defenses cannot be dismissed as self-serving if corroborated by other facts, will make every effort to supply substantiating evidence even if it might be inadmissible in court; for the agents will not reject the taxpayer's contentions unless the report shows that they are completely groundless or have been discredited by factual investigation.

This book is written in large measure as a practical handbook, and its worth is illustrated by the fact that in a recent trial in which the reviewer participated, counsel for both sides quoted from it in the courtroom in connection with legal arguments. The chapter on Trial of a Criminal Tax Case would serve as a typical pre-trial memorandum. Some of the problems and approaches are outlined in the form of questions and answers of witnesses.

But the effort to achieve practical usefulness has not been at the expense of adequate concern for conceptual considerations, and the frequent use of examples gives fuller meaning to the discussion of the many difficult legal questions which arise in tax fraud cases.

The use of indirect methods of proving evasion, such as net worth increases, expenditures, and bank deposits, is the subject of a separate chapter. While other evidentiary problems encountered in tax cases, as well as constitutional rights based on the Fourth and Fifth Amendments, are not exhaustively discussed, they are at least sufficiently presented to indicate the basic principles which apply.

The textual discussion is followed by a detailed appendix which summarizes the various criminal and civil penalties which might be applied in fraud cases, and by a topical index. Unfortunately, there is no table of cases. This is one serious handicap in using the book in the courtroom, where time may not permit the use of the index or table of contents in locating the discussion of a particular case which opposing counsel has just cited. Since the volume is equipped for a pocket supplement, it is hoped that a table of cases for the bound volume, as well as for the supplement, can be subsequently provided.

Mr. Mortenson has combined practical knowledge and the judgment born of experience with good scholarship in a book which is a good working tool as well as a source for research in greater depth.

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Professor Beutel's book is one of the most recent additions to a long list of calls to arms that have appeared over the last fifty years in the fight to persuade people to make laws scientific. The general theme of this book is not a new one
briefly, the theme is that since law is a means of social control and is thus concerned with means-end problems and, since the most efficient solutions to means-end problems are those derived from the use of the scientific method, therefore, to formulate the most efficient laws, we must base them on scientific knowledge. This involves the evaluation of existing laws and the formulation of new laws on the basis of appropriate scientific knowledge that is already available and the gathering of such scientific knowledge where it does not already exist. This is "[a] science of law based on a rigorous application of the scientific method [which] should be devoted to the study of the phenomena of law-making, the effect of law upon society and the efficiency of laws in accomplishing the purposes for which they came into existence" (p. 18), and which Professor Beutel calls "Experimental Jurisprudence."

The book is divided into two parts. Part I is primarily concerned with an explanation of the procedures of experimental jurisprudence, a discussion of some of the obstacles to its use by law-making bodies and the presentation of some examples of government regulations based on the methods of experimental jurisprudence. Part II is devoted to the presentation of five pilot research studies undertaken by Professor Beutel, as examples of the application of experimental jurisprudence techniques to problems of law. The first four of these pilot studies deal with laws in Nebraska governing the sterilization of barbers' instruments, the use of tobacco by minors, the standard size of bricks and the plumbing code, while the fifth study is considerably more detailed and comprehensive and deals with the bad check laws in Nebraska. Each of these studies includes an investigation of the extent to which the law in question is enforced, an examination of the underlying assumptions involved in the law in the light of scientific evidence, an evaluation of the effectiveness of the law as a means of achieving the ends which it is assumed the law is designed to accomplish and some suggestions for amending the law. Since Professor Beutel takes great pains to point out with respect to the five studies that "there is no pretext that this is a perfected bit of research ... the methods of social research adopted are therefore subject to much refinement ... the results are in a sense only a larger pilot study ... the whole is set out here as a modest illustration of the possibilities of the application of Experimental Jurisprudence to the practical problems of law enforcement," it is hardly fitting for this reviewer to criticize the studies in terms of their lack of scientific rigour although, as the author himself apparently realizes, questions of this kind could be raised.

