JURISPRUDENCE IN THE LAW SCHOOL CURRICULUM *

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THE PLACE of jurisprudence in the law curriculum will depend upon two things: (1) The legal needs of contemporary society, and (2) the capacity of contemporary methods and theories of jurisprudence to meet these needs.

In so far as the legal needs of contemporary society are identical with those of the past, the traditional courses, methods, and theories of jurisprudence will suffice. It is only when the contemporary legal needs of society are different from those of the past and call for a law, and a jurisprudence to define and sustain that law, different from those of the past, that jurisprudence becomes an absolute necessity in the legal curriculum. That such is the case at present the following facts make clear.

Three facts make contemporary society unique. They are: (1) The release of atomic energy; (2) the shift of the political focus of the world from Western Europe towards Asia; and (3) the inescapably ideological character of both domestic and international social problems.

I

THE RELEASE OF ATOMIC ENERGY

The portentous consequences for good and evil of the release of atomic energy are reasonably well known. Two things are to be emphasized with respect to it. First, released atomic energy is not merely a bit more energy of the old type. Second, the release of atomic energy and the construction of the atomic bomb would never have been thought of even as a possibility had it not been for Einstein's theory of relativity. Both considerations have important legal implications.

The traditional method of obtaining energy involved merely moving energy from a relatively large store in nature to the place where man wanted to use it. The leverage involved in this mode of release

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was very small. It was merely the ratio between the quantity of energy taken out and the amount of the large reservoir of energy which remained after all dissipation in its release had occurred. In the case of atomic energy, however, energy is not derived from other energy but from matter or, to put it more exactly, from the bound matter of chemical atoms. In this instance the ratio of leverage is quantitatively larger to a degree measured by one over a number which is astronomical in size. The law which defines this leverage with mathematical precision is the mass-energy equation of Einstein's special theory of relativity. The leverage element in this equation is defined by a constant c^2. This constant c has the mathematic dimensions of a velocity and the numerical value of 186,000 miles per second. When this quantity is squared, a number astronomical in size results. It is the ratio in which this astronomical number functions which gives one the terrific leverage with respect to the amount of energy produced for human uses when one releases energy from bound matter. This mathematical fact means that an atomic war will be something quite different from a merely intensified traditional war.

It must be remembered also that an atomic bomb releases not merely astronomically greater amounts of energy than a traditional bomb but that also the released atomic energy is accompanied by intense radioactivity. This means that even though the damage produced were equal merely to that produced by heavy saturation bombing, the defender, because of the radioactivity, cannot immediately proceed to repair the damage. Whether anybody could go near a vast region of iron mines, after its ore had been made radioactive by the dropping of a large atomic bomb upon it, short of several years after the bomb had been dropped, is still, to put the matter conservatively, very questionable. With iron mines untouchable by human beings, it is not clear how an industrial society could live very long even in times of peace.

These facts are relevant to the legal curriculum for one very obvious reason. They drive home the point that a law which meets the greatest social need of the contemporary world must be one which puts forth all the reflection and research of which we are capable to create a truly effective legal world order. That the traditional international law and the traditional theories of jurisprudence are quite incapable of doing this is obvious to anyone acquainted with them. In an atomic age civilized men simply cannot afford to have war. International as well as domestic disputes must be brought under the rule of law.

The fact that the release of atomic energy is a consequence of Einstein's theory of relativity has another implication with respect to the legal needs of contemporary society and the type of jurisprudence required to meet these needs. Einstein's theory of relativity is an experimentally verified, deductively formulated theory of mathematical physics. It arose because of certain inadequacies which Einstein noted to exist in the basic concepts and postulates of physics as formulated for mechanics by Newton and for electromagnetics by Maxwell. The Michelson-Morley experiment in 1885 presented a fact which simply should not exist if the basic assumptions of both Newton's mechanics and Maxwell's electromagnetics are correct. This caused Albert Einstein to see that a reconstruction was required in the fundamental theoretical concepts of mathematical physics. Analysis showed him that the difficulty centered in such abstract theoretical notions as space, time, and the relation of matter to space and to time.

