THE "PHYSICAL VALUE" FALLACY IN RATE CASES

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"Physical value" is a term frequently used by the expert as a synonym for "cost of reproduction less depreciation." To the unsophisticated, however, the term implies the rock-bottom sum on which a utility should be allowed to earn a fair return; it seems to denote a fundamental fact; a reduction of rates to the point where they yield a fair return on this quantity seems to squeeze out ruthlessly whatever "water" there may be in the property. To reduce them further is thought to be not only unconstitutional, but unthinkable—it is to fly in the face of some "physical" law as immutable as the law of gravitation (in pre-Einstein days).[1] Yet this sanctity and certainty of the "physical value" theory of rates, it is submitted, is the result of loose reasoning, and serves merely to divert the time, attention, and funds of regulating bodies out of their proper channels into one of the most unreal fields of speculation in which the minds of metaphysicians have disported themselves since the days of the medieval schoolmen.

The reproduction cost theory is a survival from an earlier doctrine which turned out to involve an obvious logical fallacy. Whether or not the modified theory avoids the fallacy, it certainly avoids the reason which led to the adoption of its predecessor. It has been bolstered up after the fact, however, by a number of other arguments, each one of which, on close examination, turns out to possess merit rather for its faith in the courts than for its works in the realm of reason.

THE EARLIER VALUATION DOCTRINE AND THE VICIOUS CIRCLE

To comprehend the hold which the doctrine has obtained, we must examine its history. Fearing that the legislative power to regulate, as

[1] George McAneny, for instance, is reported to have said at a hearing before Governor Miller on the New York Transit Bill, "The fact is that the utilities can get nothing more out of this plan than they get today, with the single exception, possibly, of the bankrupt surface lines which, however, could get nothing more than the sum that represents the interest upon the appraisal of their physical values." *New York Times,* March 30, 1921. Governor Miller himself, however, does not seem to understand "physical value" in the Transit Act to be synonymous with cost of reproduction less depreciation, which he says "would undoubtedly be unjust to the public at the present time." This was in a letter of March 31, 1921, to Frederick L. Cranford, Chairman of the Transit Committee of the Brooklyn Chamber of Commerce, reported in the *New York Times,* April 1, 1921. The "physical value" referred to is to be estimated, under the Act, for the purpose, in part at least, of determining the compensation to be paid by the city for acquiring the lines.

enunciated in *Munn v. Illinois*,[2] might lead to a destruction of property rights,[3] the United States Supreme Court attempted to limit the exercise of the power to cases where confiscation would not result.[4] Confiscation consisted, at least in Justice Brewer's mind, in taking the *use* of the property for rates less than the market value of that use,[5] or in destroying the value of the property itself.[6] In the former sense, however, no legislature can ever reduce a rate without confiscation, or else the statement is nugatory. It must be obvious that the market value of the service is whatever price *is* charged by the company, provided only that there are *some* buyers at that price, and that all who care to buy at that price may do so. The market value of a subway ticket in New York is, at this writing, 5 cts. Should the new Transit Commission authorize a charge of 8 cts, the market value will be 8 cts. Should there be a subsequent reduction to 7 cts, that reduction would constitute a "taking" of the service rendered by the subway to each passenger, for a compensation less than the market value of that service, as it was previous to the "condemnation." Any reduction, under any circumstances, would be confiscatory. If "confiscation" is defined as taking the service for a passenger at a compensation less than the value of the service after the regulation and at the time when the passenger takes it, then no reduction could possibly be confiscatory. Were the fare to be reduced to 1 ct, since 1 ct would be the new value of the service, the passenger would be making full compensation

[2] (1876) 94 U. S. 113.

[3] "This power to regulate is not a power to destroy," said Chief Justice Waite in *Stone v. Farmers' Loan & Trust Co.* (1886) 116 U. S. 307, 331, 6 Sup. Ct. 334, 345.

[4] The history of the Supreme Court's wanderings and hesitations on this subject is admirably set forth in two articles by Gerard C. Henderson, entitled *Railway Valuation and the Courts* (1920) 33 HARV. L. REV. 902, 1031.

[5] In *Reagan v. Farmers' Loan & Trust Co.* (1894) 154 U. S. 362, 410, 14 Sup. Ct. 1047, 1059, Justice Brewer said: "If the state were to seek to acquire the title to these roads, under its power of eminent domain, is there any doubt that constitutional provisions would require the payment to the corporation of just compensation,—that compensation being the value of the property as it stood in the markets of the world, and not as prescribed by an act of the legislature? Is it any less a departure from the obligations of justice to seek to take, not the title, but the use for the public benefit, at less than its market value?"

[6] Sitting as a Circuit Judge in *Ames v. Union Pacific Railway Co.* (1894, C. C. D. Neb.) 64 Fed. 165, Justice Brewer said on pp. 176-177 that if property invested in railroads is "taken for public uses, its value must be paid for . . . The same general ideas must enter into and control legislation of the kind before us. The value of the property cannot be destroyed by legislation depriving the owner of adequate compensation. The power which the legislature has is only to prescribe reasonable rates, not any rates . . . But the foundation of the idea of reasonableness is justice . . . There can be no justice in that which works to such investors a practical destruction of their property thus invested . . . The protection of property implies the protection of its value . . . "

therefor. It is perhaps because of the obviousness of these facts that the "market value of the service" has never been applied seriously by the Supreme Court as a test.[7]

The other test, however, is what has caused the trouble. "The "protection of property," said Justice Brewer, sitting as a Circuit Judge in *Ames v. Union Pacific Railway Co.*,[8] "implies the protection of its "value" against destruction—presumably against partial as well as against complete destruction.

"If the public were seeking to take title to the railroad by condemnation, the present value of the property, and not the cost, is that which [it] would have to pay. In like manner, it may be argued that, when the legislature assumes the right to reduce, the rates so reduced cannot be adjudged unreasonable if, under them, there is earned by the railroad company a fair interest on the actual value of the property."

Reduction of rates, in other words, if unrestricted, might operate to impair the pre-existing value of the property—the value which it actually had as a business concern, the value for which compensation would be rendered in a condemnation case.[9] This impairment must be prevented. It can be prevented by requiring the legislature, when it reduces rates, to reduce them only to the point where the company may still earn "a fair interest on the actual value of the property."