As we have pointed out, Part I includes an explanation of the procedures involved in experimental jurisprudence and these are conveniently listed as eight steps, as follows:

1. The nature of the phenomena which law attempts to regulate should be studied. In particular the social problem to which a specific law is directed should be carefully isolated and examined.
2. The rule of law or other method used to regulate the phenomena or intended to solve the social problem should be accurately stated.
3. The effect on society of adopting the rule should be observed and measured.
4. There should then be constructed a hypothesis that attempts to explain the reasons for this reaction.
5. This description, then broadened to apply to other analogous situations, might be considered a jural law that describes or predicts results which would occur on application of a similar regulatory law to similar problems.
6. If analysis shows that the law is inefficient, there could then be suggested new methods of accomplishing the originally desired result.
7. The proposed new law could be enacted and the process repeated.
8. A series of such adoptions of new laws and the study of their results might throw important light upon the usefulness of the underlying purposes behind the enactment, thus effecting a possible alteration in or abandonment of this objective, or in the long run, though this now appears doubtful, even induce a revision of our present scale of social and political ethics

It is understood, of course, that the various studies and investigations referred to in several of the above steps should be scientific. To this reviewer at least, a program set forth in such general terms as those outlined above is perfectly acceptable. In fact, to reject the goal of rationality in ordering social relations is, today, tantamount to being against virtue and for sin. But, while most are in favour of virtue in general and yet violently disagree as to what is the virtue in a specific instance, so one can agree with Professor Beutel's general position that the application of scientific method to problems of law is a laudable objective but, at the same time, most emphatically disagree with him when he explains in detail what he means by scientific method and the way in which it should be applied to problems of law.

Besides explaining the procedures of experimental jurisprudence, this first part of the book discusses what the author conceives to be the major obstacles to the wholesale application of the techniques of experimental jurisprudence to problems of law by law-making bodies. Briefly, these are:

1. The mistaken view that the formulation of laws are policy decisions which involve disputes over "values" which it is not possible to resolve by the use of scientific knowledge alone. Thus, for these people, experimental jurisprudence cannot, by itself, formulate laws; an additional component is necessary called a "value judgment" which is different from a scientific judgment. At best, therefore, scientific information can only help us reach a policy decision and it cannot make it for us.

2. The second obstacle to the implementation of the experimental jurisprudence program is our system of government and law. Says Beutel:

The democratic process which is supposed to control our present form of government whatever its good features may be, is not adapted to social change involving the adoption and use of scientific ideas. The principal reasons why democracy acts as a barrier to the application of scientific techniques to law-making are:
a) that both legislative and judicial policy decisions are influenced by public sentiment which is irrational because the public cannot possibly understand the complicated scientific knowledge which must be used to make rational decisions.

b) that both legislative and judicial law-makers, while perhaps somewhat better able to understand scientific material than the general public, are subject to influence by selfish pressure groups and, in any case, they do not have the equipment or facilities to secure the necessary and appropriate scientific information which would enable them to make rational policy decisions [p. 73].

What are Professor Beutel's suggestions for overcoming these two obstacles? With respect to the first, it sometimes appears as if he is advancing the argument that, in reality, it does not exist, i.e., that in fact the policy decisions necessary in formulating laws do not involve "value judgments" because there is no such thing as a value judgment, and that therefore science alone can solve problems of law. At other times, it seems as if, while denying the necessity of making value judgments in formulating law, Beutel actually brings it into his analysis, by the back-door as it were, by calling "values" by a different name, e.g., "choices" or "demands." He suggests that experimental jurisprudence would measure these "choices" in the community, regard them as legitimate ends and restrict its own investigations to the determination of the most efficient means of achieving these ends chosen by the community. In support of the first position, Beutel examines various concepts of "value" including "inherent value," "subjective value," "objective value," "moral value," "instrumental value" and "valuation or evaluation process," for the purpose of ascertaining whether they have any useful meaning. He concludes:

[j]t appears then that the term 'value' serves no purpose in Experimental Jurisprudence. . . . [A] descriptive and experimental social science can do without the term 'value'. All that is necessary is to discover the actual condition of the interests of demands of people in society to expose the need for granting the demands which they make, and to choose the legal devices which will be useful for making possible the fulfillment of the desires represented by the choices, with the least social friction [p. 44].