It is to be noted, therefore, that Einstein's difficulty was a theoretical one. The fact is that he has never performed an experiment in physics in his life. He is a theoretical physicist. None the less, his sensitivity to the theoretical difficulties raised with respect to traditional physical theory by the Michelson-Morley experiment enabled him to make one of the most remarkable discoveries in the history of western science and to place modern physics upon new and experimentally more valid theoretical foundations.

These considerations indicate that Einstein had no concern with engineering or with explosives. It happened, however, when his theory was verified and when he pursued its assumptions to their deductive consequences, that a certain theorem followed necessarily by the rules of formal logic. This theorem is the aforementioned mass-energy equation. Thus it was by pursuing an abstract theoretical question, involving the basic concepts of space and time at the foundations of theoretical physics, that Einstein came, as a by-product of his investigations, upon the discovery of the possibility of deriving energy not from larger available pools of energy but from bound matter itself.

The social and legal implications of this fact have not been noted previously but are none the less important. What it means is that men must now order themselves socially with respect to a new nature—to the new nature which is designated by Einstein's experimentally verified theory of relativity. This experimentally verified, theoretically known nature is quite different from the one which we directly observe. Directly observed nature is the same today as it was when the ancient Greeks looked at it. But the experimentally verified, theoretically known nature of Einstein's mathematical physics is a

nature radically different from any in which previous men have lived and with respect to which they have had to order their social relations.

Consider for a moment what law is. Law is an ordering of human beings with respect to one another and to nature. A law is good if it orders these human beings with respect to one another and nature in the light of a true, and as far as possible complete, knowledge of what men and nature are. A law is bad not because it is naughty but because in its ordering of men with respect to nature it puts them together in relation to nature in a way that is contrary to what true scientific knowledge reveals both men and nature to be. It follows from this that when physics places men, as it does at present, in an entirely different nature from the one in which they lived previously, the law, if it is to order men properly with respect to nature as scientifically known, must set up legal rules and create "living law inner relations in society," to use Ehrlich's language, quite different from the traditional ones.

A key to this difficulty can be grasped if we compare nature as known by contemporary mathematical physics with nature as known by nineteenth-century physics. The conception of nature of nineteenth-century physics which was most relevant to the legal and social ordering of men with respect to nature was thermodynamics. This science made it clear that human beings with bodies could not be human beings unless they obtained energy in a form available for work from a source in nature outside their own bodies. These sources as then known were limited. Thus it was that the major social problem for a man living in nature as known by nineteenth-century physics was the problem of finding and equitably dividing the limited available pools of energy. The great merit of the Marxist-Communist ideology, with its emphasis upon the production relations which joined men to these pools of energy in nature, is that, more than any previous economic and political theory, it took this conception of the relation between man and nature of nineteenth-century physics into account. In the twentieth century, however, the social and legal problem is the reverse of this. Now, instead of having too small available bits of energy for human use, we have too dangerously big amounts of energy—amounts so dangerously big that no individual or nation can afford to allow laissez faire circumstance to determine who gets control of this energy.

These considerations indicate that the release of atomic energy entails the construction of a new domestic as well as a new international law. Moreover, it requires that a legal education which is to provide the knowledge necessary to see the need for this new law and to specify and

construct it must have at least one course in its curriculum which directs the student's attention not merely away from the legal cases and the positive codes in the casebooks to the social sciences but also away from even the social sciences to the experimentally verified theories of contemporary mathematical physics.