Such is the *raison d'être* of the theory that rates should be based on "value"; if they were to be made to yield less than a "fair interest" on the pre-existing "value," that value would be partially destroyed. While the company earns a "fair interest," its property maintains its present value; but should it be compelled to earn less, the value of its property will shrink. If this is true, it must be that the value upon which a return must be permitted is something which depends upon the earnings, or upon some part of them at least, for its continued existence. Moreover, it is a fact well recognized in business that the value of a property as a going concern—and that is the value for which compensation would be rendered in condemnation proceedings—will rise or fall with every prospective rise or fall in the net earnings. It follows that its present "value," in the sense used by Justice Brewer, will persist only as long as its present prospective earning power remains unimpaired. Since the "fair interest on the actual value" means the amount which must be earned if the present value is to persist, this "fair interest on the actual value" turns out to be no other than the earnings which the company is already anticipating.

What, then, becomes of the power to regulate, if the legislature may not reduce rates to the point where they yield less than they already

[7] It does not follow, however, that cost plus a fair return is the only test for individual rates. "Value of service," in the loose sense of "considerations of policy other than cost," may be considered, provided it is clear that the term is not used in the sense of market value. Cf. a suggestive article by Henry White Edgerton, entitled *Value of the Service as a Factor in Rate Making* (1919) 32 HARV. L. REV. 516.

[8] *Supra*, note 6.

[9] *Monongahela Nav. Co. v United States* (1893) 148 U. S. 312, 13 Sup. Ct. 622.

yield? It is true that cases sometimes arise where a reduction of rates, because of additional traffic, will not be followed by a reduction of the net earnings. But Justice Brewer did not mean to confine the power to reduce to cases such as these. Had he so intended, his inquiry in this case would have ended when he found, as he did find, that the statute would have the effect of reducing net earnings. But he did not stop the inquiry there. He thought it necessary, before holding the statute unconstitutional, to estimate the "value" in dollars and cents. It is clear that he was unaware that the logical implication of his doctrine would preclude any reduction of net earnings whatsoever, regardless of how great the value might be found to be.

REPRODUCTION COST AS A CONCEALMENT OF THE VICIOUS CIRCLE

Justice Brewer's decision reached the Supreme Court for review under the name *Smyth v. Ames*.[10] It was affirmed in 1898 in a much quoted opinion rendered by Justice Harlan for a unanimous bench, of which Justice Brewer was himself a member. This famous opinion does not repeat in so many words Justice Brewer's statement that the function of the courts in rate cases is to protect the same value for which compensation would be rendered in eminent domain. It does, however, contain the following dictum:

"The basis of all calculations as to the reasonableness of rates . . . must be the fair value of the property being used . . . for the convenience of the public. And, in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property. What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."[11]

Here we have an early sanction for "considering," among other things, the replacement cost—or, as the court phrases it, "the present "as compared with the original cost of construction." What was the court's reason? It is submitted that the whole court was laboring under the same delusion as that which accounts for the reasoning of Justice Brewer in the court below—the delusion that the power to reduce earnings might co-exist with a duty to allow the company a fair return on the value of its property as a going concern. Attempts have been made to acquit the court of logical inconsistency by holding

[10] (1898) 169 U. S. 466, 18 Sup. Ct. 418.
[11] 169 U. S. 546-547, 18 Sup. Ct. 434.

that "the value of that which it employs for the public convenience" does not mean value-in-exchange at all,[12] or that it means value in some "socialistic" sense equivalent to cost,[13] or that it means the value-in-exchange of the physical as distinct from the "intangible" property.[14] I have myself contended that the last interpretation is possible and is susceptible of being reconciled with most of the court's words and acts,[15] a contention the fallacy of which, as applied to monopolies, has been asserted since I wrote, and asserted, it seems to me, with convincing proof.[16] But my interpretation, like the others mentioned, is based on the assumption that in future the court will try to adopt some theory to reconcile all previous statements. If there be some theory which will do that, the court may prefer it. But for an historical explanation of what really influenced the court we are not obliged to rule out the hypothesis of inconsistency. There is no good historical or psychological reason to suppose either that Justice Harlan perceived the logical fallacy underlying Justice Brewer's reasoning, or that the latter, when he concurred with Justice Harlan's opinion, had become aware of his own previous error.

But if the court was seeking to base earnings on the value as a going concern, and if that value consists of a capitalization of earnings, why did the court require a "consideration" of elements totally distinct from a capitalization of earnings? What have original cost, and replacement cost, to do with earnings?

The answer is not far to seek. If one were buying a factory operating under competitive conditions, there is no doubt that its value is a capitalization of the prospective earnings. Yet there is also no doubt that the buyer and seller would "consider" the replacement cost. Why? Because the earnings are not predictable with certainty. They may be reduced by subsequent competition. Yet there is some reason to suppose that new competitors will keep out unless they expect to be able to earn as much as a fair return on the cost of building a factory as efficient as the one in question. The buyer may feel surer of the continuance of that part of the earnings which constitutes a fair

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[12] Stevens, Chairman, in *Fuhrmann v. Cataract Power & Conduit Co.* (1913, 2d dist. N. Y.) 3 P. S. C. 656, 681.

[13] Harleigh H. Hartman, *Fair Value* (1920) 62-63. But then why "consider" the market value of the stocks and bonds, and the replacement cost?

[14] The words have meant all things to all men. To many commissions and courts they mean that the basis is value as a going concern. To Hartman they prove that the court meant actual cost. To Stevens, as Public Service Commissioner, they prove, as already noted, that the court could not have meant exchange value. To the same Stevens, as counsel for the New York Central Railroad, they prove that it could not have meant anything else. See pamphlet, *The Valuation of Railroad Right of Way, No. 3* (1914).

[15] Hale, *Valuation and Rate Making: The Conflicting Theories of the Wisconsin Railroad Commission, 1905-1917* (80 Columbia University Studies in History, Economics, and Public Law, No. 1) ch. 1. On p. 28 I stated that, "unless the Court was hopelessly confused, the 'fair value' is not the market value of the entire property." That statement still seems to me to be true. The court *was* confused.

