CONCERNING THE RELATION OF LOGIC TO LAW*

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QUESTIONS CONCERNING the relation of logic to law have been of perplexing concern to legal theorists, jurists, and others seeking to understand and make intelligible the basic structure of the law. The problems which have arisen concerning their relation have been due largely to a failure to clarify conceptually the nature of the "legal logic". The purpose of this article is both to explain how some of this confusion concerning the relation of logic to law arose, and to introduce certain distinctions as a way of clarifying their relation.

I

Very broadly speaking, and with some notable exceptions, the general legal theory which prevailed from the time of Blackstone until the Twentieth Century treated the law as a coherent and complete rational system.[1] It was thought to contain legal rules, principles, standards, maxims, by the application of which one could deductively arrive at the appropriate decision in any given case. The rules and the principles were sometimes conceived as eternal and unchanging natural laws, at other times as the historically authentic "living law" embedded in the customs of society, and again as simply the valid enactments of the sovereign. These three representative views as to the source and criteria of the validity of legal rules are, respectively, natural law doctrine, historical jurisprudence, and legal positivism. While proponents of these varying views disagreed as to the criteria of valid law, there seems to have been general agreement in the view of the law as coherent and complete, and of the judicial process as essentially a deductive application of existing rules of law.

While this conception of the law may appear more fitting for a legal system based on a code developed by legal authorities consciously

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1. Frank, "A Sketch of an Influence," in Paul Lombard Sayre (ed.), *Interpretations of Modern Legal Philosophy: Essays in Honour of Roscoe Pound* 189 (1947).

seeking to systematize the law, it was also a widely held view of Anglo-American legal theorists.[2] These theorists were in some way able to reconcile this conception of the law with the fact that in Anglo-American law legal decisions are authoritative sources of legal rules and law grows, to a large extent, out of such legal decisions.

Law was even compared with mathematics and the judge was considered a kind of geometrician, which implied that judges' decisions were as bound by rules and as logically necessary as mathematical proofs.[3] In addition, legal decisions were justified as logically following from the application of those principles and rules. An important corollary of this view of the law was that there is as little justification for holding the judiciary responsible for judicial decisions as for holding mathematicians personally responsible for simply deriving what is implicit within a given mathematical system. The judge's function is simply to apply existing principles of law, whether such principles be conceived in terms of natural law, living law or valid legislative enactments. The judiciary does not make or create law, but rather finds it and applies it. Even cases in which a judge reverses a previous interpretation of the law are not to be characterized as changing the law. What is being done in such cases is simply to restore the "true" rule and remove its previous misinterpretation. That this "traditional theory" did permeate the conception of law until recently can be gathered from the reflections of an American lawyer.[4]

> In days that men of my generation can remember, it was popular for lawyers to assert that judges do not make the law; they merely find it as it already exists in law books and other source material of recognized authority. This notion went unchallenged and exercised a dominant influence over the practical life of the law.... That it is a myth is now generally recognized. The breakdown of its effect on the law, not yet complete but far enough advanced to be unmistakable, represents a major change in the climate of professional legal opinion within my generation.

II

It is perhaps fair to identify the beginnings of the systematic attack on the rational deductive model of the law in the United States with the

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2. *Id.* at 231 *et seq.*

3. Karl N. Llewellyn, *The Common Law Tradition: Deciding Appeals* 11 (1960): "The ingrained practice of that time was to write an appellate court opinion as if the conclusion had followed of necessity from the authorities at hand and as if it had been the only possible correct conclusion."

