits the scope it accords to other disciplines in matters of normative judgment.
(2) Law seeks instead to rely on moral judgments of the population, where these are available, to shape legal standards.
(3) Science does not necessarily provide persuasive guidance for or against a law which accords with the mores.

After illustrating these propositions, I shall suggest that biological contributions to law might usefully focus on the processes of interaction which generate normative consensus. Developments in several disciplines indicate that concepts of justice, possibly inherent in the species, contribute to the formation of norms. In open societies, which tend toward anomie and normative conflict, there is a particular need for arrangements which facilitate normative consensus. In the effort to construct such opportunities, law can greatly benefit from the advice of all of the human sciences, including sociobiology.
The capacity of sociobiology to make contributions to specific laws depends not only on what it has to offer but also on who is listening. There are a number of discreditable reasons for legal resistance to scientific knowledge, such as ignorance and professional rigidity. These are often difficult to distinguish from certain more justifiable bases for legal caution in modifying law to accommodate current scientific thinking.

I have in mind especially the ambiguity of the borderline between is and ought and the related question of who should participate in deciding the ought. The record of inter-disciplinary contributions to legal policy indicates that is-ought problems frequently arise after initial enthusiasm over the prospective assistance which science can offer. A familiar pattern has been repeated in several instances. The sequence begins with a recognition that some knowledge from another field can be of great value in resolving legal questions. On this premise, basic legal decisions are made which rest on the findings of the other field. In applying these basic decisions, law draws on experts from the other field to provide factual information relevant to specific cases. As this is done, it turns out that the experts disagree on factual matters of specific relevance to the decision at hand. Their differences not only reflect the ambiguity and limitations of scientific knowledge; they also point up the relevance of normative considerations to the resolution of the issue. When scientists are brought into a specific case, neither law nor science can reliably draw the line between fact and value, between is and ought.

A fine example is found in the use of psychiatrists during the past three decades in the Washington, D.C. Circuit Court of Appeals to testify concerning the insanity of criminal defendants. The history of the insanity defense, so well summarized elsewhere (e.g. Goldstein, 1967), need not be described in detail here. Suffice it to say that in the Durham case, Judge Bazelon replaced the traditional M'Naghten rule with the so-called product test in the hope that psychiatric testimony could be introduced more freely and could play a larger part in determining whether insanity would excuse what otherwise would have been a criminal act. M'Naghten had limited the insanity defense originally to the question of whether the defendant knew the nature and quality of his act or, if he did, that it was wrong. Durham broadened this test conceptually to include any instance in which the act in question was the product of a mental disease or defect.
The *Durham* rule appreciably increased the incidence of successful use of the insanity defense. It led to decisions by jurors which were dominated by the testimony of psychiatrists. As a result, verdict inconsistency (always present) could be attributed to the happenstance of forensic testimony and psychiatric attitude. When St. Elizabeth's psychiatric hospital shifted over the weekend to the view that psychopathic persons were mentally ill, Friday's finding to guilt became not guilty on Monday morning (*in re Rosenfield*, 1957). The major problem seemed to be the transfer from jury to expert psychiatric witness of the basic normative judgment. Through a series of successive cases, the Court tried to specify and narrow the rule so that the jury would have more specific judicial guidance. The purpose of these developments, sometimes explicitly stated, was to prevent the determination of blame-worthiness from being dominated by psychiatrists. The psychiatric profession, concerned primarily with therapy, leans toward a guilt-free conception of human affairs. It strives to understand all and to forgive all, in order to cure as many as possible. This conception does not readily fit with the legal approach which, for purposes of standard setting and enforcement, seeks to fix moral responsibility, i.e. culpability. Ultimately, the court moved in *Brawner V. US* (1972) toward a revision of the rule that gave much more explicit criteria to the jury, in the expectation that they would thereby be enabled to decide the normative issue of responsibility themselves. Judge Bazelon, in a partial dissent, joined in reversing *Durham* while expressing the view that the court should be even more explicit in limiting the role of the psychiatrist.