[16] See *infra*, p. 718.

return on the replacement cost than of earnings beyond this. If earnings beyond are assured by some specific circumstances the continuance of which can be fairly relied upon, the value of the factory may include an "intangible" element of good will or the like, over and above its replacement cost. If, however, there is nothing to prevent the buyer of the plant from putting up and operating his own factory, without buying this one, then of course he would pay no more than the replacement cost for this one; whatever earnings might be thought at first to give it a value above this are not likely to persist in the face of exposure to competition, and are not likely to enter into the capitalization. Replacement cost is thus a highly important bit of evidence bearing on the earning capacity of a plant subject to competition. But what bearing on earning capacity have the other matters enumerated by the court? Replacement cost cannot always be estimated easily or cheaply, and the original cost plus the cost of the permanent improvements, if recorded on the books, may be "considered" as evidence of replacement cost. If not recorded on the books, the amount (par value) of the stocks and bonds may give some evidence of the original cost, hence of replacement cost, hence of future earning capacity, hence of value. The *market* value of the securities *is* the exchange value of the plant, when the exchange takes place in fractional shares. "The probable earning capacity of the property under particular rates "prescribed by statute, and the sum required to meet operating "expenses" were undoubtedly meant by the court to bear on the inquiry into what the earnings would amount to under the prescribed rates—not to be relevant to the value upon which those earnings, to be valid, must constitute a fair return.

Each of the matters enumerated by Justice Harlan, then, would be, and in fact is, "given consideration" in estimates of the value of competitive plants. Yet that value depends on the earnings. The replacement cost is significant only as bearing on the probability of the earnings continuing unimpaired. In monopolistic properties, replacement cost has no such bearing. As evidence of the value of the property as a going concern, it is inferior to a capitalization of the prospective earnings. Yet that very inferiority of replacement cost as evidence has served to postpone the out-and-out rejection of Justice Brewer's rule. Had the court estimated the value in each case by the more reliable method of capitalizing earnings, the conclusion would be reached invariably that the earnings expected under the existing rates constituted a fair percentage and no more, on those same earnings capitalized at that percentage.[17] The court might then have begun to suspect that the value rule and the power to reduce earnings could not

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[17] The sole logical escape from this vicious circle is one which is too absurd for serious consideration. If the earnings are capitalized at one rate, and the "fair return" is defined as a lower rate, then the earnings will *always* be found to exceed a fair return on the value and to be susceptible of a certain reduction. After the reduction the value will have shrunk as well, and the reduced earnings will again exceed a fair return on the reduced value. By this interpretation of

co-exist. As it is, however, by adopting a less accurate measure of value, there have been cases where a reduction of net earnings has been found to permit of the continued earning of a fair return on the value as found.[18] The result is an apparent reconciliation between the value rule and the power to reduce. The reconciliation is of course no more than apparent, for the value does not in fact cease to equal a capitalization of the earnings merely because an erroneous measure has been applied to it. The circumference of a circle remains 3.1416 times the diameter, even though it was *measured* with a tape which has been stretched. Yet there are authorities who admit that the value depends upon the earnings, but insist that the vicious circle involved (in basing the earnings on the value) can be escaped merely by the simple expedient of measuring the value by replacement cost or some other "evidence"![19] Like ostriches, they imagine that by blinking the fact they can escape its consequences.

At the time of *Smyth v. Ames,* the Supreme Court itself, as we have seen, ignored the dependence of the value on the rates. Since then, occasionally, the connection has been perceived. In *Willcox v. Consol-*

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the formula, the earnings can be successively reduced with a constant approach to zero. The formula would therefore offer no protection whatever to the owners. Cf. *Valuation and Rate Making,* pp. 20-21.

[18] Reductions were held valid in *San Diego Land & Town Co. v. National City* (1899) 174 U. S. 739, 19 Sup. Ct. 804; *San Diego Land & Town Co. v. Jasper* (1903) 189 U. S. 439, 23 Sup. Ct. 571; *Stanislaus County v. San Joaquin &c. Co.* (1904) 192 U. S. 201, 24 Sup. Ct. 241; *Knoxville v. Knoxville Water Co.* (1909) 212 U. S. 1, 29 Sup. Ct. 148; *Willcox v. Consolidated Gas Co.* (1909) 212 U. S. 19, 29 Sup. Ct. 192; *Cedar Rapids Gas Co. v. Cedar Rapids* (1912) 223 U. S. 655, 32 Sup. Ct. 389; *Minnesota Rate Cases* (1913) 230 U. S. 352, 33 Sup. Ct. 729; and *Des Moines Gas Co. v. Des Moines* (1915) 238 U. S. 153, 35 Sup. Ct. 811.

[19] Note the following language of Samuel O. Dunn, the editor of the Railway Age, in an article entitled *The Valuation of Railways* (Mar. 1914) 113 ATLANTIC MONTHLY, 403:

> "The reasoning and language of the federal courts indicate that to them 'fair value' means substantially the same thing in a rate as in a condemnation case . . .
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> "However, there is one important difference between making a valuation of property preliminary to dispossessing its owner and giving him its equivalent in cash, and making a valuation for fixing reasonable rates. The market value of a property depends on its earning capacity; and when property is taken under the power of eminent domain it is approached from a commercial standpoint. Therefore, the chief consideration is earning capacity, and ordinarily the chief measure of earning capacity is the amount of profit actually earned. In valuation for the regulation of rates, on the other hand, the fundamental assumption is that the chief measure of the reasonableness of the rates is the ratio of the net earnings to the value of the property; and the immediate purpose of the valuation is to ascertain this ratio. Obviously, in such valuation little or no weight can be given to the net earnings." (pp. 408-409.)

That is, the same market value, which "depends" on net earnings, is to be taken in rate cases, but the fact that it depends on net earnings is to be forgotten by the choice of some other evidence as to its amount.