4. Margold, "Morris R. Cohen as a Teacher of Lawyers and Jurists," in Salo W. Baron, Ernest Nagel, and Koppel S. Pinson (eds.), *Freedom and reason: Studies in Philosophy and Jewish Culture in Memory of Morris Raphael Cohen* 36 (1951).

writings and legal opinions of Justice Oliver Wendell Holmes.[5] Holmes can best be understood in the context of the general "revolt against formalism" that occurred in various disciplines at the turn of the century. The influence on Holmes of the doctrines of evolution and pragmatism is unmistakable. Holmes was even a participant in the "Metaphysical Club" of C. S. Pierce.[6] His concern with legal history and the evolution and development of legal principles made it difficult for him to conceive the law as based on eternal and unchanging rational principles. His pragmatic concern with the operative effects and consequences of legal doctrine is clearly expressed in his famous address, "The Path of the Law."[7]

What constitutes the law? You will find some text writers telling you that it is something different from what is decided by the courts of Massachusetts or England, that it is a system of reason, that it is a deduction from principles of ethics or admitted axioms or what not, which may or may not coincide with the decisions. But if we take the view of our friend the bad man we shall find that he does not care two straws for the axioms or deductions, but that he does want to know what the Massachusetts or English courts are likely to do in fact. I am much of his mind. The prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law.

It is this concern with the actual consequences and operative effects of legal doctrine, as opposed to the mere formal normative content, that becomes the central concern of the movement called "legal realism." Professor Max H. Fisch has even suggested that, historically, Holmes's "prediction theory" may have been more than an application of pragmatic principles to law, and that pragmatism itself arose as a generalization of the prediction theory of the law.[8]

Holmes, in addition to pointing out the need to examine the actual operation of legal rules, emphasized the importance of values in judicial decision-making. He stressed the need for weighing competing values in the judicial process, and recognized the role played by unarticulated values in arriving at judicial decisions:[9]

The language of judicial decision is mainly the language of logic. And the logical method and form flatter that longing for certainty and for

5. Mention should be made of Nicholas St. John Green, who exercised some influence on Holmes. See Philip P. Wiener, *Evolution and the Founders of Pragmatism,* ch. 7 (1949). See also Frank, "A Conflict with Oblivion: Some Observations on the Founders of Legal Pragmatism," 9 *Rutgers L. Rev.* 425-63 (1954).

6. Wiener, *op. cit., supra* note 5, at 173-74.

7. Holmes, "The Path of the Law," 10 *Harv. L. Rev.* 460-61 (1897).

8. Fisch, "Justice Holmes, The Prediction Theory of Law and Pragmatism", 39 *J. Philosophy* 94 (1942).

9. Holmes, "The Path of the Law", 10 *supra* note 7 at 460, 465-66.

repose which is in every human mind. But certainty generally is illusion, and repose is not the destiny of man. Behind the logical form lies a judgment as to the relative worth and importance of competing legislative grounds, often an inarticulate and unconscious judgment, it is true, and yet the very root and nerve of the whole proceeding. You can give any conclusion a logical form. You always can imply a condition in a contract. But why do you imply it? It is because of some belief as to the practice of the community or of a class, or because of some opinion as to policy, or, in short, because of some attitude of yours upon a matter not capable of exact quantitative measurement, and therefore not capable of founding exact logical conclusions.

It is this emphasis on values that one can find elaborated and systematized in "sociological jurisprudence," the companion movement of legal realism. Although Holmes was not himself a systematic legal philosopher, he exercised a considerable influence on the movements which have characterized much of contemporary American jurisprudence.

If it now appears self evident that legal decisions do not merely involve logical processes of applying existing legal rules, it is partly because of the influence of Holmes. Subsequent legal theorists, while disagreeing on many points, joined forces in rejecting the traditional theory of law. Whatever be the distinguishing characteristics of sociological jurisprudence and legal realism, writers such as Roscoe Pound and Julius Stone as well as Karl Llewellyn and Jerome Frank are not one on this point. Philosophers such as Morris R. Cohen early attacked what was called the "phonograph theory of law," and Felix S. Cohen forcefully and repeatedly argued against the conception of law as a self sufficient and completely autonomous discipline. Justice Cardozo, both in his writings and legal opinions, clearly exhibited the creative role a judge can play in the interpretation and application of law. The dramatic action of the United States Supreme Court in reversing its position on various constitutional issues left little doubt about the potentially creative role of the judiciary. In a way, the acceptance of the "Brandeis brief" as a legitimate source of legally relevant material symbolized the gradual acceptance, even among the judiciary, of the idea that the law is not, a "closed" and self sufficient system.