Thus, "subjective value" becomes an individual's objective choice between two or more alternatives; "objective value" becomes the aggregate of the individual's choices in a social group; "moral value" becomes the basis on which these choices are made; and "instrumental value" becomes the choice through which another end or goal is achieved. Now, this procedure may make the term "value" more operational than a definition of the term which refers to subjective feeling inferred from overt behavior, and it may be, as Beutel suggests, that it is better to avoid the confusion associated with the term "value" and to use the word "choice," but this procedure does not, as Beutel also implies, solve the problem of "value judgments" or "choices" in relation to policy decisions, i.e., whether such choices can be made solely with reference to the relevant scientific information.

Following his discussion and rejection of the utility of the concept of "value,"
Beutel presents a three-fold division of "wants" with which the experimental jurist should work in formulating scientific laws, as follows: "demands," ("wants which are expressed in such a manner that they may be objectively stated"); "desires," ("human interests in things which may or may not be expressed but which the individual or group subjectively wants, craves or would if encouraged claim"); and, "needs," ("those conditions or things in the current state of society which, if present and effective, would cause the individual or society to function with the least friction and more in accordance with the natural order of his or its universe at that moment"). It will be seen that both "demands" and "desires" are in fact similar to the "values" (or "objective choices of individuals and groups" if Beutel prefers) which he previously discussed. "Needs," however, are different. "Needs," in Beutel's terms, include most importantly those laws which the experimental jurist determines are the most efficient means of achieving the ends ("demands") of the community—they are the "instrumental values or choices," but not necessarily those that people want or demand because they may want or demand measures that are not effective in securing the ends they desire and therefore they are not "needs" in Beutel's sense. So it would appear that, after rejecting the usefulness of the concept of "value" and suggesting that experimental jurisprudence need never concern itself with such things, Beutel brings them back again as an essential element to be considered by the experimental jurist, but with new names. We might add in passing that further evidence of confused thought on the subject of value appears in the following sentence: "The argument on an ethical basis... entirely disappears when the process is regularized and made legal" (p. 412).

Beutel recognizes that in present-day society different groups in the community have different and frequently conflicting "demands" and that the experimental jurist will have to make choices or judgments as to which should be supported by law. Can these judgments be made solely on the basis of the relevant scientific information? Here again Beutel appears to give two contradictory answers. He says:

Experimental Jurisprudence offers the means of discovering and measuring demands, desires and needs, provides a means for determining which ones should be satisfied, and can create a technique for choosing the devices best calculated to make the needed change [p. 46].

He then elaborates on the procedure:

In making these decisions, both the lawmaker and the jurist must take disclosed desires, demands and needs as they find them and work with them toward a proper reconciliation of all. Preconceived ideals of usefulness, ends, purposes and the like, necessarily have some effect on the lawmaker, but the jurist need only look at results.

For the present it seems that in weighing or measuring wants, each demand or desire should have a one-to-one ratio with every other desire and demand. Thus the unit for consideration would seem to be the single want of each person and not the person himself. Intensity of desires and demands and the numbers of people having
them, of course, must also be considered. For the present, the numerical or statistical basis seems useful. When needs are discovered, they should, of course, be given preference ahead of both demands and desires, but these latter two cannot be entirely ignored because there is probably a human need for satisfying demands and desires even though the things demanded are not needed and may not even be useful to the persons making the demands [pp. 53–54].

This suggests then, that the policy decision should be determined by a count of noses with respect to objectives or ends, and then the experimental jurist will formulate a law which will most efficiently achieve the end desired by the majority after an appropriate scientific investigation. However, an additional criterion for choice is provided:

[H]e must choose the law or course of action which he believes will be the most useful to accomplish the purpose of keeping the peace or satisfying the interests. . . . All that is necessary is . . . to choose the legal devices which will be useful for making possible the fulfillment of the desires represented by the choices, with the least social friction [pp. 43–44].

It would appear that Beutel thinks experimental jurisprudence escapes the value problem involved when making policy decisions by choosing the end desired by the majority and, by scientific investigation, selecting the most efficient means for achieving this end—bearing in mind the need to maintain internal peace in the society. But, of course, this is not a means of escaping the value choice, it is a way of making it! In other words, Beutel is recommending that the “ultimate values” are the wishes of the majority, internal peace, and lack of friction, and that these be used as the “absolute values” in terms of which the choice of “instrumental values” (or “needs” in Beutel’s sense) are made; one need hardly add that this solution is no more “scientific” than many other “ultimate values” put forward in opposition to this one.