The same attempt to escape the vicious circle by adopting a rule of evidence which conceals the circle, is to be found in the opinion of Judge Miller in *People ex rel. Kings County Lighting Co. v. Willcox* (1914) 210 N. Y. 479, 104 N. E. 911. He concurred with the Appellate Division in its holding that there is "no logical difference between allowing 'going value' in the valuation of a

idated Gas Co.,[20] the company's claim that the franchises had increased in value was rejected, on the ground that this alleged value depended upon earnings, and that the earnings could not be anticipated, since the state had the power to reduce them. The rule that the company may not expect to be protected in the enjoyment of a fair return on the increased value of the franchises was deduced by the court from the premise that the company may not expect to be protected in the enjoyment of a fair return on the increased value of the franchises. By such similar reasoning the court was saved the necessity of rejecting the value rule altogether. In *Cedar Rapids Gas Co. v. Cedar Rapids*,[21] the *Minnesota Rate Cases*[22] and *Des Moines Gas Co. v. Des Moines*[23] the court perceived that certain claims made by the companies would amount to a capitalization of the earnings, and it therefore rejected those claims. It did not, however, make a clear-cut repudiation of the value rule. In *Denver v. Denver Union Water Co.*,[24] while Justices Holmes, Brandeis, and Clarke were dissenting on another point, Justice Pitney put the court definitely back into the ostrich-position, ignored the dependence of value on rates, and insisted, apparently, on the inclusion of the entire value as a going concern.

How long the Supreme Court's learned head will remain in the sand cannot, of course, be predicted. As long as it does remain there, however, reproduction cost less depreciation will be held to be a proper matter for "consideration," and we may expect an increase in the brood of vague "composite value" cases in the lower courts and commissions.[25] The results will be a failure to give the regulatory experiment a fair trial as a substitute for government ownership and operation.

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plant when it is to be taken entirely by the public and allowing the same element when valuing the same plant for rate making purposes." He then adds (210 N. Y. 486, 104 N. E. 912):

"It is no answer to say that in condemnation cases the exchange value is taken, and that that depends on the rates charged, the thing to be determined in rate cases. Of course, a rule of valuation might be adopted in a condemnation case which would not work in a rate case; but if the cost of reproduction, less depreciation, rule be adopted, as appears to have been done in *National Waterworks Company v. Kansas City* (62 Fed. Rep. 583) and *City of Omaha v. Omaha Water Company* (218 U. S. 180), the leading condemnation cases in the federal courts in which 'going value' was considered, it is impossible to see why the 'going value' could not be determined in both classes of cases in precisely the same way."

He seems to think that cost of reproduction less depreciation was used in the two condemnation cases he cites for some purpose other than to ascertain the exchange value. Further in the opinion he says that "exchange value" "is not admissible in a rate case" and later "We are dealing, not with exchange values, but with the value upon which the company is entitled to earn a return."

[20] *Supra* note 18.

[21] 223 U. S. 669, 32 Sup. Ct. 390.

[22] 230 U. S. 455, 33 Sup. Ct. 762.

[23] 238 U. S. 171, 35 Sup. Ct. 817.

[24] (1918) 246 U. S. 178, 38 Sup. Ct. 278.

[25] Some of the Wisconsin commission cases applying this hybrid method of "valuation" are described and discussed in *Valuation and Rate Making*, ch. 4.

"PHYSICAL" VS. "INTANGIBLE" VALUE—A DISTINCTION SUPPOSED TO AVOID THE VICIOUS CIRCLE

Meanwhile many lower bodies have attempted to escape the vicious circle by confining the requisite fair return to the value of the physical property as distinct from that of the entire business. Elsewhere I have attempted to show that such a distinction can be made, and that the exchange value of the physical property is equal either to the cost of replacing it with an equally efficient substitute, or to the value of the entire business as an earning proposition, according to which of the two is the lower.[26] Mr. Gerard C. Henderson has objected that, while it is true that a hypothetical buyer already possessed of a franchise would pay no more than the replacement cost or the earning capacity value (whichever is lower), still it is not necessarily true that he would pay as much as this. Since the seller (who has no franchise) would be glad to get anything above junk value, and since we may not assume competition among franchise-owners for the purchase of the plant, the plant would exchange for a price anywhere between junk value and replacement cost (or earning capacity value).[27] In other words, there is no determinate sum for which the plant would exchange, unless we suppose it to be sold by one operator to another, in which case the exchange value will be our old friend, the earning capacity value. This criticism seemed to me at first to ignore another possible hypothesis under which the sale could be supposed to take place—namely, a sale between persons who will still have to construct the plant and the owner of a franchise. The sellers would not construct it without receiving the replacement cost, which would then constitute the minimum as well as the maximum selling price—a determinate value. Upon further reflection, however, I am inclined to think that any such "long-run" hypothesis, however useful it may be as an explanation of a standard to which the value may *tend* to conform, is not admissible as a hypothesis upon which the "exchange value" of property already in being can be predicated.

"PHYSICAL VALUE" RULE AS A PROTECTION OF "VESTED RIGHTS"

Let us suppose, however, that the distinction possesses validity. Would it not justify the use of replacement cost less depreciation[28] as a rate base? Technically, yes, but only where reductions of earnings are concerned—not where a commission is determining how much of an

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[26] Cf. *Valuation and Rate Making*, ch. I, sec. 5, pp. 29, 30.

[27] In the second of the two articles referred to *supra* note 4. The criticism of my position is to be found at 33 HARV. L. REV. 1048-1050.

[28] Were depreciation not deducted, we should have the cost not of an equally efficient but of a superior substitute. *Valuation and Rate Making*, pp. 37-38 and 67-71.

increase to allow.[29] Even in reduction cases, the rule carries out at best but the letter, not the spirit, of the reasons which gave it birth. The purpose of adopting a "value" rule at all was, as Justice Brewer clearly explained, to afford to the owners the same protection they would have received against the exercise of the power of eminent domain. That purpose, however, can be effectuated only by annulling the power to reduce net earnings. To leave all the value in excess of the "physical" value exposed to the power of reduction is to fail to carry out the original purpose of the rule.