II

More is involved in such examples than a simple competition between the professions. The courts reflect here and in many other areas an inclination to take into consideration the views of the public. In the example of the insanity defense, the courts explicitly express the concern that the jury will be deprived of its normative function. This concern is also manifested by the courts in the traditional deference to the legislature and in the use of changing community standards in judicial review to determine constitutionality.

Some court opinions reveal with particular clarity the importance of community standards. In the first of two major capital punishment cases, Chief Justice Burger gave this account of the Court's accepted way of construing the Eighth Amendment's ban against cruel and unusual punishment.
The Eighth Amendment prohibition cannot fairly be limited to those punishments thought excessively cruel and barbarous at the time of adoption of the Eighth Amendment. A punishment is inordinately cruel, in the sense we must deal with it in these cases, chiefly as perceived by the society so characterizing it. The standard of extreme cruelty is not merely descriptive, but necessarily embodies a moral judgment. The standard itself remains the same, but its applicability must change as the basic mores of society change (Furman v. Georgia, 1972: 382).

Differences of opinion are found among the judges not as to whether the mores are important in interpreting the "cruel and unusual" clause, but as to how public sentiment should be measured. Some would rely on the legislature to reflect public opinion (except in instances where there existed "unambiguous and compelling evidence of legislative default" [Furman v. Georgia, 1972: 384]). Others would supplement legislative action with information derived from referenda (presumably a more direct measure) and public opinion polls. For Justice Marshall, the criterion to be applied was whether public (opinion, if enlightened by the kind of information available to the Court, would have favored abolition. And Justice Brennan urged a shift from the level of specific norm, existing or potential, to a broader principle. Capital punishment, he said, is unconstitutional because it does not accord with "the evolving standards of decency which mark the progress of a maturing society" (Furman v. Georgia, 1972: 384). The standard of decency in this instance involved the concept of human dignity. Capital punishment, said Brennan, was unconstitutional because our moral evolution as a society has brought us to the point of valuing the dignity of each individual human being. In our value system, we are ready to believe that "even the vilest criminal remains a human being possessed of common human dignity" (Furman v. Georgia, 1972: 273). That being the case the discard of any human being by execution is for Brennan unconstitutionally cruel and unusual.

Each of these approaches indicates an effort by the judges to shape law of societal norms. The variations have to do with how the normative position of the society is best registered, whether it is current or potential, whether it is pervasive or limited to a (particularly significant) segment of the population, and whether it is derived from and consistent with a general set of values.

In using capital punishment as an example, I have chosen a line of
decisions in which the courts most explicitly consider public opinion. In other spheres, this tendency is more obscure or absent. We need to know more about its distribution in the universe of court cases. It seems to me, though, that recourse to public opinion (however it may be ascertained) constitutes a systemic tendency which is particularly marked where societal norms are strongest.

The tendency to seek consistency between the mores of society and the law is an important characteristic of our legal system. The theory of representative government, as carefully described by Dahl (1956) and others, rests on the premise that law and government will receive greatest support in our type of society if the interests and standards of the population influence the making of the laws. For this reason, the courts regularly defer in form at least to the legislature by according to its statutory acts the "presumption of constitutionality. When the Courts declare a statute to be unconstitutional (as formulated or implemented) they seek justification under a broader set of values embodied or inherent in the Constitution which are assume to express deeply anchored, general value commitments of the society concerning the rights of individuals, social categories, organizations, or governments.

III

The propensity of law to be guided by public opinion does not mean that the mores do in fact playa large part in shaping the law. While that relationship may be fundamental in primitive societies, as suggested by Bohannan (1965) in his concept of double institutionalization, public opinion offers much less guidance in urban societies because such societies are so normatively heterogeneous. As Dicey (1905) pointed out concerning England in the late nineteenth century, there may not be a public opinion on many issues, and if there is it may not be transmitted, or, if transmitted, not be taken seriously in the shaping of laws. If anything, our situation shows even greater diversity than did nineteenth century England.