The implications of this conclusion are somewhat surprising but none the less inescapable. To say that a law which provides rules for properly relating men to one another and to nature in the contemporary world must ground itself in the experimentally verified, deductively formulated theory of twentieth-century mathematical physics is to assert that contemporary jurisprudence must return to the Greek and Roman Stoic doctrine of a *jus gentium* grounded in *jus naturae*. Moreover, this *jus naturae* must be taken in its original Greek and Roman Stoic meaning, as literally a law of nature verified by physics. In other words, the philosophy of contemporary law must be a philosophy of nature as well as of culture, a *jus naturae* as well as a *jus gentium*. Also this philosophy of nature must take as its basic concepts and postulates, just as did Greek and Roman Stoic philosophy drawing upon Greek physics, the primitive concepts and postulates of experimentally verified, deductively formulated physics. By so doing, one obtains a philosophy of law which is verified in a sense that holds for everyone, since its basic assumptions are those of mathematical physics, which the physicists have verified by scientific methods which give results verified for all men.[1]

In returning thus to the Greek and Roman Stoic doctrine of the natural law of contemporary Roman Catholic law schools, it is to be noted that the content of this natural law cannot be that of the natural philosophy and physics of St. Thomas and Aristotle. Its content must be that of the experimentally verified physics and attendant philosophy of natural science of the twentieth century—not that of the thirteenth century, or the fourth century B.C.

1 It should be noted that a scientifically verified philosophy of natural science has two parts. One is its ontological part, the other its methodological or epistemological part. The ontological philosophical assumptions of any scientifically verified, deductively formulated theory are found by examining the theory to determine its basic or primitive entities and relations. The epistemological part of any experimentally verified scientific theory is found by examining the scientific method by means of which the theory is verified and determining the relations which join the basic concepts and postulates of the verified theory to the directly observable data to which they refer for their empirical verification. For a more detailed exposition of these two parts of an experimentally verified philosophy of science, see my LOGIC OF THE SCIENCES AND THE HUMANITIES, cc. 8, 21, and 24 (1947), with especial attention to pages 360–361. For a detailed exposition of the epistemological philosophy of contemporary, experimentally verified mathematical physics in its bearing upon an international philosophy of culture and law, see my MEETING OF EAST AND WEST, c. 12 (1946).

A contemporary jurisprudence grounded in natural law and its scientifically verified philosophy of contemporary mathematical physics has one other merit which is required, as noted above, to meet the legal needs of an atomic age. The requirement is that we have a truly effective international law. As Roscoe Pound has noted in a recent paper entitled "Toward a New Jus Gentium," [2] such an international law entails the return to the concept of a universal law. It is precisely this universality which a philosophy of law, grounded in a scientifically verified philosophy of nature, provides, since all men, regardless of the diversities of humanistic laws of their different cultures, live in the same nature. Moreover, as noted above, the scientifically verified laws of nature, and of a philosophy which is scientifically verified because its basic concepts are those of scientifically verified theory in natural science, are true in a sense which holds for all men.

II

THE SHIFT OF THE POLITICAL FOCUS OF THE WORLD FROM WESTERN EUROPE TO ASIA

In its issue of November 13, 1948, the *Economist* of London reported as follows: "There have been signs for some time that the storm centre of world politics might shift from Europe to the Far East." The *Economist* then goes on to point out that this shift is already here.

Although it has not received the attention which it deserves, this shift of the focus of world politics from Western Europe to Asia is the major political fact of our time. It should have come home to citizens of the United States on December 7, 1941, when they were brought into the second major war of this century, and its first *truly* world war, by the attack of an Asiatic rather than a European power. Everywhere throughout Asia peoples are arising and insisting not merely upon the self-determination of their social institutions but also upon the principle that international decisions must take oriental peoples and values as well as Western ones into account.

This is the meaning of India's break from Downing Street. It is the meaning also of the failure of Chiang Kai-Shek's Chinese Nationalism and the present progress of Mao's Chinese army, united as it is by Mao's indoctrination of Marxist communism.

The full implications of this rise of Asia are yet to be appreciated. A majority of the people on the surface of this earth live in the Orient. This means, if political power goes where the majority of

[2] F.S.C. NORTHROP (ED.), IDEOLOGICAL DIFFERENCES AND WORLD ORDER 1–17 (1949).

the people are, that the control of world affairs will inevitably and eventually pass to the Orient.

