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JURISPRUDENCE · PHILOSOPHY OR SCIENCE

BY HENRY ROTTSCHAEFER*

IT WOULD perhaps be practically impossible to secure for any definition of the term Jurisprudence any very general acceptance. It is doubtful whether there exists even any general agreement as to what subjects are within its scope. The problem of whether, and in what sense, it is to be considered philosophy or science, cannot, however, be discussed without adopting at least some tentative notion of its meaning that shall serve as the basis for the discussion. This can be more effectively done by a general description of the types of problem usually dealt with in treatises and courses on Jurisprudence than by framing a logically correct definition that secured accuracy and completeness by resort to a convenient vagueness. Investigation discloses its use to denote lines of inquiry having little in common other than a professed interest in general questions and problems concerning law and justice. It denotes in any case a broader approach to law than is implied in the mere effort to give a succinct or even scientific statement of its rules, its use today as synonymous with "law" represents a survival from an earlier period when it was not at all uncommon to talk about the "Jurisprudence of New York" and the "Jurisprudence of Torts." Its current meaning includes efforts to derive from legal data concepts and broad generalizations that aim solely to impose on these data the highest degree of logical systematization, that is, investigations of the internal structure of legal systems in order to achieve a measure of logical integration. It is applied to investigations of the content of legal systems whose professed aims are the discovery of the existence and development of general ideas that have helped to shape that content, but which in practise not infrequently constitute slightly

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veiled attempts to formulate a critique of existing law. A considerable number of its leading exponents have been chiefly concerned with the problem of delimiting the field of legal from non-legal phenomena by elaborating definitions of law by processes of pure abstract reason uncontaminated by empirical factors—treating it as a special problem in the theory of knowledge. Others have been primarily interested in developing standards by which to subject existing systems to searching critiques. There is a growing tendency to include the intensive study of the interactions between legal and non-legal phenomena, although in practice this frequently represents merely a step in the process of subjecting law to a particular kind of critique. There is no escape from including each of these diverse problems within the scope of Jurisprudence, if prevailing practises are to be our guide, and there is no practical reason for refusing that guidance. It will, therefore, be taken to describe all these diverse lines of inquiry that seem to have little more in common than that they deal with problems concerning law that possess a particularly high degree of generality, that is, problems that involve, or can be raised concerning, all or practically all the specific phenomena that comprise the juridical field. The question, for example, whether a law is a just law can be asked of every legal rule and solution; that whether an agent's apparent authority is based on estoppel or an objective theory of contracts has significance within a quite limited field. This difference, though one of degree, exists, and, while probably insufficient to constitute the specific difference required for framing a logical definition of Jurisprudence, is a useful factor in its practical description. Another significant difference between inquiries assigned to Jurisprudence and those pertaining to other fields of legal study is that the aim of the former is critical, of the latter dogmatic exposition or historical.

This brief description of its scope clearly shows that Jurisprudence is both philosophy and science. There is no particular objection to including within a single field of study these diverse types of thought if only it be recognized that Jurisprudence as philosophy and as science have quite distinct aims and, to a considerable extent, distinct methods. The inclusion of both merely implies a recognition of the fact that the data of legal systems raise general problems of more than a single type. The situation might, however, raise questions as to which of the problems involved primarily philosophic inquiry and which of them required treatment by the methods of science. Truth is that

some of them can be, and have been, dealt with by both methods. A frankly empirical theory as to the nature of law is not only conceivable but is actually found in the definitions of such writers as Gray¹ and Salmond.² Such methods are the very antithesis of attempts to develop the concept of law by the processes of abstract reason found in Del Vecchio's *Formal Bases of Law* and Tourtoulon's *Philosophy in the Development of Law* in the chapter on Scientific or Pure Law.³ It seems, then, that the classification of the problems under either philosophy or science will depend upon whether we classify the actual product of juristic thinking or attempt to construct a grouping that shall assign them to their proper class on the basis of some assumed inherent nature. The former would possess no special interest for those whose principal concern is with the problems rather than with the grouping of particular answers to those problems, the latter would almost certainly produce a new surge of barren dialectic with no end and little purpose. What is needed is a critical examination of current thinking on these problems in order that we may discover exactly what we are doing at each stage of their discussion, whether that discussion be approached from the point of view of philosophy or science. There is no need for further general definitions of legal philosophy and legal science, and this not because those that we already have are adequate but because those that we are likely to get are quite unlikely to be more so. There is, however, considerable need for examining and analyzing the steps in our thinking about the problems assigned to Jurisprudence, not for the purpose of developing a new theory of knowledge or adapting existing theories to this special case, but for that of becoming fully aware of the process in the hope that that may forestall a too assertive dogmatism. The remainder of the discussion will consider that problem.