Recourse to science as a basis for normative judgment may reflect the need for some sort of consensus which is so lacking in our pluralistic, anomic society. But I am skeptical at the prospect that science can support particular laws or mores in a sustained and effective manner. It seems to me far more likely that it can contribute to belief in some general principles and procedures which may eventually influence mores and laws.
Science seems poorly fitted to shape laws because laws are so heavily normative in content. They are expressions, that is, of what people feel to be proper behavior. The societal sense of what is proper is derived largely from socialization and experience, rather than from scientific observation. If anything, scientific studies of the range of human societies demonstrate the enormous diversity in normative beliefs found in human cultures. “The mores,” Sumner remarked, “can make anything right and prevent the condemnation of anything.” In the face of such diversity, the search for universals succeeds if at all only at a highly abstract level. We may find that all societies have some form of family, for example, but we must also acknowledge that the family can be polygynous, monogamous or polyandrous; that it can be stable over a lifetime or highly unstable; that it can be rigorously exclusive or co-existent with extensive philandering; and so forth.

How then might science help to provide guidance to law, for example in the matter of family structure? It might (1) call for toleration, (2) provide technical (functional) information or (3) aid in the development of societal norms.

(1) The first possible use of biology is to reinforce the norm of toleration. Given the diversity of human societies and of primate behavior, scientists might urge that laws seeking to constrain freedom of behavior should be regularly avoided. Of course such a position must specify limits. Law must presumably constrain freedom where freedom is used to harm other individuals or the society. This classic position, tracing back through J. S. Mill to John Locke, sets terms of inquiry but does not answer the question. What behavior must be constrained to avoid harm to the individual and the society?

Law frequently wrestles with such questions. An interesting example is found in the instance of polygyny. In the early test of this issue, presented by the Mormon religion, the Supreme Court upheld the proposition that freedom of religion did not protect this practice from statutory prohibition even though the practice was deeply imbedded in a system of religious belief. In doing so, the Court drew on the prevailing mores:

Polygamy has always been odious among the northern and western nations of Europe and, until the establishment of the Mormon Church, was almost exclusively a feature of the life of Asiatic and of African people. (Reynolds v. US, 1878: 164).

Later the Court condemned polygyny as a "return to barbarism"
(Church of Jesus Christ of Latter Day Saints v. US, 1890: 49) and a "notorious example of promiscuity" (Cleveland v. US, 1946: 19).

The Court thus expressed the prevailing mores and supported a" legislative policy which enforced those mores. In order to override the First Amendment guarantee of freedom of religion, the Court was bound by its own doctrines to find that the legislation had a "valid "secular purpose." Such a purpose was found in the effort to preserve monogamy. The Court affirmed the legitimacy of that purpose primarily by reasserting the monogamous mores of this society, calling to mind their pervasiveness in the north-west European cultural area, and ethnocentrically condemning the alternative family patterns as barbarian and alien.

Could the case be made scientifically that preserving monogamy is not a valid purpose? All societies have mores of one kind or another The mere fact of intersocial variations in mores, while true, does not seem to obviate the need for a particular set of mores in any given society. Survival as a society may well depend on some degree of normative consensus. Within wide limits, the fact of agreement may be more important than the content or substance of the agreement. Law may be seen as one device (perhaps the major device) by which a complex society can achieve and express necessary normative agreement. Thus, a scientific argument for a norm of toleration would not necessarily carry the day.

(2) If science is to attack laws which express the mores, it might have a better chance if it questioned the instrumental effects achieved by particular laws of this type. The courts are doctrinally prepared for such functional arguments. Secular purposes, justifying limitations of First Amendment freedoms, are linked to effects. An expressive purpose may be enough, but the courts are also concerned with " consequences. If a law produces the opposite of its intended result, it may fail to meet the test of a rational relationship.

In the polygyny cases, the Court used language of both purpose and effect. Writing for the Court in Cleveland v. US (1946: 19), Justice Douglas not only condemned polygyny on moral grounds, but also spoke of "the sharp repercussions that [polygynous practices] have in the community." What repercussions he had in mind, beyond the moral concern, is not clear.