The first legal implication is equally obvious. It is that any law school which is to train men competently in a nation which is one of the two major powers in such a world must pay attention to the codified law and the living law of the major peoples of the Orient as well as to that of the traditional and contemporary West. No longer can a legal curriculum adequate to the social and legal needs of the contemporary world be concerned solely with Western social and legal institutions, cases, and principles.

For the same reason, a course in jurisprudence which teaches theories of jurisprudence derived almost exclusively from Western law is an inadequate, contemporary jurisprudence. A jurisprudence which faces the legal needs of the contemporary world must derive its method and its theory from a study of oriental as well as occidental law.

The method which it must use is also clear. The great sociologist of law, Ehrlich, has shown in his *Fundamental Principles of the Sociology of Law* that no codified law of any people or culture is understood or effective unless the underlying, living law to which it corresponds is also known and present. Once this is grasped it becomes evident that a jurisprudence which meets the social and legal needs of a world in which oriental as well as occidental peoples are playing a major role must go behind the comparative studies of the codified, positive laws of the different peoples and cultures of the world to their underlying living laws. These living laws are exhibited by cultural anthropology and cultural sociology.

Recently these sciences have found, however, that their investigators do not understand any foreign culture which is observed objectively until they stay with that culture long enough to discover the particular concepts and assumptions used by that people themselves in conceptualizing the facts of their experience and ordering their lives morally and socially. Moreover it has been found that these key concepts, indigenous to a given people and culture, are always philosophical in character. In fact the word *philosophy* is nothing but a name for the basic concepts which a person or people uses to conceptualize the facts of experience. This means, therefore, that a jurisprudence which would find the living law beneath the codified law of any one of the world's cultures must pass through cultural anthropology and cultural sociology to the philosophy of culture. Thus, just as the first unique fact of our age—the release of atomic energy—entails that an adequate jurisprudence must ground itself in the basic concepts, that is in the phil-

osophy, of experimentally verified twentieth-century natural science, so this second fact of our time—the oriental focus of international politics—entails that an adequate contemporary jurisprudence must ground itself in the basic concepts, that is in the philosophy, of the world's cultures.[3]

III

THE INESCAPABLY IDEOLOGICAL CHARACTER OF BOTH DOMESTIC AND INTERNATIONAL SOCIAL PROBLEMS

The foregoing considerations prepare us to recognize the third unique fact of our time. A study of the key basic concepts of any culture, without which the living law underlying the codified law of that culture is not understood, reveals that these key concepts not merely provide the ideas in terms of which the people of that culture conceive the facts of their experience but also define their values. Each people regards the social ordering of people with respect to nature in society as good in so far as that ordering fulfills and gives expression to the conception of themselves and nature which their particular key philosophical concepts prescribe. Furthermore, each people judges the social and legal institutions and moral conduct of any other people or nation from the standpoint of its basic ideological or conceptual assumptions.

That the ideological assumptions of the traditional cultures of the Orient are different from those of either the medieval or modern cultures and nations of the West has been obvious for a long time. This difference in ideological outlook created no social problems, however, as long as the oriental peoples were docile, incapable or undesirous of insisting upon determining international policy. But the moment the Orient arises, as it has arisen, this ideological conflict between traditional western and traditional eastern basic concepts and values becomes inescapable. In fact the major problem of our time is that of putting together the quite different ideological and cultural values and legal institutions of the Orient and the Occident.

In this connection a frequent confusion should be avoided. Many people speak of the issue between Soviet Russia and the traditional democracies as an issue between the East and the West. One may use the words as one chooses, provided one makes clear one's usage and

[3] For an introduction to what this means specifically and methodologically, see THE MEETING OF EAST AND WEST, *supra* note 1; THE LOGIC OF THE SCIENCES, *supra* note 1, cc. 14, 16–19, 21, and 22; and IDEOLOGICAL DIFFERENCES AND WORLD ORDER, *supra* note 2.

does not surreptitiously shift to a different meaning. The issue, however, between Soviet Russia and the traditional democracies is an issue purely within modern western civilization, between the West of Europe and the East of Europe; it is not an issue between the East in the sense of the traditional Orient and the West in the sense of the traditional Occident.