It may be thought, however, that while the physical value rule fails to accord complete protection to the owners, it is nevertheless a useful compromise shielding them from such drastic regulation as might be practiced were rates to be reduced, say, to a fair return on the actual, rather than the reproduction, cost. But why make this particular compromise? It is submitted that a far better, more efficacious, less capricious and less intricate compromise can be adopted. Suppose, for instance, that two widows (or orphans, or savings banks, or whatever it is that most appeals to the judicial heart) buy shares of equal market value in two public service companies, regarded as equally safe investments. Suppose that if unregulated each company would continue to earn what it now gets, and that the stocks in the two companies would therefore continue to have the same market value. The one is a gas company owning iron mains, the replacement cost of which, due to an advance in the price of iron, has increased to the point where it equals or exceeds the market value of the stocks. The other is a telephone company possessed of much copper wire, whose replacement cost has fallen, due to a drop in the price of copper. Under the replacement cost rule, the widow who bought the gas stock would be given complete protection, the widow who bought the telephone stock would not. Yet both bought with an eye solely to the earnings, and the investor in gas paid not one cent more by reason of the subsequent rise in iron prices. There would be no more hardship in reducing her stock's value than in reducing that of the telephone investor. As a rule for avoiding hardship, the replacement cost rule is about as capricious as any that could be devised. If a compromise is sought which will afford some protection to investments made before the regulation,[30] but not sufficient protection to defeat the power to

[29] *Valuation and Rate Making*, ch. 1, sec. 11, pp. 38-40. Mr. Henderson takes issue with this part of my argument too. 33 HARV. L. REV. 1050. If the market anticipates that the court will allow a fair return on an increased reproduction cost, though the legislature has kept the earnings below this and announced that they would continue to be kept below, and if the market anticipates the court's action with sufficient confidence, then it is true that the property will possess an exchange value equal to the reproduction cost. But so much of the value as results from a prognostication of a particular decision will not, I imagine, be protected, even in eminent domain proceedings, so far as to deflect the decision from the course it would otherwise have taken. However, I am not familiar with the law on the subject.

[30] Cf. *Valuation and Rate Making*, ch. 7.

reduce, it would appear to be simpler and far more satisfactory to protect a given percentage of all investments, rather than so much as happens to coincide with replacement cost. The physical value distinction provides a counterfeit substitute for the valuation rule first adopted by the Supreme Court. It follows the letter but not the spirit of that rule. Since the spirit is inconsistent with the well-settled power to reduce earnings, the rule itself must go. There is no merit in the counterfeit.

REPLACEMENT COST AS A SAFEGUARD AGAINST EXTRAVAGANCE

In spite of the eminent domain theory which influenced Justice Brewer, the doctrine of actual cost kept recurring in argument, and occasionally in judicial decision. Before *Smyth v. Ames* was decided, the Supreme Court of Pennsylvania applied the test of actual cost, on the theory that a fair return on that amount is one of the necessary expenses of rendering the service.[31] The language of *Smyth v. Ames,* taken apart from its historical context, would seem to give as much sanction to original cost plus the cost of permanent improvements as it gives to replacement cost. In three subsequent cases, however, the Supreme Court rejected the *company's* claim to a fair return on the actual cost.[32] That claim is of course inconsistent with the eminent domain theory, but the court was not content to reject it on that ground alone. In each of the three cases the court criticised the actual cost rule as a question of policy, on the ground that it might have been dishonestly or extravagantly incurred. That is undoubtedly a valid criticism of an unmodified actual cost rule; it is not an argument for any basis other than actual cost if modified to make allowance for unreasonable expenditures. Yet the court thinks it an argument for "present value," which is generally interpreted as replacement cost less depreciation, with or without the addition of "intangibles," and always as an amount which includes the "unearned increment" of land.[33] The idea is expressed succinctly by Justice Hughes in the *Minnesota Rate Cases,*[34] as follows:

"It is clear that in ascertaining the present value we are not limited to the consideration of the amount of the actual investment. If that has

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[31] *Brymer v. Butler Water Co.* (1897) 179 Pa. 231, 36 Atl. 249.

[32] *San Diego Land & Town Co. v. National City, supra* note 18, *San Diego Land & Town Co. v. Jasper, ibid.,* and *Stanislaus County v. San Joaquin &c. Co., ibid.*

[33] The Supreme Court has not held rigidly that "present value" is always synonymous with reproduction cost less depreciation. In the *Minnesota Rate Cases,* for instance, it pointed out that what the market value of the land, and consequently the cost of acquiring the roadbed, would be, on the hypothesis that the railroad had not been built, could not possibly be told. It therefore rejected the cost of reproduction as a means of "ascertaining" the "value" of the roadbed. While it allowed a "value" equal to the value of the adjacent lands, it did not make this allowance, apparently, on the ground that it represents replacement cost, but because it would permit the company to share in the general prosperity of the community. Again, in *Des Moines Gas Co. v.*

been reckless or improvident, losses may be sustained which the community does not underwrite. As the company may not be protected in its actual investment, if the value of its property be plainly less, so the making of a just return for the use of the property involves the recognition of its fair value if it be more than its cost."

But unless the "fair value" or "value," as Justice Hughes uses the term, means "the amount which would have been spent by ordinary "reasonable men"—and he evidently means it in no such sense—the learned Justice might have said with equal truth, "Whether the actual "investment was reckless and improvident *or not,* losses may be "sustained which the community does not underwrite if the value of the "property, with or *without the company's fault,* is less than the actual "investment." As the Railroad Commission of Wisconsin has pointed out, a company may build a plant at a high cost, not because the company is reckless or improvident, but because it is impossible to build at the time for less. "Under such conditions," says the commission,

"it might not always be fair or equitable for the municipality, later on when the situation has improved, to take any undue advantage of those who in good faith undertook to furnish a service that was almost indispensable, and that at the time could be had on no better terms."[35]

The "present value" rule, in other words, is not necessarily a corrective at all for recklessness and improvidence in the making of the actual investment. This rule may happen to give a return on something far in excess of the most reckless amount that could well have been spent, or it may give a return on an amount much below the sum which the very shrewdest business man would have spent at the time when the plant had to be built. Whatever else can be said for "present value," it is frivolous to defend it as a protection against the recklessness and extravagance of the original investors.