III

While the traditional view of the judicial process was apparently widely expressed, one can perhaps raise questions as to how literally it was meant. In a way, it seems implausible that anyone with the least familiarity with the judicial process could have conceived it in such a simple manner.

While the traditional theory may appear more plausible in a period characterized by relatively stable conditions, as opposed to one in which great changes and developments are clearly evident, it is still difficult to see how one could literally believe the law to be a coherent and complete system, and the judicial process to be only a logical application of existing rules of law. Professor Cooperrider has made the plausible suggestion that the traditional theory was not intended as an accurate descriptive account of the judicial process :[10] '... I am also inclined to doubt that it is sound to think of it as a conscious attempt at scientific description. It did, however, represent a view which at one time was generally held as to the *attitude* which the judge should bring to his task : that it should be his *objective* to deal with the case before him in that way which was indicated by an interpretation of existing authorities, rather than in that way which seemed to him on the facts to be the fairest or most desirable from a social point of view. It called for the subordination of his judgment to that of the collectivity of his predecessors, for a primary reliance on a reasoned extrapolation of accumulated experience.' According to this interpretation, the traditional theory represents more a practical regulative *ideal* of how the judicial process *ought* to be conceived by the judiciary than a theoretical analysis of its actual structure and functioning.

If this analysis adequately explains why the traditional theory was, and perhaps to some extent still is, deeply embedded in the legal consciousness, it of course does not constitute a justification for it. Part of the message of contemporary jurisprudence is that the judge does, to some extent, unavoidably exercise a creative "legislative" choice, and that he has the responsibility to exercise it in an intelligent manner. To conceal the inevitable elements of discretion involved in the judicial process behind a theory which denies their existence cannot contribute to a responsible use of that discretion. The attack on the traditional theory has been valuable and important in making us sensitive to the variety and complexity of values involved in the judicial process. It has also led, unfortunately, to some confusion concerning the relation of logic to law.

IV

The attack on the conception of law as a coherent and complete system has often shifted into an attack on logic itself. One can find numerous instances in legal literature and legal opinions in which logic is deprecated and its value questioned. One of Justice Holmes' most

10. Cooperrider, "The Rule of Law and the Judicial Process", 59 *Mich. L. Rev.* 505 (1961).

famous remarks has often been employed by those objecting to logic in the law:[11]

> The life of the law has not been logic : it has been experience. The felt necessisties of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow men, have had a good deal more to do than the syllogism in determining the rules by which men should be governed.

While this statement is perhaps susceptible to more than one interpretation, Holmes can be construed as making two points which are essentially sound and true. First, that the changes and development of legal rules and principles cannot be fully explained and made intelligible in terms of purely logical analysis of legal concepts. Second, that such logical analysis is not a sufficient tool for rationally deciding legal controversies.

Whether Holmes intended it or not, his remark has been repeated in many contexts that import a sharp antithesis between "logic" and "experience." Holmes himself appears to adopt this interpretation elsewhere when he says :[12]

> ... the whole outline of the law is the resultant of a conflict at every point between logic and good sense—the one striving to work fiction out to consistent results, the other restraining and at last overcoming that effort when the results become too manifestly unjust.

This antithesis between logic and experience is developed at great length by Professor Max Radin in his Storrs lectures.[13] Radin contends they are two different methods for resolving legal problems. He asserts that, if a conflict should arise between them, we should be guided by experience and not logic. Radin repeatedly attacks what he interchangeably calls the mathematical, logical, and rational method in the law. His attack is more than an attack on treating law as a complete system. Radin sometimes speaks of a choice between decisions based on immediate experience independent of all conceptual analysis, and one based on such analysis. He implies that immediate judgments are more authentic and reliable.[14] Radin often conceives of logic as having a specific and definite content, instead of being a highly formal discipline concerned with general principles of valid reasoning?.[15] He appears to identify logical method in the law with the method of extending the application of legal rules and standards on the basis of analogies. To many legal theorists,

11. Oliver Wendell Holmes, *The common Law* 1 (1881).
12. Oliver Wendell Holmes, "Agency", in *Collected Legal Papers* 50 (1920).
13. Max Radin, *Law as Logic and Experience* (1940).
14. *Id.* at 97-98.
15. *Id.* at 111.

logic becomes identified with reasoning by analogy, and criticisms of logic are often criticisms of procedures for deciding legal issues on the basis of analogies alone. Such theorists characterize the decision not to apply an analogy, when experience indicates it is not justified, as a choice of experience over logic.