The character and function of philosophy have been described in terms of varying degrees of inclusiveness and vagueness. Its orthodox representatives have usually been intent upon unifying and interpreting the totality of phenomena, not for the mere purpose of a more effective organization of our experience or our knowledge thereof, but with that of discovering an absolute, variously conceived. The aim has been to penetrate beyond phenomenal existence to a realm of essence or being, generally by

¹Gray, *The Nature and Sources of Law*.

²Salmond, *Jurisprudence*.

³Both of these have been translated into English as volumes in the *Modern Legal Philosophy Series*.

the processes of reason and reflective thinking on the assumption that their results give us reality of a grade higher than that derivable from other of the activities that function in our experience. It is this fact that is largely responsible for the importance assigned to the problem of knowledge, and it is from that angle that legal philosophy has derived the conceptions of formal or pure law. Dr. J. C. H. Wu, in an article on the Juristic Philosophy of Justice Holmes,⁴ expressly states that the epistemological is one of the two philosophical problems involved in the study of law, and he conceives it as that of determining the logically necessary predicates of law. He finds these in Stammler's four general characteristics of law, namely, that it is human will in contradistinction to natural phenomena, that it is communal, self authoritative in contrast with conventional, and finally inviolable.⁵ A considerable portion of Del Vecchio's *Formal Bases of Law* is taken up with proving the possibility of establishing an objective or universally valid definition of law and showing that it is the Kantian theory of knowledge that makes it possible. Hence he holds that such definition must have reference only to the form of law, i.e., the logical type inherent in every juridical experience, and that its essence consists in pure form alone, which appears in reason as concept. Thinkers of this type seem bent on giving to a classificatory device adopted for organizing their experience, and their knowledge of it, the character of logical necessity rather than mere convention. It may be true that the concept is logically prior to the objects comprehended by it, and the universal a logical pre-condition of the particular, but these are relational qualities that can have meaning only after the concept is given. It requires something more than that, however, to prove that any particular concept has the character of logical necessity. It may be true that you cannot affirm of a given rule that it is a rule of law without implying at least some definition of law, it does not follow that you can make such affirmation of that same rule only if you adopt one particular and only definition of law. It seems extremely doubtful that there are any propositions about law without which its conception would be logically impossible.

But the chief point of interest of this type of thinking for the purposes of the present discussion lies not in the inadequacy

⁴21 Mich. L. Rev. 523.

⁵For an excellent brief statement of Stammler's views see I. Husik, *The Legal Philosophy of Rudolph Stammler*, 24 Col. L. Rev. 373.

of the assumption just considered, but in its product. Its concept of law is not only confessedly devoid of material content, but professedly derived from pure reason, not from the material content of concrete legal systems. It is not a mere generalization of the concrete data of our legal experience, but a true universal which not only transcends experience but cannot even be derived from it. Its essence, as Tourtoulon says,⁶ is that of a categorical self-evident truth in the same sense and degree in which the axioms of geometry are such. An examination of the concepts of law developed by these thinkers reveals a marked tendency to find among the logically necessary predicates of law many of the same characteristics found in definitions of law that are frankly empirical and claim no virtue beyond being fairly accurate generalizations of a limited portion of our experience. This may, of course, result merely from the fact that it is the world of experience that is sought to be unified by the concept, and not be due to the fact that experience has been appealed to to furnish its elements. It is impossible to determine with certainty which of these views constitutes the true explanation, but the actual discussions concerned with developing the concept make it extremely probable that the logically necessary predicates of law have been lifted from experience. The concept then loses its character of logical necessity, of being a categorical self-evident truth, it is transformed into an attempt at stating the one or more elements that are common to a great many of our particular experiences for the purpose of delimiting their field from others, or at least for the purpose of indicating one point of view from which they can be conceived as a distinct group for the convenience of our thinking about them. It is not an a priori necessity but a convention that can be kept from becoming arbitrary only by keeping in touch with the facts of experience. It is not correct that there is but one true definition of law any more than that there is but one true geometry.⁷ Any definition of law can be tested to determine how accurately it generalizes the data that it professes to treat. There is no sense in saying that any one of several, all of which meet that test of internal consistency in equal measure, is objectively truer than the others, although they may well differ greatly in their availability for different purposes. The purpose of this rather extended discussion of this philosophical approach

⁶Tourtoulon, *Philosophy in the Development of Law*, chapter xiii.