REPLACEMENT COST AS THE BEST EVIDENCE OF ACTUAL COST

"The general use of the cost of reproduction as an indication of "investment in a physical plant has been largely necessitated," says the Wisconsin Railroad Commission, "by the lack of accurate and reliable "information as to actual, legitimate investment."[36] And the Supreme Court of the same state, speaking through Judge Barnes, who had been the first chairman of the Railroad Commission, said two years later:

"It was shown in the testimony that, while the ascertainment of cost was desirable, it is not a safe guide to tie to and is not considered especially important in arriving at final results. At least no such importance is attached to it as is to reproduction cost. This

Des Moines, infra note 49, the court refused to allow the full replacement cost, when that would include the cost of cutting through pavement which had been laid at the city's expense over the mains.

[34] (1913) 230 U. S. 454, 33 Sup. Ct. 762.

[35] *Hill v. Antigo Water Co.* (1909) 3 Wis. R. C. R. 623, 633-634.

[36] *Green Bay v. Green Bay Water Co.* (1913) 11 Wis. R. C. R. 236, 245.

is due to the fact that it is very difficult in most cases to arrive at cost where a plant has been constructed for a long time, and it is also difficult to ascertain whether the cost has been kept within reasonable bounds."[37]

Of course where actual cost cannot be ascertained with reasonable accuracy it cannot be used. There is no escape from that fact. But utilities which have been built since the era of serious regulation set in, are not in that class. Their costs are recorded with the appropriate commission.

Utilities which have been built so far in the past that there is no record of their actual cost must perforce be regulated on some other basis, and if actual cost were thought a desirable basis, reproduction cost might be the best available substitute. But if reproduction cost is used simply as evidence of actual cost, it must be modified to allow for all conditions which are known to cause it to exceed or fall short of the actual. In these ancient concerns, however, it seems to me very doubtful whether we wish to base the return on an approximation to the actual cost incurred *by the company*. The shares have frequently changed hands since the original construction took place, and whatever amount was originally spent for construction was not spent by the *present owners*, who are the ones to be affected by regulation. Had it always been known that rates were to be reduced to a fair return on the actual cost, the stockholders being credited with the intermediate deficits and debited with the intermediate surpluses, then of course no one would have paid more than that actual cost for his stock. What the present owners paid for their stock would in that case coincide with what the *plant* had actually cost. But such is far from being the situation. With these old companies, then, it seems better to ignore both the actual and the replacement cost, and to allow a return which will afford a partial, but not a complete, protection to existing values. Such a policy, coupled with a future *announced* policy of actual cost, modified in such respects as the promotion of efficiency may require, and with a drastic inheritance tax, would not be so unduly tender to the existing owners as to constitute them a permanent drag on the community.

In all cases, then, where actual cost is not ascertainable, it seems to me unnecessary to adopt reproduction cost or anything else as evidence of that actual cost.

REPLACEMENT COST AS A SAFEGUARD AGAINST CHANGES IN THE VALUE OF MONEY

Judge Learned Hand of the federal District Court has recently defended the replacement cost theory on a novel ground.[38] If the

[37] *Duluth St. Ry. v. Railroad Commission* (1915) 161 Wis. 245, 273, 152 N. W. 887, 897.

[38] *Consolidated Gas Co. v. Newton* (1920, S. D. N. Y.) 267 Fed. 231, 237.

company, he contends, gets a fair return only on the amount of *money* which it actually invested, and if meantime the buying power of the dollar has decreased, the company is in fact getting less than a fair return (measured in buying power) on that which it originally invested (measured again in buying power). This is undoubtedly true. But the judge draws the curious inference that a fair return on the present buying power of the money actually invested is equivalent to a fair return on the replacement cost. The inference would be correct if the difference between the replacement and the actual cost could be explained wholly by the change in the value of the dollar. That is far from the case.[39] Much can be said for and against the policy of protecting investors against changes in the value of the dollar. But that policy is not furthered by adopting the replacement cost as the rate base.[40]

REPLACEMENT COST AS A MEASURE OF EQUAL TREATMENT OF REGULATED AND UNREGULATED PROPERTY OWNERS

Property increments under regulation are sometimes defended on the ground that everyone in an unregulated business may get them. In the *Minnesota Rate Cases*[41] Justice Hughes, purely by way of dictum, "valued" the roadbeds at the market value of adjacent lands. This was not in the belief that the company would have had to pay that much were it to reproduce the property—the replacement cost in this instance was expressly ruled out as impossible of estimation, since what the railroad would have to pay for its lands if there were no railroad there would be purely a matter of speculation. In allowing the market value of adjacent lands, the court may have been influenced in part by an erroneous notion that the roadbed *has* a value equal to that of adjacent lands, but it was influenced chiefly, it seems, by the theory that the railroad *ought* to be allowed "a reasonable share in the "general prosperity of the communities which it serves." The owners of adjacent lands have shared in that prosperity to the extent that their lands have appreciated in value; hence the appreciation in the adjacent lands measures the amount by which the railroads should share in the general prosperity. To allow them less than a fair return on this increased amount, would be to treat them less favorably than the rest of the community.

It is submitted that this line of argument is fallacious. It is quite true that the unregulated owners of land derive from the prosperity

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[39] For a single illustration, see a very informing study by Robert Murray Haig of *The Unearned Increment in Gary* (1917) 32 POL. SCI. QUAR. 80, wherein it appears that, out of a total net increment between 1906 and 1915 of $21,805,732.30 (making allowance for development expenses etc.), only $874,698 was due to the depreciation in the value of money.

[40] I have commented more in detail on Judge Hand's decision in a note in (1921) 21 COL. L. REV. 166.

