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"VALUATION OF PROPERTY"
A REVIEW

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THIS two volume[1] treatise dealing primarily with the concepts of value and methods of valuing property for specific legal purposes is a contribution in the main to applied economics and to what might be called "institutional economics" but not to what is traditionally thought of as economic theory. It sets forth and analyzes one of the most significant features of the environment in which the mechanism known as "business enterprise" functions in our present industrial system. Since its approach is primarily economic, it shows, among other things, the way in which broad general economic tendencies have been modified by judicial valuation of property both at certain times and historically, particularly in the sense of the cumulative effects of the thoughts and actions of the courts.

According to Professor F. H. Knight, there are at least three methods of treating economic data that should be logically distinguished from each other, although in attempting to solve any particular group of problems they perhaps should be ultimately combined:

> The first is economic theory in the recognized sense, a study largely deductive in character, of the more general aspects of economic cause and effect, those tendencies of a price system which are independent of the specific wants, technology and resources. The second division, or applied economics, should attempt a statistical and inductive study of the actual data at the particular place and time, and of the manner in which general laws are modified by special and accidental circumstances of all sorts. That is, on the one hand it should get the facts as to the wants, resources and technology in the situation to which the study is intended to apply, and the precise form of such functional relations as the general theory cannot describe more accurately than to say for example that they are "decreasing"; and in the second place it should

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[1] The Valuation of Property, Vol. I and II, by James C. Bonbright, New York: McGraw-Hill Book Co., Inc., 1937. Vol. I: pp. xx, 632; Vol. II: pp. xi, 639.

ascertain and take account of facts and principles too special in character for the general theory or which are not matters of general agreement. . . . . this branch of the science is subject to very narrow limitations; the data lack the stability, classifiability and measurability requisite to scientific treatment, and actual economic practice must . . . . be at least as much an art based on wide general knowledge and sound judgment as a science with accurate premises and rigorous conclusions.

The third division of economics is the philosophy of history in the economic field, or what some of its votaries have chosen to call "historical" and others "institutional" economics, studying "the cumulative changes of institutions." In so far as it aspires to practical utility it will endeavor to predict long-period changes in the factors which applied economics accepts as data and attempts to observe and use as bases of inference. As far as can be seen now, this third division, even more than the second, is a field for the exercise of informed judgment rather than for reasoning according to the canons of science. The movements of history are to be "sensed" rather than plotted and projected into the future.[2]

Professor Bonbright's and his associates' treatment of economic data regarding property valuation is as was to be expected somewhat a combination of these three methods but it is a *mixed* combination and their emphasis is almost entirely on the second as well as on the third since their case materials in the main deal with the "states of mind" and action of courts. It may well be, had they recognized fully the need of *logically differentiating* between these different methods of treating economic data they would not have expected as much as they have seemed to expect from the body of thought traditionally known as economic theory, they would have been adequately aware of its limitations.[3]

The main question discussed in this large treatise is "what is value (property value) and how is it found"? Aside from attempting to establish

[2] See Knight's Essay on The Limitations of Scientific Method in Economics, in Tugwell, The Trend of Economics 263–4 (1924); 1 Wicksell, Lectures on Political Economy 1–11 (1934).

[3] See especially pp. 8, footnote 23 on 29–30, 64–5, 508 [particularly the implications of the following: "The confusion as to the meaning and measure of value that one finds in the administrative practice and in the judicial rulings on real-estate assessment is not the type of confusion that can ever be cleared up by the professional appraiser or by the value theorist. The trouble lies far too deep to be cured by either of these *economic skin specialists*." (italics added)], 1017, 1078–89 [in this connection see, also, Pigou, The Economics of Welfare 240–317 (1929)], 1166, 1173, 1191, 1195–8. It should be noted here that practically throughout the treatise the economists appear to be found wanting. Had Professor Bonbright and his associates, however, fully realized that recognized economic theory, in the main, limits itself primarily to analyzing (1) the equilibrium conditions regarding prices of consumptive services, prices of the services of productive agencies, and sale prices of property, and (2) that these prices tend to coincide with value only under highly simplified conditions; it is hard to believe that the authors would have expected to get final answers from economists to the questions raised in their book. Probably all they should have expected is a first approximation to these answers. But since they did not primarily approach their underlying problems by a process of successive approximations, they have failed fully to understand the significance of economic theory for their problems. Accordingly, to condemn the economists for not contributing more

that in practice "the proper meaning of 'value' cannot be determined without reference to the purpose of the valuation,"[4] the primary objective of this study appears to have been to present a body of thought that would make it possible "to distinguish between proper and improper shifts in its (property value) meaning,"[5] or put in other words, how property value is to be properly construed in any given case. Unfortunately, their thoughts regarding this latter objective do not seem to be sufficiently precise to afford a useful body of scientific standards regarding proper property valuation. For example, Professor Bonbright and his associates in their concluding chapter say:

> For the admission that a valuation should be made in the light of its purposes merely raises a problem without solving it. The practical consequences of some valuations, such as those for rate-making purposes, are exceedingly complex; and the type of appraisal which seems best adapted to serve one desirable purpose—for example, to protect savings banks against the loss of funds invested in utility bonds—may prevent the achievement of other desirable results. Under these circumstances, an intelligent choice of a basis of valuation demands a prevision of its social consequences, in quantitative terms, to which no scientific method gives easy command.[6]

And in the following paragraph they say in dealing with what they call "a relatively simple problem" of property valuation: "Mere functional analysis breaks down here, and the problem must be referred to *artists* in the appraisal of real estate."[7]

After investigating the literature in economics, in law, in accounting and in appraisal theory bearing on property valuation and analyzing thousands of court cases dealing with situations in which there was controversy regarding property values, the study is presented in three parts: Part I deals with the concepts of value, Part II deals with methods of valuation and Part III deals with valuation for specific legal purposes.

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than they have to property valuation questions is evidence of not being aware of the limitations of traditional economic theory, and economists, perhaps, should not be reproached for self-imposed limitations. [In this connection see, Knight, Essay on Value and Price in The Enc. Soc. Sci., 218–24 (1935)].

[4] P. 6. [5] P. 6. [6] P. 1173.

[7] P. 1174. Aside from what appears to be a general admission that mere "functional" analysis, as the authors have used it, breaks down as a basis for scientific judgments regarding proper property values, it is interesting to note their handling of some specific groups of litigated cases regarding which they offer solutions. See especially in this connection conclusions with reference to (1) Valuation of Public Utilities and other Enterprises for Tax Purposes, 630–2; (2) Valuations under the Estate and Inheritance Taxes [particularly conclusion (2)] 745–6; Valuation to Determine Profits or Surplus Available for Dividends, 973–5; and (3) The Valuation of Corporate Stock under Federal Income Tax, 1074–6; see, also, 1168, 1174–5. "Expediency" seems to be the basis of the significant judgments arrived at regarding many of the litigated cases. It can hardly be said, however, that such judgments can be construed as "scientific."

The last chapter—"Conclusions"—brings out in relief the difference between the so-called "functional" and the "conceptual" treatment of property valuation emphasizing the need for recognizing the significance of "purpose" in property valuation. In other words, it appears that property valuation is primarily, if not solely, a process of determining values which will serve certain purposes under given circumstances. In this chapter are also presented the alternative meanings of property value as found in the "states of mind" and action of the courts. This is followed by a presentation of "Points of Special Concern for Economic and Appraisal Theory." Questions are then raised with reference to the difference between property value and social value.

In view of the wide scope and the detailed treatment of the problems of property valuation in this treatise, it is abundantly obvious that a reviewer is in grave danger of not doing full justice to the study. Under these circumstances perhaps his task may best be accomplished by raising some questions regarding this study with a view of suggesting another possible approach to the whole problem of property valuation.

Before raising these questions, however, it may be well to present briefly what appears to be the central and underlying thesis of the study. According to this study a consistent body of thought dealing with property valuation in general cannot be developed along the lines that Professor Bonbright and his associates think economists have usually employed, *i.e.*, beginning with a definition of value, identifying it in effect with price, and then developing a group of generalizations which explain how prices are determined.[8] In short, according to Professor Bonbright and his associates, it is not advisable to define property value as an attribute of property. Instead, such a body of thought should be developed without adhering to any one value concept for, in Professor Bonbright's own words, "any single definition of 'value' disqualifies the term for the multiplicity of uses to which it is put in modern law" and, therefore, the concept

[8] Instead they argue they have found it necessary "to reverse the emphasis with which the subject of value is treated in the standard textbooks on economic theory," for they say "one must abandon the attempt to solve valuation problems by finding out what *value* 'really means' and must address one's self to the question, What meaning should here be assigned to the term in view of the intent of the legislature that used it, and in the light of the probable social consequences flowing from the adoption of one definition rather than another"? See pp. 1166–1167, see, also, pp. 10–11. Apparently, according to the authors, a theory developed along the lines the economists employ would not offer an adequate solution to all the underlying problems raised in the treatise. But may not such a theory offer a *first approximation* to the answers of these underlying property valuation questions? On this question see 1 Wicksell, Lectures on Political Economy 9 (1934).