⁷Riemann and Lobachevski have developed logically consistent systems on the basis of non-Euclidean postulates in which some of the propositions contradict those of Euclidean geometry.

to the problem of the nature of law was not to outline the concepts thereby developed, its aim was to contrast what its adherents were professing to do with what they were in fact doing. It is such contrasts that help us to discover the points at which dogmatism creeps in in the form of unconsciously adopted assumptions. There is no doubt that these abstract logical methods for deriving the concept of law have produced ideas of real value, and have focussed attention on the point that reflective thinking can be aided by employing principles not wholly given by experience. Its error lay in failing to recognize that in so doing we are making an hypothesis, not discovering an ultimate reality. These thinkers, professing to be discovering an ultimate unchanging reality, were in fact constructing from the data of experience an instrument for organizing their knowledge thereof, to which they attributed the former character by assuming that the product of logical thinking possesses that quality.

The illustration just discussed shows clearly the danger of dogmatism inherent in the failure to analyze completely the processes of our thinking about juristic problems. That danger arises not from the fact that we make assumptions, without which indeed thinking on any general scale is practically impossible. It lies rather in the failure to make explicit the fact that we make them, the particular point in the process at which they occur, and what they are. It is a failure that has especially serious consequences when dealing with what may be called the normative problem of legal philosophy since that raises those evaluative questions that involve most directly the points of contact between law and life. A brief statement of what that problem involves may help in understanding the subsequent discussion of some of its answers. It is an indubitable fact that the objects and events in our experience present themselves to us as having qualities that we describe as good, bad, just, unjust, and so on. It is probably impossible to discover the ultimate why of this fact, but the fact itself has a fundamental importance for the normative problem of law. In so far as it becomes an object of our thinking it produces judgments of value, i.e., judgments that subsume the particular events of experience under certain more inclusive and general categories that may as well be called value-standards as by any other name such as ends. The statement, for example, that a law is just is no more than a judgment that it possesses the characteristics that we have set up as the essentials of the value-standard called justice. It involves something more than an as-

section that such law is a means to an end called justice, in so far as it asserts that in the particular instance the means-end relationship is effectually realized with respect to a particular end. If the statement that law is a means to an end is understood in this wider sense, it is unobjectionable, if, however, it is used to denote no more than that law must be conceived from the means-end point of view, it can serve as a critique of law only for the purpose of determining whether it meets that relational test. That is, of course, a useful purpose, but it is but the preliminary step to the problem about which most of the controversies in this field are waged—namely, its effectiveness as a means to a particular value-standard, not its effectiveness as a means to some value-standard. The crux of discussions of normative legal philosophy is the value-standard itself, and, closely bound up therewith, the method of its discovery, derivation or construction, however you may describe that process. It is at these crucial points that we must become aware of our thinking on this problem.

The value-scales of the different individuals composing the community which we will assume is to be regulated by law are not the same. The values that one man would sacrifice if necessary to realize others are not in every instance and at every moment the same as those which another would forego to secure the latter. There is a sense in which each of us is *sui generis*. The legal order may from one point of view be conceived as an attempt to realize a definite set of values by that form of societal action that distinguishes it from other of its forms. The validity of this approach is independent of any theories as to the why or the how of the selection of any particular set of such values, although the latter is a problem on which empirical studies may be expected to throw considerable light. It may be that the actual selection is the only possible one at the moment that it is made, historians not infrequently explain the sequence of events by invoking theories of inevitability. It is, however, true that the actual selection is in every case considered by some as being but one of many possible selections. This is the germ of an idea that ultimately develops into theories as to what values law should seek to realize, whether those theories come from those who approve or disapprove the legal status quo. The scope and purpose of this discussion prevents any attempt to trace the psychological process by which "could" develops into "should"; it is sufficient to note that it does. The result is almost invariably an attempt to test law by a standard external to itself. That such standards exist