One possibility worth considering concerns the economic significance of differing family structures. It is the essence of anthropological functionalism that the consequences of a particular practice must be understood in terms of the conditions in which the practice
occurs. Polygyny, which is functional in an agricultural economy, (especially with a high female/male ratio), does not retain its economic, social or reproductive functions in industrial societies. This functional difference between types of societies is supported not only by correlational observation but also by studies of economic development. Those societies which undergo rapid modernization tend to move toward monogamy and those which are monogamous move more rapidly toward modernization (Goode, 1963). On that basis, one might propound the argument that polygyny is dysfunctional for a modernizing or modernized society.

Would that kind of analysis lead the scientist inevitably to support laws against polygyny? Even at the technical level, for example, what about post-industrial society?

Another value in the polygyny case is the role of religious belief. A functional analysis produces indeterminate results here as well. Sociobiology may tell us something about the universality of religious belief, manifested in primate "sun-worshiping ceremonies" or in prehistoric hominid burial practices. If every primate society manifests religious belief, what significance does that carry for polygynous religion? Does it mean that (1) every society must have a single, unifying religious belief which should be supported by social and legal controls, or (2) that every member of society should be free to practice non-intrusive religion together with like-minded others? Depending on the choice, the religious factor also could weigh for or against the prohibition of polygyny.

There is a third way in which science might contribute to the resolution of legal policy questions by aiding in the development of social norms. Scientific efforts might be best employed if engaged in trying to understand the ways ill which normative systems develop and work in societies. We know that viable societies always maintain some minimal degree of normative consensus. Failing to do so, a society loses its stability, its capacity to maintain the functions which it must perform to hold together. In such circumstances, societal collapse can lead to immediate misery and uncertain results as the process of reconstruction begins. In general, societies strive in various ways to maintain their equilibrium and avoid collapse, anarchy or revolution.

Scientific knowledge may affect these outcomes by helping us to understand minimal conditions of normative order. Contemporary work in the social sciences, jurisprudence and philosophy has given us
some interesting leads which suggest that a useful empirical inquiry is possible. Sociobiology can, I believe, play a valuable role in such work.

IV

All human societies (and many other species) have standards of behavior which regulate interaction. Social control provides a basis for transmitting and enforcing these behavioral codes. These standards are in addition reinforced by the reciprocal rewards or reciprocities which are associated with the interactions. Controls and reciprocities constitute the mutually reinforcing mechanisms which maintain these conditions of normative order.

In every human society, these codes are verbally formulated as norms (though not necessarily as laws) used to guide and evaluate individual behavior. As noted, they vary widely in content from one, society to another. Yet they seem to have in common the following characteristics:

1. They are generated by and manifested in social interaction;
2. They are enforced against those who violate them;
3. They lead to reward for those who comply with them;
4. They are supported by a substantial segment of the society, directly or vicariously;
5. Support for them is enhanced by the belief that they are fair or just.

Even a casual sampling of anthropological literature illustrates each of these. Their universality can for the present be assumed.

My hunch is that these standards are a product of some intrinsic property of the human species, quite possibly shared with many other species. These codes may vary widely, like language, from one society to another. But like language they may reflect common species characteristics. If so, it is important that we understand the deep structure of these characteristics.

By putting together the ideas of several students of the concept of justice, we can get some idea of what might be involved. Piaget (1932) tells us that rules are adopted by groups of children after they reach a certain age (seven to nine years) and have had a chance to play together. Prior to that age, they have believed that rules come from some powerful, inflexible authority (e.g. God, father, the mayor) outside of themselves by whom they are preserved and enforced. This
“heteronomous” orientation toward authority gives way as they mature. It is replaced by an "autonomous" orientation such that the children realize that rules are made by the group for its convenience and that they may be changed to enhance the satisfaction of the group.

An element emphasized by Rawls—in potential conflict with Piaget—is that the rules, once accepted, must be stated in advance of knowing to whom they will apply, that they cannot be perceived as fair if it is known that they change to suit the advantage of a single person (Rawls, 1971: 11-17). This accords with Lon Fuller's idea that warning, stability, and even-handed administration are essential elements of "the morality that makes law possible."