Judge Cardozo, in a more refined analysis, also distinguishes the logical method of developing legal rules from other methods:[16]

> The directive force of a principle may be exerted along the line of logical progression; this I will call the rule of analogy or the method of philosophy; along the line of historical development; this I will call the method of evolution; along the line of the customs of the community; this I will call the method of tradition; along the lines of justice, morals and social welfare, the *mores* of the day; and this I will call the method of sociology.

Here again, in case of conflict, logic is to be sacrificed or subordinated to some more important value. The difficulty with this type of analysis (an analysis adopted by many legal theorists) is that it assumes, and fails to explain, how logic is a method with independent content. But is the logical or analogical method an independent method capable of being compared with these other methods? Cannot analogical development take place on the basis of the other three methods or any other principle of legal development? Cardozo in a later work recognizes that the method of analogical extension does not, in itself, represent an independent method.[17]

No doubt there is ground for criticism when logic is represented as a method in opposition to the others. In reality, it is a tool that cannot be ignored by any of them. The thing that counts chiefly is the nature of the premises.

Many legal theorists and jurists seem to have shifted from the sound proposition that logic is not a sufficient tool for rationally deciding cases to the questionable assertion that logic is not a necessary tool.[18] Perhaps one can avoid the sharp antithesis between logic and experience by saying, "The life of the law is not logic, but experience as structured by logic." The problem remains, however, of clarifying the different conceptions of logic and explaining how they are related to the law.

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16. Benjamin N. Cardozo, *The Nature of the Judicial Process* 30-31 (1921).

17. Benjamin N. Cardozo, *The Growth of the Law*, 62 (1924).

18. Cohen, "My Philosophy of Law", in *My Philosophy of Law: Credos of Sixteen American Scholars*, 39 (1941): "Once we get rid of the false assumption that experience and logic are mutually exclusive, we can express the precise truth of our dictum by saying that logic is necessary but not by itself sufficient for the human experience we call law."

V

That there has been a lack of clarity in the way many legal theorists and jurists speak of logic has not gone unnoticed, but few attempts have been made systematically to unravel the distinctions which are meshed within this concept. A study of legal reasoning by O. C. Jensen, which discusses the relation of logic to law, can be used here as a point of departure for further analysis of the problem.[19]

In response to the many charges that logic is responsible for various kinds of unjust decisions, Jensen points out that deduction plays a minor and rather subsidiary role in the judicial process. The crucial issues in legal reasoning, he maintains, revolve around issues of classification, and generally such issues cannot be resolved by logic. There is valuable insight when Jensen argues the importance of classification in analyzing legal decisions.[20] Legal decisions can often be looked upon as processes of enriching the content of legal rules by making the range of their application more determinate, rather than simply deductive applications of existing rules. Legal theorists often fail to distinguish questions of classification from questions of logical inference, and include a discussion of both under the undifferentiated notion of logic. Jensen performs a valuable service by clearly showing the differences between the two processes.

He further points out that if there are abuses in legal decision-making, they cannot be ascribed to logic.[21]

Formal logic cannot be blamed for these disasters, for it simply shows the formal implications of a statement. It does not say that these implications were necessarily intended by the author of the statement or that the implications should be acted upon if objectionable, *i.e.* that they should be accepted as anything more than implications.