It should be pointed out, however, that although the above stand receives the greatest support in the book under review, the author does sometimes claim a more limited role for experimental jurisprudence. At times, for example, the jurist is seen as only suggesting to statesmen and other policy-makers changes in the law which might better effectuate the policy for which it was created. Again, a more modest claim is made for the role of experimental jurisprudence when the author states:

Nobody should be prepared to argue that the solution of all moral, social and international problems are presently possible by the technique of Experimental Jurisprudence, but can it not be said that it is foreseeable that the ultimate projection of procedures here suggested may lead to a possible means of resolution of clashes of opinion which in the past have been settled only by brute force? [P. 36.]

And finally Beutel states:

In short, Experimental Jurisprudence, when properly applied, can now be expected only to test the efficiency of a law in attaining the particular ends for which it was
adopted and in turn can state the results which will follow various attempts to reach such ends. The data thus accumulated may throw great light on the ultimate usefulness of the objectives and the effectiveness of the means used to attain them [p. 55].

Up to this point, it will be seen that Beutel's position with respect to the role of experimental jurisprudence in the area of policy-making is not clear; he seems to reject the notion that policy decisions involve values and therefore to claim that experimental jurisprudence can formulate laws on the basis of scientific evidence alone, while at other times he takes a much more modest view and recognizes that choices between conflicting demands have to be made and admits therefore that experimental jurisprudence can only propose laws on an "if—then" basis; in other words, the experimental jurist requires some guidance as to ends, and his role is therefore limited to supplying information based on scientific study in the following form: "If" the law-makers want end x, "then" this law is the most efficient means of achieving it. Or, "if" the law-makers do x, "then" there will be certain consequences. However, to this reviewer, even this position assumes an over-simplified situation and raises serious problems which are not discussed in Beutel's book. For example, Beutel assumes that the majority of legislative and judicial disputes are of the simple kind where there is unanimity as to ends but alternative means are available. In fact, in the majority of legislative disputes, there is no such unanimity in any meaningful sense, and alternative means may be equally competent to achieve the particular end, but may have vastly different consequences in other areas. Professor Beutel continually cites scientific traffic control as an example of the use of experimental jurisprudence techniques in law-making, so let us illustrate this point by reference to an hypothetical issue in this area. Suppose there is an intersection where two people on the average have been killed each year over the past twenty-five years and suppose that by scientific investigation we can prove beyond a shadow of a doubt that the installation of a stop sign will reduce the deaths to only one a year. Even if there were complete unanimity among legislators and members of the community that the end of saving life was a "value" or "demand," would we as scientists be justified in recommending that a stop sign be placed there? And would this recommendation be scientific? Obviously not, for even such a simple situation may involve extremely difficult choices which cannot be made, at least at the present time, on scientific grounds alone. For example, the installation of a stop sign involves an economic cost in terms of materials for the sign, installation and maintenance, and the resources which would be used for this purpose could be used for other purposes. Perhaps the same amount of money used for say the provision of free drugs could save two lives, or perhaps it could be used to considerably improve the lives of those who are not killed at the intersection. This is, perhaps, a rather strained example, but it was chosen purposely in order to show that, even in what appears to be an extremely simple situation, there may still be difficult decisions to make. That we fre-
quently make such decisions without any qualms is true, but that we make them "scientifically" is not. (It might be pointed out parenthetically, however, that a similar dispute concerning the allocation of resources is in fact raised by many people who, while accepting both the value of certain social ends and the effectiveness of government regulation in achieving these ends, nevertheless decide that "bureaucracy" is too high a price to pay for the desired end and therefore demand that the community's resources be spent in other ways.)

A similar case where Beutel does not even appear to recognize the complexity of issues involved in a given legislative problem occurs in connection with the pilot study into the problem of the use of tobacco by minors. After presenting the results of the study, he states: "... but a number of burning scientific questions will remain," and then he lists them as follows:

1. Is smoking injurious to adults?
2. Is it more injurious to young people?
3. Is it progressively more injurious as the smoker's years decline?
4. At what age, if any, is smoking by minors so injurious that it should be prohibited because it endangers health or bodily or mental functions? [P. 207.]