"property value" is fixed by the purpose for which the valuation is being made. The very meaning of "property value" according to Professor Bonbright, then, is subject to change with changing purposes; and, it appears to be advisable to define property value as, let us say, an attribute of the particular purpose for which the valuation is being made.[9]

A body of thought dealing with property valuation or a theory of property valuation then seems to become not a consistent set of propositions regarding the process of how property values are determined but a set of propositions of what property values which will serve certain particular purposes should be. On this basis a comprehensive summary and criticism of valuation as it is "practiced" by courts, appraisers, accountants, etc., is developed and presented.

If the above is an adequate statement of the underlying thesis of the study, one group of questions that immediately arises is: Is the attitude developed in this study toward a concept such as "property value" a useful one? Should not the concept "property value" be definitely and solely associated with the operations involved in determining property value rather than with the "purpose" for which a particular valuation is being made?[10] Bearing on this whole question it is worth quoting Professor P. W. Bridgman:

> The new attitude toward a concept is entirely different. We may illustrate by considering the concept of length: what do we mean by the length of an object? We evidently know what we mean by length *if we can tell what the length of any and every object is*, and for the physicist nothing more is required. To find the length of an object, we have to perform certain physical operations. The concept of length is therefore fixed when the operations by which length is measured are fixed: that is, the concept of length involves as much as and nothing more than the set of operations by which length is determined. In general, we mean by any concept nothing more than a set of operations: *the concept is synonymous with the corresponding set of operations.* If the concept is physical, as of length, the operations are actual physical operations,

[9] P. 1167. The implications of the following generalizations are that property values are essentially not an attribute of "property" as such nor an attribute of the method of determining value but primarily, if not solely, an attribute of the particular purpose for which a valuation is being made: "The recognition of the fact that any single definition of 'value' disqualifies the term for the multiplicity of uses to which it is put in modern law, is what underlies that much-misunderstood statement that the same property may simultaneously have different values for different purposes. The values are different simply because for some purposes the very term 'value of the property' is used in a different sense from that in which it is used for other purposes." In this connection see, also, pp. 359–60.

[10] This question is, of course, considered but no precise nor adequate answer appears to be ultimately given to the question so that an adequate general theory of property valuation could be developed. See especially pp. 37–8, 125–6, 510, 808, 1075, 1083 and 1180–1.

namely, those by which length is measured; or if the concept is mental, as of mathematical continuity, the operations are mental operations, namely, those by which we determine whether a given aggregate of magnitudes is continuous.[11]

And further he says:

> We must demand that the set of operations equivalent to any concept be a unique set, for otherwise there are possibilities of ambiguity in practical applications which we cannot admit.[12]

It is rather interesting to observe, here, that Professor Bonbright's analysis comes to the conclusion that the courts have been more rigid in their words than they have in their actions, that they appear to have come very close by their actions to identifying the concept "property value" with the methods of valuation.

It may well be that "purpose" and "methods of valuation" may be made synonymous but I do not believe that Professor Bonbright and his associates do so explicitly. At any rate they do not seek the appropriate meanings of property value in operations and methods of valuation but rather in social consequences. And, in this connection, they come close to saying, as was indicated above, that the problem cannot be solved satisfactorily on a scientific basis.[13]

If adequate answers were given to the above questions in the study, perhaps the objection to the suggestion Justice Brandeis made that the standard of value should be "prudent investment" in his dissenting opinion in which he, also, stated that "value is a word of many meanings," would not be wholly justified. It may well be that Justice Brandeis was seeking the meaning of property value essentially in a set of operations determining property values rather than essentially in "purpose" and,

[11] Bridgman, The Logic of Modern Physics, p. 5, (1927) (first italics mine, second Prof. Bridgman's.)

[12] Bridgman, *op. cit. supra* note 11, at 6.

[13] It should also be noted here, that if a useful body of thought is to be developed regarding property valuation it is probably essential to develop a value concept which will be able to embrace future experiences regarding property values. It is difficult to believe that a concept which is essentially associated with purpose is such a concept, for it does not identify the generic content of the term "property value" and, therefore, does not lend itself for use with reference to future experiences regarding property values. On the other hand, it may well be that a property value concept which is essentially associated with operations and methods of valuation could be such a concept. This sort of concept might identify the generic content of "property valuation," might indicate the operations to be employed in measuring this content, and might, thereby, afford a basis for proper variations to be employed in the operations to serve various legal situations. On all of this, see Bridgman, The Nature of Physical Theory 1–32 (1936). Also see how an economist applied Professor Bridgman's thinking and compare it with the discussions of the "value concept" by Professor Bonbright and his associates—Schultz, The Theory and Measurement of Demand 10–12 (1931).