Clearly, from this point of view, one cannot ascribe any responsibility to logic for any kind of legal decision, good or bad. In this sense, logic does not "force" or "compel" any particular legal decision. The problem which remains, however, is to discover the concept of logic held by legal theorists who feel that it is a determining force in arriving at legal decisions. In this respect, Jensen's account offers no assistance. He simply points out that legal theorists misunderstand the nature of logic.

That Jensen does oversimplify some of the issues can be seen in his criticism of Julius Stone. Stone speaks of an "abuse of logic," that consists of making logical deductions from existing legal propositions

19. O.C. Jensen, *The Nature of Legal Argument* (1957).
20. *Id.*, ch. 1.
21. *Id.* at 9-10.

and assuming without further analysis that such deductions are law.[22] Jensen argues that Stone is contradicting himself when he speaks of abuse of logical deduction:[23]

> This will not do. If two premises are unobjectionable, as regards either their truth or their legal soundness, and if the conclusion follows logically from them, it too is unobjectionable; for it simply brings out what is "contained" in the premises. Stone must either find fault with the premises he gives, or with the process of derivation, or give up his objection to the conclusion, or he must admit that his syllogism misrepresents the legal argument. To do otherwise is flatly to contradict himself.

Does it follow, as Jensen maintains, that if the conclusion is "contained" in the premises, and the premises are unobjectionable, then the conclusion must also be unobjectionable? Disregarding the problem of what "unobjectionable" means, there is a fatal ambiguity in the notion of "contained" in the premises. Logical[y, a conclusion brings out what is "merely" implicit in the premises; psychologically, the drawing of a particular inference may be a real and genuine discovery. It is possible to discover legal consequences implicit in a legal rule which are objectionable, and which were not known at the time the rule was created.

VI

The attack on logic and formalism in the law is more than on attack on a theoretical conception of the law as a complete normative system. It is an attack on the purported practical consequences of conceiving the law in this manner. The cries of "mechanical jurisprudence", "arid conceptualism", "transcendental nonsense," as well as "abuse of logic," are essentially attacks upon the use of legal concepts and rules in an inflexible way without adequate regard for their propriety. The attack emphasizes that legal decisions are *judgments*, and not merely logical processes for deriving inferences.

When legal theorists complain about abuses of logic in the law, they are usually complaining about decisions that are somehow not considered fitting. One can classify five typical situations where this charge is frequently made : (I) where resort is had only to a fixed set of existing legal rules in resolving a controversy, when it would have been better to introduce a new rule; (2) where a rule that is sound in general is held to

22. Julius Stone, "The Provincc and Function of Law: Law as Logic", *Justice and Social Control*, 196 (1950).

23. Jensen, *supra* note 19, at 15. Jensen's criticism of Stone revolves around thc interpretation of a particular case, *Rose* v. *Ford*, [1937] A.C. 826, which Stone maintained exemplified an abuse of logical deduction. For our purposes what is improtant is not the correct interpretation of this case, but whether such an abuse can exist.

apply to all situations that literally fall within its meaning, or otherwise stated, where a literal application of the rule fails to carry out the underlying purpose of the rule; (3) where a decision is based on an analogy without regard to whether the analogy leads to a fitting result; (4) where the circumstances of the particular case arouse considerable personal sympathy but no attempt is made to "bend" the application of the legal rule in order to arrive at an equitable result; (5) where due to changing conditions the original purpose of the rule can no longer be fulfilled or where there is a changed attitude toward fulfilling this purpose, the rule is still vigorously applied without attempted modification. This last situation in which legal rules lose their connection with "social reality" is sometimes called "arid conceptualism."

The diverse kinds of criticisms of logic by legal theorists can only be made intelligible in terms of some material sense of legal logic. Jensen was clearly right in saying that formal logic is not responsible for the kinds of decisions made by judges. But the real question is whether there is some kind of material logic which *does* "compel" and "force" judges to make decisions in a particular way. If logic be conceived as a set of principles in terms of which we evaluate the validity of arguments, the question remains whether the law provides a set of principles in terms of which we can evaluate the validity of legal inferences and arguments. If there are such standards of legal validity they would, in a sense, force and compel the kinds of decisions made by judges.