The answers to these questions may be relatively easy to determine scientifically, but he neglects to include in his list other questions which are not quite so easy to answer scientifically. For example, if it is demonstrated that smoking is injurious to the minor's health, should we pass a law prohibiting it or should we leave this to parents to control? Does smoking by minors have negative consequences for society (as distinct from those for the individual smoker) and, if not, should there be regulation in such an area? If there are negative social consequences, is the social cost of the enforcement of the law justified by a greater saving by the elimination of the negative consequences? Does social control by law in such areas as this diminish the individual's power to make his own choices in other areas? And, if so, what are the consequences of this? And one could go on for a long time raising similar questions pertinent to the issue which are somewhat more difficult to answer than those mentioned by Beutel.

If this is true in relatively simple choice situations, then it will be seen that in disputes concerning such issues as private enterprise or public ownership, sales tax or income tax, strict or lenient divorce law, the scientific choice between competing proposals is an extremely difficult, if not an impossible, one to make. This is not to say that scientific information concerning the consequences of alternative means would not be of tremendous help in reaching decisions in these matters—with this we are in entire agreement—but this position is far short of that which Beutel appears to take throughout the major portion of Part I of his book.

In fact, one's worst apprehensions concerning Beutel's position with respect to the role of experimental jurisprudence are confirmed in the later chapters of Part I. As pointed out earlier, the second major obstacle to the implementation of the experimental jurists' program is the democratic form of government.
For reasons which are not clear to this reviewer, Professor Beutel discusses such concepts as "the state," "sovereignty" and "the law-maker or law-giver" in a chapter entitled: The Purposes of Law and Government: Relationship of Experimental Jurisprudence to Government, Lawmaking and Policy Decisions. Each concept, he concludes, is a "fiction." Specifically, he says that the state "is a fiction about which much real loyalty has been built," although he had pointed out previously:

[T]he term "state," in its modern sense, is a creation of the writers on philosophy and political science, sometimes used, as is the case in the United States, to designate a geographical portion of a larger federal government, again as a synonym for the ultimate power or sovereignty of a particular government. . . . [I]t is used, perhaps, as a collective noun to represent the powers and interests of the body politic as a unit distinguished from the powers and interests of the individual subjects of the government [p. 59].

Sovereignty is a "fiction" although the author also admits that "[i]t is sometimes used to describe the power of a person or group to change the rule or laws without any restraint or interference by others and without suffering any sanction for so doing" (p. 60). The lawmaker is a "combination of fact and fiction which usually designates that part of the governmental organization which enacts and creates laws" (p. 60). Beutel then goes on to identify specific lawmakers and to suggest that "the law-giving or law-making function has been delegated to so many agencies that the term as a unit has become a mere fiction" (pp. 60–61). (Emphasis added.) It seems odd to distinguish between "fictions" and "non-fictions" on the basis of whether the term is in the singular or plural. In fact, the use of the terms "fiction" and "fictional" throughout this chapter is very puzzling, especially when the author admits that these "fictions" have demonstrable consequences about which he has much to say.

However, it is fairly clear in the remainder of Part I of the book that Professor Beutel feels quite strongly that our judicial and legislative system hampers the onward march of scientific social control and he urges that it be replaced by a system which may be characterized as: "A Government of the People, By the Scientists, For what the People should want." Before proceeding further, let me say that, on this issue, as on the one discussed previously, Beutel's position is not consistently stated. For example, he speaks approvingly of advancing the program of experimental jurisprudence by jurists who, operating independently of the government, offer advice and suggestions for legal reform (p. 64). He points out that traffic engineers are "advising changes and improvements in the laws and regulations based upon scientifically gleaned data" (p. 129). Finally, mention is made of the necessity of separating research from the administration of the law because research would tend to be influenced by the prejudices of the administration. However, since experimental jurists are assumed to be "impartial," it is conceivable that this requirement of separation would not apply to them. From these statements, it might be inferred that the
author would be content for experimental jurists to play the limited role of scientific advisor to legislative bodies which would have the final responsibility for making the policy decisions. On the other hand, it seems to this writer that, on balance, Beutel espouses most forcibly the Comtian view that at the top of the societal pyramid should stand the social scientist (or presumably in Beutel's case, the experimental jurist) who will decide what is good law for society on the basis of scientific investigation. In support of this interpretation of Beutel's position, it should be mentioned that he spends some thirty-four pages in Chapter V criticizing many aspects of both the legislative and judicial systems as hinderances to the scientific determination of policy disputes. When discussing the types of relationships that could exist between experimental jurists and the government, Professor Beutel appears to prefer a relationship of identity—the experimental jurists are not only to provide scientific information but also to make the laws. Finally, in Chapter VI, when describing the "Complete Development of Experimental Jurisprudence," i.e., traffic control, where experimental jurists make law based upon scientific investigation, the author uses the most glowing language of which the following is typical:

It is rapidly being recognized that, after a study of the facts and the body of available scientific knowledge, the expert traffic engineer or director is far better qualified than any elective body to institute laws to regulate drivers and pedestrians. Popular referenda on the advisability of diagonal parking in specific locations, such as was recently held in the city of Lincoln, Nebraska, are silly procedures which will soon become as obsolete as the carrier pigeon [p. 134] [footnotes omitted].

It is felt that many readers of Professor Beutel's book will be considerably disturbed by such suggestions, especially in view of what has already been pointed out with respect to the complexity of the issues involved in most policy decisions. Further, in view of the disagreement among eminently reasonable and intelligent men, including some scientists, concerning the consequences and therefore advisability of granting legislative power to a small group of so-called "experts," it is astounding that Professor Beutel does not deal with these questions at length in his book. In fact, so far as this writer can ascertain, the only mention made of the problem by the author is tucked away in a footnote where he dismisses the matter as follows:

Here again the facts of the studies show results that are contrary to popular beliefs. Again and again the idea is repeated that bureaucracy is a dangerous thing and that public officials should be limited in their power and discretion by laws which make them subject to judicial review and to legislative checks. While this may be a justifiable fear of despotism remaining as a sort of aftermath of misrule by certain incompetent, corrupt or hereditary autocrats, there is every indication that successful operation of government in a complicated modern society will require that public officials have great latitude to change the rules in the spheres in which they operate so that by proper experimentation they may reach the optimum results in carrying out the purposes for which their offices were created. The ultimate limits upon such discretion
may not flow from any theory of checks and balances but rather from the restraints inherent in the scientific method itself [p. 396, n. 57].

The concern with these particular suggestions increases when one considers the state of knowledge in the social sciences at the present time and in the foreseeable future upon which so much of the author’s program in the field of law depends.

This observation brings us to the last point which we are able to consider in this review, that after reading this book a distinct impression is left that the author is far more optimistic than many others concerning the present state of scientific knowledge and of reliable techniques for obtaining such knowledge. For example, in many places throughout the book there are claims that scientific evidence such as blood-tests, lie-detectors, tests for intoxication, truth serums and, of course, “experts,” justify the abolition of the jury system. Likewise, the author asserts that scientific evidence justifies sterilization and artificial insemination, and revisions in the sex, marriage and divorce laws. It is not suggested that these contentions are all incorrect, and, of course, considering the vagueness which characterizes the statements, it is difficult to know precisely what is being claimed. It is, however, safe to say that with respect to most of the above issues, one would find considerable disagreement even among the “experts” as to what changes in the present laws are justified by the available scientific knowledge. Beutel’s optimism in these matters may be the result of more narrowly defining the choice situation than others do, or it may be due to his having somewhat different standards of scientific rigour than others, which would permit him to draw conclusions from research data which others would not consider warranted.

Although the bulk of the above comments on Professor Beutel’s book have been of a critical nature, it should perhaps be emphasized that this reviewer has purposely selected what he considers the more extreme positions taken by the author. While the author does frequently tend to overstate his case, perhaps this is a fate that usually befalls those who are primarily concerned with convincing others of the virtues of a program to which they are themselves committed. And, in any case, there is much in Beutel’s book that is stimulating and suggestive of potentially fruitful research in the area of law and the social sciences.

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The Common Council for American Unity, a non-profit non-sectarian organization active in the field of immigration and naturalization, is the outgrowth