in the sense that they are elements in the intellectual and emotional experience of men cannot be denied, and it is equally indubitable that they present themselves for the time being as entitled in their own right not only to measure the actual but also to exercise over men that compulsion in the direction of their own actualization that is expressed in the idea that it is men's duty to realize them. The question arises whether they are or exist in any other sense. The answer of those who believe in theories of absolute justice is clearly that they do, their existence is, in the case of the metaphysical schools, usually conceived as supra-phenomenal or rational. Such views are open to the same objections already mentioned in discussing the various formal theories of law. There is no way of either proving or disproving such theories, since they involve an assumption that cannot be tested by experience. There is the same inadequacy in those theories that profess a more scientific, or at least empirical, basis such as Duguit's theory of Objective Law.⁸ There are schools, such as the sociological, that have never explicitly dealt with this question. The reason for every attempt to give the value-standard the character of objective reality is plainly the desire to avoid the instability of anarchic subjectivism. Those who have attempted to escape this result have not proved their case, but the plight of those who have made no attempt whatever is no better. Del Vecchio states that the conception of absolute justice is one of the fundamental needs of the human mind.⁹ That may be questioned, but it is certainly true that man has an inveterate habit of postulating value-standards that transcend those actually experienced, conceiving them as those that ought to be realized, and viewing them as at least not wholly arbitrary. The quest for the absolute seems doomed to failure. Does it follow, however, that the only alternative is a complete and arbitrary subjectivism? And if not, by what process is it to be avoided? These are problems that will have to be explicitly acknowledged and frankly faced if we are to make an intelligent appraisal of the competing value-standards that are offered. That has not yet been done. The result is a measure of concealed dogmatism in them all. It is not a question of how near we can approach the absolute, but of becoming consciously aware we are making an assumption when we predicate of something that it ought to be. Every theory of justice or

⁸See chapters by Duguit in *Modern French Legal Philosophy* (The Modern Legal Philosophy Series).

⁹Del Vecchio, *Formal Bases of Law*, chapter iii.

of the end of law is, therefore, an assumption or hypothesis. Its use as the basis for a critique of existing law or as a force to determine the direction of its development involves a measure of transcendentalism in the sense of a going beyond the limits of experience up to that moment. If that be true, the mere appeal to fact sometimes made in criticizing judicial decisions is inadequate and quite unsatisfactory in so far as it fails to make explicit that it implies a theory as to the relation between what is and what ought to be. It appears, therefore, that the question whether our legal value-standards are necessarily wholly subjective and arbitrary is really that of whether men can set up hypotheses that are not wholly such. I assume, of course, that we are to proceed by reflective thinking, not by way of some form of mystical experience or intuition.

It is at this point that assistance can be obtained from a consideration of the physical sciences. These usually assume that the relations of things which they discover have objective reality, and are not merely creations of the mind that conceives them ("mind" is here used in a sense so as to exclude the "divine mind" as that appears, for example, in the idealism of Berkeley) They are objective in the sense that they are, will become, or will remain, common to all rational thinking beings. This being appears quite frequently in the writings of Pearson¹⁰ and Poincare;¹¹ and while never definitely described, seems to be that ideal person whose habits of mind, procedure and point of view in dealing with the world have been found particularly compatible with the acceptance of the scientific method as the one best suited for analyzing and organizing experience. He is an hypothesis, but one that stands quite close to experience. We cannot be certain that every one will give him exactly the same personality, but the chances of extreme disagreements on that score have been reduced though not eliminated. It seems to me that the postulate of a somewhat similar rational thinking being is implicit in every theory of justice or of the end of law that has ever been seriously advanced.¹² It was the value scale of such a person that furnished

¹⁰Pearson, *Grammar of Science*.

¹¹Poincare, *The Foundations of Science*.

¹²The use of the term "rational" to describe this hypothetical man is not to be construed as implying a theory that the desire for any given value is derived from reason, instinct and emotion probably play a much more important part in that activity. The use of the term "rational" is intended to denote no more than that the desire to give our choices the appearance of being influenced, even if not completely determined, by reason is probably the most important factor operative when our experience is made an object of intellectual activity. The writer, while recogniz-

the ideal law of the natural law theorists, it is the value scale of another such person that is implicit in the theories of sociological jurisprudence. It is quite natural that this should be so since those who reflect on such matters at all wish their conduct and thinking to appear not only reasonable but rational, as the widespread existence of rationalization in its modern sense with its dubious connotations so strikingly proves.¹³ It represents, moreover, a sound instinct since it is a device that forces us to make our critique intelligent and intelligible instead of a mere inarticulate process. It remains, however, an hypothesis that appears as a premise in our reasoning in this field.