The idea of standards does not mean equality, however Piaget notes that a big winner in children's games may be required to return some of his winnings to the game to keep it going, but that he is never deprived of all gains. Barrington Moore reflects at length on the (for him) puzzling phenomenon that people accept a very small share ~ rather than rebelling. His eventual explanation—that they come to accept the very deprivation as a normatively good thing—he illustrates with a story from India. When a harijan retainer is invited into the home of a newly equalitarian Brahmin youth, recently returned from school, the invitation is vigorously but courteously rejected by the servant with the words, "you may have given up your religion, young master, but we have not given up ours" (Moore, 1978: 61). While such standards tend to be fixed (more so perhaps than Piaget suggests) in stable cultures, they are regularly being given new normative content in open, rapidly-changing societies such as ours. Walster points out that a perception of imbalance between the value of work contribution and compensation for the work leads to a tension. This is resolved, her research suggests, in one of two mutually incompatible ways: by increasing the compensation or by derogating the quality of the work or worker.

These ideas (and many more like them) indicate the prospect that scholarship will help us increasingly to understand the social bases of behavioral standards. I believe that sociobiology can make its most important contribution in this area.

To learn more about norm formation does not imply any particular or immediate effects on questions of legal policy. In the example of family structure, the prohibition against polygyny may be so deeply rooted in the structure of our society that any analysis would simply confirm the strength of the taboo and its inevitability under existing social conditions. Even so, it would be interesting to learn what might
be discovered if, for example, advocates and opponents of polygamy (let us include polyandry as well as polygyny) were able to consider the consequences of permitting these forms. Why should we not develop procedures for discussing, even simulating, variations which might have societal value? Such deliberation should be informed by scientific knowledge, not displaced by it.

There are many areas in which the society seems burdened because of difficulties in discovering latent normative dispositions. Better understanding of such dispositions is, I believe, desirable not only for the sake of the knowledge itself but also for the uses to which it could be put. Like any knowledge, it has the potential for misuse. But a program aimed at facilitating normative consensus by structuring voluntary interactions and encouraging mutually satisfying resolutions seems to me worth developing. Can sociobiology help in this by informing those charged with responsibility for legal procedures how to arrange them more effectively?

Better understanding of norm-forming processes is of great importance for maintaining minimum conditions of normative order. In open, heterogeneous societies such as this one, the evidence of anomie (normlessness) is found on every side. Some of this normative diversity provides valuable liberties for the individual and variations for the society. When anomie passes a certain limit (which we cannot yet identify), however, it can destroy mutual trust, confidence, legitimacy and a willingness to adhere to and support the code of the society.

Open societies particularly need to cultivate congruence between law and the norms of society. Where these do not match, law tends to be viewed as alien to one's concerns if not an oppressive instrument imposed in the interest of a dominant class. But the absence of pervasive norms means that law will often fail to accord with someone's (if not everyone's) conception of what is right. The remedy for this state of affairs is not necessarily to be found in a renewed effort to use scientific expertise to shape and support particular legal decisions. Sociobiology and other sciences of human behavior may contribute much more effectively and appropriately to legal policy formation by explaining norm-forming processes. With the help of such knowledge law may provide the best opportunities for normative coalescence. It can promote interactions between opposing parties which facilitate dispute resolution and norm formation. Labor-management relations illustrate that possibility (Fuller, 1971). Law can facilitate the orderly termination of relations where these need to be maintained. This is illustrated by property
division and custody arrangements in marital dissolution cases (Mnookin and Kornhauser, 1979). Law can provide a setting in which latent mores can be collectively expressed and examined. This is illustrated by the use of aggregate jury determinations in declaring the death penalty for rape unconstitutional (because disproportionate, excessive and random) (Schwartz, 1979: 319-325).

These instances are intended only to illustrate the potentialities for law, by arranging interaction, to facilitate dispute resolution, mutual satisfaction and norm formation. Much more remains to be done in this direction. Any knowledge that can be found in sociobiology concerning how disputes are resolved, reciprocities generated and norms formed will be welcomed as a contribution, where it is most needed, to the reconciliation of law and the mores in an open, stable, democratic society.

CASES CITED
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