VII

One can distinguish three types of evaluations of legal decisions in terms of their soundness and validity. We shall call them procedural validity, substantive soundness, and extra-legal fittingness. To call a legal decision procedurally valid is simply to indicate that the decision was arrived at by a court having authority to adjudicate the matter, and that its decision has not been reversed by a court of higher authority. In this sense, whatever is actually decided is by definition legally valid, irrespective of whether the judge has made mistakes in the characterization of the facts of the case or in the interpretation of the law that is deemed applicable. All that is required is some minimum state of affairs, such as a "decision" of a "court" having "jurisdiction" and not "reversed" by a "higher court." One can perhaps state the minimum requirements in terms of what is needed to have a decision entered on the judgement rolls so as to be legally entitled to enforcement. This procedural sense of validity presupposes that the legal system is generally effective, *i.e.* capable of enforcing its judgments.

Legal evaluations are usually made in a more material sense. Legal theorists often seek to evaluate the soundness of a legal decision in terms

of the existing legal rules and principles which are assumed to be "the law." Thus, a legal decision can be substantively unsound because it is inconsistent with enacted statutory provisions, established precedent, or general legal principles, and still be a procedurally valid decision.

The third kind of legal evaluation concerns the fittingness of a legal decision in terms of some extra-legal standard. A legal decision may be substantively sound in terms of legal rules and principles, and yet not be a fitting legal decision in terms of some other standard. For examples, it would be a legally sound decision in many jurisdictions for a person found guilty of first degree murder to be sentenced to death. If the death penalty is mandatory, it would be legally unsound for the judge to give any other sentence. However, the sentence may not be fitting in terms of some extra legal standard that disapproves of capital punishment. In fact, the judge himself may personally subscribe to such an extra-legal standard. Yet he can recognize that what is legally sound does not necessarily have to conform to his own personal standards.

A legal system can authoritatively adopt some extra-legal standard and hence make it part of the legal standards of evaluation. Thus, those jurisdictions which have abolished capital punishment have authoritatively adopted standards of legal validity which previously were extra-legal. Clearly the standards of legal evaluation are in many ways influenced by the values held by various groups in society. Interactions in which they mutually influence each other are constantly taking place. Despite this, it is necessary for purposes of legal analysis to recognize that logically they constitute two different kinds of evaluations. The test by which we distinguish them is the basis or grounds of the evaluation and not the motive for making the evaluation. If the critic bases his criticisms on legal principles and standards, it is a legal evaluation, despite the fact that his motive for making the judgment may be based on his extra-legal beliefs about what is socially desirable. There is clearly a difference between saying capital punishment is not legally sound because it is not consistent with legal rules governing punishment and saying that it is not fitting in terms of ethical or social principles. It is true, however, that in areas where the legal rules and standards are vague it is not always easy to determine whether an evaluation relates to legal soundness or extra-legal fittingness or both.

It is the legal standards of procedural validity and substantive soundness which constitute the material legal logic with which lawyers, jurists and legal theorists are concerned. It is the law as a system of authoritative rules, principles, standards, doctrines, received ideals, and canons of interpretation that make up this material logic. These are some of the standards by which the legal soundness and validity of a decision are measured.

Logic is concerned with the general and formal principles of valid reasoning. Legal logic is correspondingly concerned with the particular principles of legally sound and valid reasoning and decision-making. The whole body of authoritative legal material constitutes a complex network in terms of which legal inferences can be made and evaluated. It is this material sense of legal logic that underlies most of the remarks of legal theorists concerning the relation of logic to law.

When legal theorists say that the law is not logical, one of the main things they mean is that the law is not a wholly consistent and complete system. A legal system is open-textured in the sense that new rules and principles can be created and old ones changed. In addition, it is often the case that competing rules have applicability to the same set of facts. To say that law is not wholly logical is a way of saying that judges are not merely tools for deriving legal conclusions. Judges exercise a creative function in various ways. The basic problem, is one of setting up rational standards to guide judges in exercising their creative functions. This is a fundamental problem for normative jurisprudence.