There exists a considerable disparity between the legal value-standards of the natural law and the sociological jurists. This is due to the fact that they postulate rational thinking beings that are somewhat dissimilar; that is, they proceed on the basis of different hypotheses. I am not now concerned with comparing them, but with the preliminary question whether there is any way of comparing them that is not itself wholly arbitrary, and, if so, what it is. In the physical sciences the issue between rival hypothesis is decided by the test of experiment, including therein those less precise methods of consulting experience that comprise observation. Resort to that method implies that we can determine the solution that each of the rival hypotheses would give to the problem that is the subject of the experiment, and that such solutions are not the same for all those being thus tested. This requires that they be sufficiently definite so that their implications and consequences can be developed by applying to them an equally definite and known technique. The question is whether the method is available in deciding between rival theories of justice or the end of law, and, if so, in what sense and within what limits. The physical sciences use it in order to discover whether a suggested generalization can be accepted as a basis for making predictions, i.e., as a practical device for passing from the known to the unknown. Theories of justice and the end of law are frequently advanced as answers to the questions, What is Justice, and What is the end of Law. The prevailing generalizations on these matters can scarcely be claimed to help us to predict what will actually happen, al-

ing the considerable part played by rationalization in the sense in which it has come to be used, is of the opinion that its importance has been overemphasized with the result that the really significant problem of the function of reason in human conduct has been obscured by a fog of clever but insubstantial superficialities.

¹³James Harvey Robinson, *The Mind in the Making*.

though they do afford a basis on which we can judge whether that will possess certain qualities. This, of course, does not mean that an inductive study of a particular legal system at a particular time may not reveal certain fairly definite conceptions of justice or the end of law which can be used as the basis for such predictions. But that is not the problem which the theories now being considered profess to answer, their claims are much more pretentious. It is apparent, then, that if the method is to be used to test rival theories or competing conceptions of the rational thinking being implicit in them in this field, it will have to be construed quite differently than in the physical sciences, since it aims to discover not what is, but what should be. It cannot be done by merely determining how they work, since the dispute is as to what work we think the legal system ought to perform. That view is a mere statement of the problem in a different form. The demand that law take account of the facts is equally inadequate, the rival theories are themselves facts, and the real problem is as to which of such facts should be chosen to direct its course. If the facts referred to be those more particular events and conditions that comprise the content of individual and group experience, the appeal fails in so far as it offers no theory whatever as to the relation between such facts and the assumed ideal or end. The appeal to experience which the physical scientist makes in testing rival hypotheses by experiment contains an element of subjectivism in so far as its view of objectivity postulates a rational thinking being, and it might appear that the use of the method in our field involved merely a comparable ultimate assumption which is not sufficient to make its use therein practically impossible. That is in a measure correct; in neither case do we reach the absolute. There is, however, this difference; the being postulated by the scientist has a much more definite outline and is more nearly realized in the mass of individuals than is the case with the comparable being in our field. The result is a much more coherent and effective organization of experience from the point of view of using it as a guide for action than is the case with those organizations of our juridical experiences found in the theories under consideration. The difference may be one of degree, but it is sufficiently large to make it extremely doubtful whether the methods employed to test hypotheses in the one field are of any practical use in the other. Since our hypotheses do not lend themselves to serving as bases for predictions as to what will be as distinct from judgments as to what ought to be, it is difficult to see how the issue

between them can be resolved by the methods employed in the physical sciences. We seem doomed to continue indefinitely to guide our destinies, in so far as we seek them through law, by unproved and unprovable assumptions. This does not imply that experience will not in fact play a considerable part in constructing our hypotheses. It is certain that we shall continue not only to rely on experience for that, but also for a check on extravagant claims as to the ideal. This will not enable us to escape a high degree of subjectivism in the field, but may help to prevent our assumptions from becoming wholly arbitrary. This is as much as we may hope for, but it is insufficient to make the competition between standards as intelligent and rational a process as the complexity of the problems involved requires. It is, however, imperative that we recognize that we are making assumptions.

It is not enough to realize merely that we are proceeding by way of hypotheses, it is equally essential to be aware of what those hypotheses are. Practically every one of these theories falls down hopelessly at this point. The standard is phrased in terms so vague that it might have almost any conceivable content. This is sufficiently patent as to the formulas of those jurists who have adopted the metaphysical approach. Stammler's generalized formula that the test of just law is that it must harmonize all the purposes of all the individuals in a given society is practically of little use. In so far as he himself employs it in reaching solutions that strike us as just, we feel their justice for no reasons connected with his formula or his method. Sociological jurisprudence shows the same defect. There is implicit in it the theory of a society in which law is to be used within the limits of effective legal action to achieve some scale of values, but what scale has not yet been formulated as definitely as the materials permit and as its effective utilization demands. Only a partial and quite fragmentary picture of the society could be painted from the materials furnished by its advocates. Something more, however, is required than a mere catalogue of interests, the whole conception requires considerable further and critical study to give it that definiteness of outline of which it is capable and which is essential if it is to retain its value for an intelligent, as distinct from an emotional, critique of law. It is quite futile to expect or demand that our hypotheses in this field shall have the exactness and definiteness of mathematical formulae. There must be room for modifying them as experience expands and our knowledge of it increases, but this scarcely accounts for the prevailing vagueness. It should be

possible to describe our hypotheses more definitely. The reason for our failures is probably that we have never explicitly admitted that they were such, and have thus unconsciously erected a new absolute, whose character has escaped us because it appeared somewhat elastic.