therefore, was forced into the position of suggesting the alternative standard of "prudent investment" which to Professor Bonbright and his associates "was no farther removed from the 'fair market value' or 'commercial value' that has been adopted in tax cases or condemnation cases, than was the alternative standard preferred by the majority of the Court."[14]

Another group of questions closely related to the above are as follows: Are we to conclude from this study that a property has as many values as there are legal purposes of valuing it?[15] If so, does not this approach make the concept "property value" indefinite, since there may be almost an infinite number of purposes for which a property is to be valued? With this sort of a concept, probably all that could be obtained from a body of thought regarding property valuation is whether or not the value for a specific purpose under circumscribed given conditions has risen or fallen. May it not be possible to expect the development of a body of thought regarding property valuation which would explain why one property has either temporarily or permanently one value and another property a different one, as the economists attempt to develop in their theories regarding capital? It should be noted that such a body of thought probably

[14] Southwestern Bell Tel. Co. v. Public Service Comm'n of Missouri, 262 U.S., 276, 310 (1933). See also p. 1170. It should be noted here that although Professor Bonbright and his associates have defended the "prudent investment" standard for rate-making purposes when they discuss, in their concluding chapter, "Verbalism versus Functionalism in the Law of Valuation" they find that after all Justice Brandeis' "alternative standard, called 'prudent investment,' was no farther removed from 'fair market value' or 'commercial value' that has been adopted in tax cases or condemnation cases," on the basis of the rule established in Smyth v. Ames. It appears, then, that the authors infer that Justice Brandeis in suggesting his standard leaned in the direction of being a "verbalist" in the same sense as the Court was in Smyth v. Ames. It should, also, be noted that throughout the opinion Justice Brandeis was continually seeking to identify the concept "value" with the corresponding set of operations which would determine "value." He seems definitely to take the position that "value" is a quantitative conception.

[15] It should be noted here that in view of the grouping of the cases in Part III of the Treatise Professor Bonbright and his associates intended a negative answer to this question. The groupings, however, appear to be based primarily on *convenience*, in their attempt to develop directly a theory of property valuation from an analysis of the thoughts and practices of courts without having first clearly set forth an abstract and schematic general body of thought on property valuation on the basis of simplifying assumptions. Such a body of thought, of course, would have afforded the first approximation to the answers the authors sought to their questions. Accordingly, as the treatise now stands there seems to be no inherent limit to the different property values that could be established in terms of specific legal purposes for according to the authors "values are different simply because for some purposes the very term 'value of the property' is used in a different sense from that in which it is used for other purposes," p. 1167. The Treatise does not seem to present a comprehensive statement covering the scientific grounds for limiting the different values that could be assigned to the same property for different legal purposes.

could not be developed with a concept of property value which was associated primarily, if not, solely with "purpose" and it should be further noted that only such a body of thought, if it could be developed, is likely to answer the issue which Professor Bonbright and his associates raise in his first chapter and do not appear to answer adequately of "how value is to be construed in a given case." May it not be, also, that the lack of a theory of property valuation such as the one just indicated in the minds of the courts rather than their unwillingness in written opinions to associate the concept "property value" with "purpose" may explain at once the courts inept and ill-defined shifts in the meaning of "property value" in their written opinions at the same time that their actions have shown "much common sense and acumen in their rules on evidence"? The courts may have intuitively sensed a theory of property valuation based on an operational approach to the concept "property value," but have not as yet in their written opinions been able to become articulate with reference to the concept "property value" which is involved in this theory. And it is rather difficult to believe that the concept "property value" in a coherent and comprehensive theory of property valuation is likely to be essentially an indefinite one emphasizing dissimilarities in terms of "purpose" rather than a definite concept emphasizing whatever unity there happens to be behind a useful body of thought dealing with property valuation.