It would be a mistake, however, to suppose that the only ideological social and legal problem of our time appears in the shift of the political forces of the world toward Asia and in the evident conflict between the Soviet Russians, with their Marxist philosophy, and France, Great Britain, and the United States, with their pre-Kantian modern empirical philosophy and attendant social and legal institutions and practices. Another ideological conflict exists between the more emotional, aesthetic, voluntaristic values of any Latin people, such as the Spanish and the Latin Americans, and the more empirical, utilitarian, pragmatic values of Anglo-American cultures, such as those of England, Scotland, Canada, and the United States.

But domestic social problems are fast becoming equally ideological in character. This shows most obviously in China, where one group is dominated by the Marxist-Communist doctrine and the other group, formerly under Chiang Kai-Shek, was dominated by a somewhat ambiguous ideology which attempted to combine Chinese Confucian and Western Christian and laissez faire free enterprize capitalistic values. For centuries domestic Latin American politics has been shot through with inescapable ideological conflicts. There different parties would have different constitutions. It is for this reason that Latin American elections tend so frequently to be revolutions rather than merely the peaceful casting and counting of ballots. When the parties to a domestic election differ upon the basic ideological legal and political rules according to which the game is to be played, then domestic politics becomes as inescapably ideological as is international politics at the present moment. Contemporary French politics is an additional example. If either the de Gaullists or the Communists were to come into power, the change would probably occur more by revolutionary than by constitutional means, and in any event a new constitution would result in fact if not in name.

Let us not miss the full implications of facts such as these. They mean that in most of the nations throughout Asia, Latin America, and continental Europe there is at present not merely no effective international law, but also no effective domestic law.

Nor is the domestic politics of the United States as far from this type of situation as one might suppose. In the last presidential election, there were eleven political parties—at least three or four of which had radically conflicting economic and political ideologies affecting individual civil liberties as well as economic and political social relations. Suppose that in the next election the Dixiecrats and the Wallaceites should increase their ratio of the total votes; then very easily the United States might find itself in the predicament of contemporary France, where no party leader represents more than a minority. When this happens governments cannot function, since any statute they attempt to pass fails to have the living-law, majority, high-frequency support necessary to make it effective. Thus it is that legal research to the end of formulating a new domestic law is fast becoming as imperative a task as that of forming a new international law.

The failure of our law schools and of our departments of economics, political science, ethics, and philosophy to face and meet this most pressing social need can be truly serious. The incapacity of a majority of people, who have rejected their old economic and political norms for ordering their social relations with respect to nature, to come to agreement upon new ones may be fatal not merely for democracy, but for any ordered society whatever. For there is no ordered society except as a majority of the people in it agree upon at least some ideological principles, *i. e.*, some specific economic, political, moral, and legal rules, that they are to use to order themselves socially with respect to each other and to nature.

This inescapably ideological character of both the domestic and international social problems of our world is another evidence of the inadequacy of the traditional theories, methods, and courses in jurisprudence, for the traditional theories in jurisprudence reflect the old ideologies. When ideological issues become the key social and legal problems of society, to appeal to the old jurisprudence is to beg the basic social questions at issue.

Also, to teach the technical branches of law in the present manner is similarly to beg these questions or to answer them inadequately. This is the case because the present content and organization of these technical courses in law are but a reflection of the last popular traditional theory of jurisprudence, say legal realism. A new jurisprudence and new courses in the technical branches of law based on this new jurisprudence are required. This jurisprudence must be one which provides political and legal norms which resolve the inescapably ideological domestic and international social problems of our time.