The aim and purpose of Jurisprudence as philosophy, therefore, are the critical examination of our thinking about general questions raised by law for the purpose of discovering and examining the assumptions made in that connection. It remains to consider in what sense it may be termed a science. All science is classificatory in the sense that it aims to set in order the data given by experience. There is no single necessary order, the one selected will depend upon the point of view from which the data are considered, and that turns on the purpose for which it is made. The data of our juridical experience are sufficiently many-sided to admit of several schemes for their ordering or organization. The claim of analytical jurisprudence to be a science is unimpeachable, but the limitations imposed on it by its very special purpose must be clearly recognized to prevent a misapplication of its theories. It is merely a device for securing the maximum logical unification of the materials by the employment of concepts developed on the assumption that there exist certain general and logically necessary conceptions implicit in the materials, it treats these materials as parts of a closed system. It is an effective analytical tool, but barren as a source of material legal content in which the chief significance of law consists. This must not be construed as involving a denial that the desire to employ deductive logical methods as a means for certainty in law is a real factor in developing its content, but that is not the basis on which analytical Jurisprudence rests.

I shall merely refer, without discussing it, to that scientific aspect of Jurisprudence which consists in inductive studies for the discovery of the values, and the order of values, which a given legal system has in fact adopted. This type of activity is especially important in a system that relies as largely as does ours upon the judicial development of its content. Its generalizations do not state merely logical relations, but express correlations, however, imperfect, between observed data. The concepts of analytical Jurisprudence help us to state a problem as a legal problem with considerable precision, the generalizations of this other method afford a real basis for predicting its solution, i.e., the specific content of its decision. Since, however, every such generalization is

the product of an abstraction in the sense that it is an inference from less than the totality of the observed data within the system, it will necessarily be incomplete. We cannot state all knowledge of the system in a single proposition. There are certain to be not only omissions of relevant data, but in abstracting we necessarily eliminate the possible effects upon the data covered by the generalization of the facts not included within its scope. Our predictions, therefore, are mere statements of probabilities, not certainties. This situation is aggravated by the fact that the implications of various of these generalizations are frequently contradictory. A choice must then be made which can sometimes be done by reference to some more inclusive principle already contained within the legal system but may require reference to factors outside it. It is in connection with the latter process that hypotheses of the kind heretofore considered are likely to prove the decisive factors, and I know of no principle that affords a safe basis for prediction in such case. These inductively derived generalizations, like the concepts of the analytical jurists, are concerned wholly with what may be described as data within the legal system in the sense that society has already formulated a legal judgment on the crude facts involved. The study of the more general and pervasive of such generalizations comes properly within Jurisprudence, and to that extent it is a science.

The question whether law is, or can become, a science in some sense other than that of the analytical jurists is not exactly one as to whether, and in what sense, Jurisprudence is a science. It is, however, one that Jurisprudence must consider. What seems to be meant by it is whether the methods of science can be employed in dealing with the problems of law. It cannot be answered without some consideration of those methods. The essence of science has been described by Professor Whitehead as consisting of the union of a passionate interest in detailed facts with an equal devotion to abstract generalization.¹⁴ Its methods are accordingly concerned both with finding facts, formulating generalizations, and testing the latter. It is sometimes interested in an isolated fact—for example, the existence of some particular element. It is more frequently concerned with relations between facts. Poincaré defines it as a system of relations. It avails itself of two methods for discovering facts and relations, simple observation and that more refined and exact type of observation, known as experiment. I do not include the process of developing the im-

¹⁴A. N. Whitehead, *Science and the Modern World*.

plications of even fairly well established hypotheses, useful as this is for directing observation and experiment; for example, spectrum analysis made it highly probable that the element Illinium existed, but it was established as a fact only by experiment. Its use of generalization, and resort to observation and experiment to test them, requires no discussion. Its chief concern is no longer with the classification of facts on the basis of assumed essential characteristics, but with the relations between them. Its ideal is the formulation of those relations in quantitative terms, which requires a considerable equipment of measuring units, although the degree to which the different sciences approach this ideal varies greatly. To the extent, however, that it is realized do we obtain not only a statement that a relation exists but one that further tells us something quite definite about its character. A biometrician, for example, who is interested in discovering whatever correlation may exist between body length and the length of particular body structures hopes ultimately to be able to express it in a mathematical formula. There exist similar trends in the social sciences such as sociology and political science, in which the conception of correlation is tending to supplant that of cause and effect. Hence the importance in those fields of statistical analysis which is nothing but a technique for arriving at generalizations.