In this connection the one thing above all that seems to stand out in this study is that the courts as well as the experts appearing before the courts lack an articulated theory regarding property valuation. Perhaps, too, this investigation shows that such a body of thought cannot be adequately developed by analyzing primarily the practices of courts, appraisers, accountants, etc. Instead, it may be advisable to develop the first approximation to a theory of the valuation of property by strictly and explicitly limiting the investigation to the general aspects of the underlying proposition that the value of property is essentially derived from the prices put on (or imputed to) the services that various forms of property render in an industrial system such as ours; and furthermore, that the forces that determine the prices of these services are the forces that essentially determine property values (and it might here be suggested, in view of some of the comments in Professor Bonbright's treatise, that as long as property is being used the services of property are continually being bought and sold). It should be noted that such a first approximation to a theory of property valuation would be largely deductive in character and based explicitly on a definite operational concept of "property value" and not on one that is essentially indefinite and associates property value primarily, if not solely, with "purpose." The second approximation to a theory of property valuation would then take account of the effects of the actions of courts, appraisers, accountants, etc., upon the underlying forces determining property valuation at a particular time, showing precisely how the underlying forces are thereby modified.[16] And the third approximation to a theory of property valuation would take account of such matters as the cumulative effects of these practices as well as of the effects of other historical trends on property valuation. To establish clearly the range and validity of conclusions regarding property valuation at least these three approximations to a body of thought regarding the valuation of property probably should be developed and kept distinctly and explicitly separate.[17]

All the values that tend to be put on properties both temporarily and permanently are in an underlying way related to how resources are being used, being apportioned and being augmented, or reduced in a free enterprise profit system. When we are dealing with property valuation for taxation purposes, or for rate-making purposes, or for condemnation purposes, or for any other kind of legal purpose, we are dealing either directly or indirectly with how resources are to be used, to be apportioned among various uses as well as with how much real prop-

[16] It is here, of course, that some sort of "functional" method of analysis may become useful but it should be noted that this "functional" method of analysis would then be based on an abstract and schematic body of thought regarding property valuation. In bringing into accord with reality the conclusions arrived at by such a systematic body of thought the original simplifying assumption would be gradually relaxed, and in doing so groups of property valuation problems would be dealt with. The grouping of closely related property valuation problems might be accomplished on the basis of "functions."

[17] It should be noted that what is envisaged here is one approach to the development of a theory of property valuation.

The three methods of treating economic data regarding property valuation are all part of this approach, and are to be kept separate so that at every successive approximation to a theory of property valuation the range and validity of the conclusions at each stage could be established. It should also be noted that work on the second approximation to a theory of valuation would, of course, influence and make precise the first body of thought developed with reference to the first approximation and the work on the third would, of course, influence the first two stages of development. In any comprehensive attempt to solve the problems of modern legal valuation, the three would, of course, ultimately be combined. The very complexity of these property valuation problems seems to call for such an approach, *i.e.*, an approach based on a process of successive approximations. In this way perhaps it also would be possible to reduce the legal cases dealing with property valuation to a greater degree of intellectual order and understandability than Professor Bonbright and his associates seem to have accomplished. [On this whole matter of proceedings from "principles" to observations rather than from observations back to "principles" see Hutchins, University Education, 25 Yale Rev. 665, 673–4 (1936)].

erty we are to maintain. Associated with this process are the same sort of valuation problems the economists deal with when they study the functioning of the economic system as a connected whole and perhaps an attempt should be made, therefore, to solve these problems along the same lines economists have been using in investigating the forces that determine prices of commodities and of capital. Professor Knight's suggestions regarding the treatment of economic data in general, above mentioned, are obviously along these lines.

Aside from the fact that this treatise is abundantly full of significant ideas and case material that will be exceptionally useful in developing a theory of property valuation, it also shows how the broad general economic tendencies influencing property valuation (whatever they may be) have been modified by the courts and the various experts that have appeared before the courts both at certain times and historically.

A REPLY

JAMES C. BONBRIGHT*

OF ALL the reviews of our treatise on Valuation that have come to my attention, the one by Professor Nerlove interests me the most. Previous reviewers have discussed the specific conclusions and recommendations of our case studies, expressing sometimes agreement, sometimes dissent. So far as I am aware, however, none of them has taken issue with our general method of approach. But Professor Nerlove strikes at the very heart of the treatise by challenging its whole "functional" method of analysis. Since his position has broad implications for legal economics, and indeed for the social sciences in general, I gladly add these comments at the invitation of the editors.

Let me confess, however, that Professor Nerlove has expressed his criticisms in a form that makes an effective answer very difficult. In the first place, instead of furnishing a "bill of particulars," he presents a blanket indictment of the methodology of the treatise and of the results obtained therefrom, citing no case discussions in support of the counts of the indictment. In the second place, he declines to commit himself by affirmative or negative answers to the basic questions that he raises, even though most of these questions have already been raised and discussed at length in the treatise and in the supplementary published studies noted in our preface. He therefore throws back upon the author

* Professor of Finance, Columbia University. It should be noted that Professor Nerlove's footnotes were added after Professor Bonbright had written his reply. (Editor).