[41] 230 U. S. 455, 33 Sup. Ct. 762.

of the community a benefit which can be measured by the increase in their land values. But the owners of land, or of other property susceptible of appreciation in value, constitute only a fraction of the whole community. The gains which the rest of the population derive from prosperity are of a vaguer, more intangible nature. These vaguer gains the land owners share in, too, in addition to their increments. Now the land increment is the result of earnings derived from the consumers of the products of the land. Whether these earnings are justified in the case of private owners is a question with which we are not concerned. Arguments can be made in support of them, based on the difficulty of distinguishing "earned" from "unearned" increments, the speculative incentives to production offered by the prospect of increments, the unwieldy bureaucratic mechanism that would be involved in any attempt to take them away, and the like. The fact remains that these increments result from net earnings in excess of a fair return on the *original* price paid for the land. Such increments come only to owners. If it be said that everyone has an equal opportunity to become an owner, the obvious answer is that one can become an owner only on payment of the present, not the original, value; and the increment has accrued only to those who bought at less than the present value. The increment accruing to landowners, then, is something not shared in equally by the whole community. Nor is it shared equally by all landowners, since some acquire great and some small increments. Nor do all owners of lands adjacent to the railroad roadbed share equally, since they may have bought at different prices. How then can the owners of the roadbed be put on an equality with the owners of the adjacent lands? The *beneficial* owners of the roadbed (the stockholders) cannot even be put on an equality with one another in the enjoyment of increments, since, if there has been an increment, they have presumably bought their respective shares at different prices. And the nominal owner, the company, cannot be put on an equality with all the adjacent owners, since they are themselves unequal. To allow the railroad to earn a fair return on a roadbed valued at the level of adjacent land values is to give it a share in the prosperity of the community proportional (per unit of land) to that enjoyed by *some* of the adjacent owners, but entirely out of proportion to that of the rest of the community—and at the expense of the rest of the community.

If the railroad is to be put on an equality with the *most fortunate* of the unregulated property owners, all regulation, prospective as well as retroactive, will be annulled. The owner of unregulated property gets a value based on earnings not regulated by law. True, they are frequently regulated by competition, but by no means invariably. "Good will" and quasi-monopolistic "intangibles" are frequent assets of unregulated concerns. To allow them to the owners of regulated property for that reason, is to defeat all power to regulate.

"When people obey other people's orders," said Dick Deadeye, "equality's out of the question." The same is true when some men get "intangible" values, some get large increments, some small increments, and some no increments at all. To wipe out these inequalities is probably undesirable. The most we can do is to consider each case of special advantage on its merits, without regard to the fact that someone else also has a special advantage, and that still someone else has none at all. Since equality among all is out of the question, there is no force in the contention that the utility must be given an increment in value for the purpose of giving it the same share in the community's prosperity that other men enjoy.

REPLACEMENT COST AS A MEANS TO PREVENT DIVERSION OF CAPITAL TO UNREGULATED FIELDS

It is frequently urged that unless an increment is allowed in utility investments, capital will shun the utility field and be diverted to fields where an increment is permitted. In this argument, too, it is submitted, there is a fallacy. If an increment is likely to be realized, say in the real estate business, that increment will either be open to all comers, or it will be confined to the owners of certain kinds of property. In the former case, capital will flow in, causing an increase in the supply of houses, and an increased demand for the land, labor, etc. involved in the construction of houses; there will follow a diminution in rents and, very likely, an increase in costs. The prospective net earnings in the business will thus be curtailed, and the process will continue until the increment vanishes. If, as is more likely, the increment is conditional on the ownership of limited resources (say land), the present owners will not part with their advantages except on full payment therefor. The outside investor will have to pay for his land a price high enough to offset any advantage he may reasonably expect to get from the increment, and it is of course the increment which he expects, not some unlooked for increment which may chance to accrue, which would attract his capital away from the utility investment. The terms to the outside investor, then, in an investment where an increment is to be expected are no more advantageous than those in an investment where it is not to be expected.[42]

If it is said that the inside investor—the owner of the land—will not devote it to utility purposes unless he gets a price high enough to offset his prospective increment in other uses, that is perfectly true. The selling price of land always reflects the seller's loss of a prospective increment. But this does not necessitate the allowance of an increment to the utility company. The price which the utility actually

[42] The prospect of the increment in the unregulated investment may be paid for not entirely by a higher selling price, but partly by an *immediate* prospect of earnings lower than they would be were the increment not expected. A higher *rate* of return in the utility business than the immediate rate expected in the other might be required to compete with the increment in the other. Cf. what is said below, under the next heading.

pays for its land is doubtless higher than it would be in the absence of the prospect of a private increment. But this higher selling price is part of the actual cost to the company which buys the land. If the company may offer a fair return on this amount to its stockholders, they can be induced to subscribe this amount, since by definition a fair return is a rate required to attract capital. The land owner will be paid for his loss of increment, but the buyers of the stock have not been called upon to part with any increment, and therefore require no increment to induce them to invest.[43]

REPLACEMENT COST AS A SPECULATIVE OFFSET FOR RISKS

There is one argument for allowing an increment to a utility which seems to me to be perfectly sound. It does not, however, necessitate

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[43] Professor Harry Gunnison Brown argues not only that land *will* not be devoted to utility purposes if shorn of the prospect of an increment which is open in other uses, but that it *cannot* be so devoted without social loss. If the community will pay more for the use of land for other uses than for railroads, it shows that the land is more needed for those other uses. *Transportation Rates and Their Regulation* (1916) 23-24. This may be true, though I question the underlying assumption that what consumers will pay for various services indicates their relative desires for them, since the consumers of the various services are not necessarily persons of similar incomes. But grant the assumption. Still, at the time when the owners decide whether to devote their land to railroading or to other uses, if the railroad promises to pay a fair return on the actual cost (to the railroad) of acquiring the land, it indicates the anticipation *at that time* of as great a demand for transportation as for the competing uses. If, *after* the land is devoted to the railroad use, the value of similar land for other uses should rise, the public demand for transportation may or may not have risen in proportion. If the traffic will bear rates yielding a fair return on reproduction cost, the public wants the transportation as badly as the other uses. Were the commission to reduce the rates, this fact would still be true, though the reduction might make it impossible to determine how long the traffic would bear the higher rates. If the traffic will not bear the higher rates, there is no remedy, unless the road is abandoned; and while, on Mr. Brown's theory, it was a misdirection of labor to build it, still it is likely to be too late to devote the land to other uses.

Mr. Brown may mean, however, that at the lower rates there will be a greater demand for transportation than at the higher rates, and more labor therefore devoted to meeting the demand. But if the higher rate were allowed, this extra labor would be devoted simply to the production of the additional things which the stockholders would be in a position to consume. If the increment were taxed, as Mr. Brown suggests it might be, then the additional labor would be devoted, not to the additional transportation, but to uses determined just as artificially by the government when it spends the revenue. The channels into which this labor shall flow must be determined artificially in any event.