The questions are to what extent do the facts with which law deals lend themselves to these methods, and what is involved in their use. Since the aim is to discover relations between facts, the first requisite is to select the facts whose relations, if any, are to be investigated. The possible choices here are practically unlimited. The facts may be the variations of two legal rules of the same system during an historical period; or the relations between institutions in one system and their inter-relation in another. Examples could be multiplied almost indefinitely. The present demand for a science of law comparable in method and aim to other sciences does not, however, have reference to investigations of such data. Its primary interest is in the inter-actions of legal data in the narrower sense and non-legal data. As such it is concerned both with the influence of non-legal factors in shaping the content of law and with the results of legal data upon non-juridical elements in our experience. An example of the former is the relation between the economic opinions of judges and their interpretations of the due process clause as a limit on the substance of legislation, an illustration of the latter is the relation between anti-trust laws and the maintenance of a competitive economic order

These are problems that are theoretically amenable to the methods of science in so far as their solution should be based on inductive studies. It is unnecessary to discuss its methods, but it may be remarked that the present stress on quantitative expressions of relations in the social sciences makes it quite probable that statistical analyses will constitute an important part of the technique employed in these fields. The degree of refinement required in our inductive investigations will depend upon whether we wish to establish merely the existence of a relation and its direction or also its amount. In most cases the former is sufficient for our purposes. What we are after is not so much an efficient tool for prediction as information that will help us to guide our actions intelligently. The science of law in this sense can be useful without becoming one of accurate measurements. Take, for example, the problem already mentioned of the effect of anti-trust laws upon the maintenance of competition, we wish to know this not because our knowledge will enable us to predict the future course of legal development or that the observed relations will continue, but rather because it will help us to decide whether a means that we have adopted to secure a postulated end is in fact proving effective, in order to guide us in deciding whether to continue or abandon it. Our decision will undoubtedly be affected by our belief as to whether the observed relation will continue, and in that connection we may use the generalization as a basis for a prediction, but that is only incidental to another more immediate and direct purpose. The fact that our purposes can be generally realized without any very definite knowledge of the amount of relationship between the data being studied does not, however, mean that we can dispense with the use of whatever exact and quantitative methods are available for determining the existence of the relation and its direction. That is a matter that goes to the correctness and adequacy of the generalizations in which we state those relations, and is, as far as we employ statistical methods, a question of statistical theory beyond the scope of this discussion. We must, in any event, recognize that we are dealing in probabilities, not certainties, and that quite frequently we can only get at the fact we are interested in indirectly by measuring some related quantity. It would, for instance, be practically impossible to directly measure competition, it may be possible to get at it through such facts as percentages of supply controlled by the different units of supply, consolidations of prior independent units, and so forth. Science of law in this sense is quite possible and has probably always ex-

isted in some form. It is preferable to both the deduction of such relations from a priori premises and the dogmatic assertion of assumptions as proven facts, but is, and will probably continue to be, an imperfect tool of limited value. It must be used with a lively consciousness of these limitations if it is not to engender a new dogmatism as questionable as that which it aims to replace.

The expression "science of law" sometimes seems to denote a quite different theory. It is assumed that by the employment of the methods of science, by which observation and induction appear to be intended, we can discover the ends society should strive to realize. The data to be thus studied are the facts of our experience, particularly our social experience, and the interactions of legal and non-legal phenomena which have just been discussed. This view is frequently associated with the adoption of the philosophy of Pragmatism and the acceptance of the views of Professor Dewey, stated particularly well in his *Essays in Experimental Logic* and his *Experience and Nature*. The difficulties of this position have already been stated in discussing Jurisprudence as philosophy. It is primarily a theory as to how we are to determine the values that law should aim to realize. It has in it an element of truth in so far as it directs attention to the fact that the ends actually postulated have their basis in the facts of that experience which it proposes to investigate, and that these are modified in time by our interpretations of prior experience while experimenting with other assumed ends. Its emphasis on the importance in that connection of the observed limits within which individual and group actions occur is a wholesome factor in excluding the extremely arbitrary from our hypotheses. Its stress on their developing character is a force making for correct critical judgments on assumptions that might otherwise tend to be conceived as fixed and eternal. It is preferable as a method for deciding what assumptions we are to make as to the ends of law to their derivation by a priori logical processes. If that is all that is intended, it is a move in the direction of a more intelligent approach to the problem of ends. If, however, it claims for its results any great measure of that high degree of probable correctness that we attach to the results of the method in the physical sciences, it is creating an illusion. There seems to be, moreover, considerable vagueness in defining just what is meant by the method in this connection. It will have to make thorough investigations of the assumptions that underlie its use of these methods in these matters, and much remains to be done in the

way of making explicit its assumptions as to the nature of human conduct. Until then it is almost impossible to formulate any more definite critique of it. It has not yet been established that it is for science to determine our ends, although that is a factor in the process whose exact contribution has never been satisfactorily measured.