Can any science of jurisprudence provide the required new jurisprudence? This is entirely too difficult a question to be answered within the limits of this paper. Certain general characteristics which it must have, however, can be briefly noted. First, it must face the question—the most difficult question in science and philosophy—of whether there is any method valid for all by means of which a given normative social or legal theory may be said to be true or false. The problem at bottom is whether ethical and social normative statements are cognitive or purely hortative. If the latter alternative is the true one, then our problem is hopeless from the outset. The sole method of peace is the method of verbal propaganda and military force in support of one's own arbitrarily or provincially selected norm. If, on the other hand, it can be shown that normative sentences are cognitive, *i.e.*, it is significant to say that they are true or false, then the scientific method which provides the criterion of this truth and falsity must be specified.

It is the great merit of the scientifically exact method and theory of law of Underhill Moore that it demonstrated the incapacity of the traditional legal philosophy called legal realism and of the sociology of law to provide such a methodological criterion of the truth or falsity of normative propositions. It is the merit also of Professors McDougal and Lasswell's policy-forming law that it recognizes that a law adequate to the aforementioned legal needs of contemporary society must be a law creating new social and legal norms rather than merely mirroring old ones. In this sense policy-forming jurisprudence is the jurisprudence of the future.

Unfortunately, however, although Professors McDougal and Lasswell have seen what is needed, the scientific methods and concepts and theories which they use are even less capable of achieving what they see to be needed than was the more exact and scientific method of Underhill Moore.

There are evidences that Professors McDougal and Lasswell's aims can find the adequate scientific methods necessary to achieve them, even though the methods which they propose are quite inadequate. Here we can merely state arbitrarily what a careful analysis indicated elsewhere reveals these methods to be. They must be those of a philosophy of the world's cultures, supplemented and corrected with a philosophy of nature as prescribed by the experimentally verified theories of deductively formulated contemporary physics.[4]

[4] THE MEETING OF EAST AND WEST, *supra* note 1, and THE LOGIC OF THE SCIENCES AND THE HUMANITIES, *supra* note 1, cc. 14–22.

IV

CONCLUSION

When society appears with unique characteristics, such as the three which characterize our own time, a legal curriculum which does not make jurisprudence central is a legal curriculum inadequate to the legal needs of its time. As long as the traditional conceptions of social and legal norms remain adequate, jurisprudence can be ignored, since the traditional jurisprudential theory of law as embodied in the technical legal courses is adequate to the needs of society. But when traditional norms break down, as is the case both domestically and internationally at present, then jurisprudence becomes inescapable. It must be a jurisprudence, however, which puts the *emphasis upon research* into new methods of legal science and into the new social and legal norms which these methods specify and verify. Courses in jurisprudence which merely peddle the old traditional jurisprudential theories, while valuable in enabling us to see what old methods of jurisprudence can and cannot do, are quite inadequate. They merely prescribe old norms, whereas what is required is a jurisprudence with a scientific method which can prescribe new ones.

The three unique facts of contemporary society indicate the lines which this new jurisprudence must follow:

1. Because we are living in a new nature capable of releasing to us energy in astronomical amounts, a jurisprudence which orders men socially with respect to nature in the light of true knowledge of what men and nature are must be a jurisprudence rooted in natural law—not merely in living social law. Moreover, this natural law, or philosophy of natural science, must have the content specified by experimentally verified, deductively formulated twentieth-century physics. It cannot be the natural law of the physics or metaphysics of St. Thomas or Aristotle.

2. Because the political focus of the contemporary world is shifting from Western Europe to Asia, an adequate jurisprudence providing oriental as well as occidental foundations for an effective international law must be rooted in the philosophy of the world's cultures.

3. Because the social and legal problems, both domestic and international, of contemporary society are inescapably ideological in character, an adequate jurisprudence in the legal curriculum must investigate the scientific method for determining the truth and falsity of normative social theories and, having found that method, must use it to specify and verify the new social and legal norms required to resolve

the dangerous domestic and ideological problems of our world. There is evidence that this scientific method is that of an empirically determined philosophy of culture supplemented and enlarged by an empirically verified philosophy of nature.