It is frequently stated that law must become scientific. What is meant is seldom, if ever, explicitly defined. It is one of those expressions that it is quite proper to use uncritically in this scientific age. The time seems opportune for giving this formula at least some meaning. It frequently seems to mean that the law should accept the results of scientific research in those fields that directly touch on those spheres of conduct with which law is concerned. If, for example, a definite correlation should be established between certain objectively ascertainable data and degrees of mental or moral responsibility, the demand is that the law shall avail itself of that knowledge whenever the legal quality of an act turns on those factors. This is within limits a perfectly justifiable demand. But it sometimes denotes a much more extreme position. Law is at times accused of being unscientific merely because it refuses to adopt the latest unproved hypotheses of such quasi-sciences as sociology and psychology as the basis for its action. It has been suggested, on the basis of a completely psycho-analytic assumption, that every judicial opinion is necessarily the justification of the personal impulses of the judge in relation to the situation before him, and that their psycho-analytic treatment would yield abundant results.¹⁵ That result in the case actually analyzed in the article referred to was the discovery by inference of a skeleton in the judicial closet. There is also a tendency in some quarters to reproach the law for not adopting a thorough-going behavioristic point of view. It seems rather extreme to accuse the law of being unscientific solely because of its refusal to embrace such hypotheses at present, and this independently of their ultimate validity or invalidity. Bertrand Russell states in the *A. B. C. of Relativity* that the question of the nature of an electron is not answered when we know all that mathematical physics has to say about the laws of its motion and of its interaction with its environment, so too there may be phases of human conduct of vital concern for law that are not completely disclosed in a knowledge of its physiological accompaniments. If

¹⁵T. Schroeder, *The Psychologic Study of Judicial Opinions*, 6 Cal. L. Rev. 89.

law can become scientific only at such a price, it is wise in choosing to forego the prestige of such description of its character. The demand that law become scientific has therefore, both a legitimate and a doubtful meaning, and it is only reasonable that those who make it should indicate clearly what they mean by it in order that others may fairly appraise their claims.

The preceding discussion has been evoked principally by a feeling that the dangers of dogmatism and obscure thinking are very real ones in our consideration of those general problems concerning law with which Jurisprudence deals. They are due primarily to the uncritical use of terms, phrases and ideas. The result has been an incongruous blending of hypothesis and fact which may be quite an effective device for enlisting our emotions on behalf of approved values but is scarcely likely to furnish an intelligent guide for choice and action. The remedy lies in a thorough and critical examination of our thinking in these fields. The claims of those who contend for a philosophy of law or a science of law cannot be adequately appraised until those conceptions have been sufficiently definitized to furnish a basis for intelligent discussion. Divergent views on such matters are not fatal if each is conceived and expressed with sufficient definition to enable others to understand clearly what is meant. Hohfeld has shown the importance of an accurate and carefully defined terminology in legal analysis; something similar is required for the other general legal problems. But that alone is insufficient. Our chief difficulties lie not in an inability to frame proper definitions or to agree upon the labels to be used in our discussions, serious as these sometimes are, they lie rather in an inability to give our conceptions that definiteness of outline essential to intelligent thinking, and these cannot be wholly overcome by even the most accurate and universally accepted set of labels. Lack of accuracy in definitions can and does raise additional difficulties, but exactness in that matter will not alone resolve our problems. These go beyond an inability to agree on a terminology. No amount of quibbling about definitions can save us from the consequences of an obscure understanding of our problems. Our thinking must therefore be closely analyzed in order to discover its assumptions, whether these occur in dealing with such problems as the ends of law or such a question as what is involved in the attempt to make law a science. To present our thinking on these problems as based on assumptions and hypotheses is not to condemn it to futility, but merely to

demand a recognition of its limitations. The absolute is beyond our reach, but our choice is not between believing everything and doubting everything, there is the alternative of intelligent and critical thinking but its value depends on being conscious of its limitations.