However, in arguing against basing the "fair return" on the replacement cost, I do not mean to prejudge the question whether the excess above the fair return should be reduced by taxation rather than by rate making. It seems to me that regulation of utilities will never be complete until the "valuation" is treated as bearing primarily not on what the company ought to *charge*, but on what it ought to *keep*. Policy could then determine whether the keeping of more should be prevented by the one method or the other.

an appraisal of the reproduction cost. The prospect of an increment in value may induce the investment of capital at a lower *rate* of return than that for which it would be invested without this prospect.[44] In cases where the risk is peculiarly great at the outset, it may be that the capital cannot be attracted at all unless the chance of an increment is offered.[45] In such cases an increment may be expedient. Some gambling chance of gain may be required to offset the unavoidable gambling chance of loss. It is a matter of no great moment upon what contingency this chance for gain is based. We might say to prospective investors,

"If the company fails, you lose; if it succeeds, you get not only a fair return on what you put in (which is what you would get in an investment that was safe from the start), but in addition an increment in value; we will fix the upper limit which the value of your stock may reach, and you may decide, in competition with other investors, how much below that level you will pay for it."

That is, we can regulate the security issues, and state in advance how high a dividend we will permit in case of success; the necessary capital can then be attracted by selling as many of these securities as may be necessary, at whatever prices they may bring. As the risk lessens, the payment of the specified dividends will result in an increment in the value of the shares. This can be brought about, be it noted, without any regard whatever to the changes in the hypothetical replacement cost. The replacement cost rule, as a gambling device, introduces more speculation than is necessary, and the enormous cost of making the appraisal renders it a peculiarly expensive form of gambling apparatus.

ATTEMPTS TO DISTINGUISH FAMILIAR FORMS OF INCREMENT FROM UNFAMILIAR IMPLICATIONS OF THE REPLACEMENT COST RULE

Curiously enough, certain forms of increment which would result from the unflinching application of the replacement rule are repugnant to the same courts and commissions which defend the more familiar manifestations of the same rule, such as land increments. To allow a utility to earn a fair return on a land increment is of course to allow a return on something for which it never paid. The same thing is equally true in regard to unregulated property, but this way of stating the fact seems to throw doubt on the propriety of the private increments. Because of a reluctance to doubt the propriety of anything so familiar, fantastic efforts are made to distinguish the increment of land from other items which the court or commission rejects. "To "include anything in the value upon which rates are based," said the Wisconsin Railroad Commission on August 3, 1909, "for which no

[44] The interrelation of the questions of increment and rate of return is well discussed by Henderson, in the articles already cited.

[45] Cf. *Valuation and Rate Making*, ch. 5, sec. 4, pp. 103-109.

"equivalent has been rendered, would apparently disturb the equitable "relation that should be maintained between utilities and their customers."[46] Yet when it came to the application of this reasoning scarcely six months later in a manner which would deprive the company of the familiar "unearned increment," the same commission, with the same personnel,[47] could not "now see good reasons upon which to "exclude these elements."[48] Its argument is worth examining. It is set forth below, with my criticisms interjected in italics:

"That the law as well as our social system," said the Commission, "recognizes such gains in practically all other undertakings, is evident from the fact that rents and interest charges usually vary with the natural increase in the value of the property they cover. [*It would be more accurate to say that the increase in value results from the increase in the rents and interest charges. No doubt the law recognizes such gains; so did it recognize monopoly profits in utility companies before regulation changed the law.*] As the cost of reproduction of a plant usually plays perhaps the most important part in determining its value [*the very question at issue if by "value is meant the rate base—an irrelevant statement if by "value" is meant exchange value*], it is more than likely that the owners would have to bear losses in case land and other property had depreciated instead of appreciated. [*The statement of course begs the question.*] It would seem only just that the rule should work both ways. Appreciations in value of the kind in question are also of an essentially different nature from such appreciations in value as those which by the respondent's testimony is [*sic*] classed as going value. It is appreciation of a kind that is generally acknowledged as rightfully belonging to the owners of the property which has thus risen in value. It is based neither on unreasonable rates, nor on assumed business conditions or similar facts of this nature. It is simply due to general growth and development."

To say that the appreciation in the *company's* land is not the result of unreasonable rates is to beg the question. The utility's land, insofar as it cannot be sold, has no value distinct from that of the entire plant of which it forms part, unless the distinction between "physical" and "intangible" value is tenable. Even then, if the amount on which the company is permitted a return is less than the replacement cost, no part of the mass can have a separate value. In either case, then, the entire property, or the land alone, will have an increment only in case the company be permitted rates high enough to cause that increment to emerge. The land cannot be said to have increased in value merely because adjacent land has increased. When speaking with strict accuracy, the thing that is exchanged, and that consequently possesses exchange value, is not the land, but the right of ownership in the land. The rights in the adjacent lands differ essentially from the rights which

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[46] *Hill v. Antigo Water Co. supra* note 35, at p. 729.

[47] B. H. Meyer (now an Interstate Commerce Commissioner), Halford Erickson, and John H. Roemer.

[48] *State Journal Printing Co. v. Madison Gas & Electric Co.* (1910) 4 Wis. R. C. R. 501, 579.

the regulated company has in its land. One can appreciate without the other following suit. The company's increment depends on its earnings. Whether the rates which will yield sufficient earnings to create an increment are "unreasonable," is the very point at issue. The commission can scarcely be said to have made its distinction very convincing.

The same tendency to ban a return on anything for which the company did not pay, when not given a familiar label like "land increment," appears in several of the decisions dealing with paving over the mains. It frequently happens that, after a company has laid its mains in a dirt street, the city paves the street. In such cases, the cost of *replacing* the mains, involving as it does the cutting through and relaying of the paving, is likely to be considerably in excess of the cost that actually was incurred. There has been some conflict among the authorities as to whether the company is to be entitled to a fair return on the replacement cost. The United States Supreme Court and the New York Court of Appeals have both denied the company any such right, but in language which is inconsistent with the attitude of both courts on the question of the land increment.

In *Des Moines Gas Co. v. Des Moines*,[49] Justice Day followed the master in chancery in rejecting the claim, and said:

"The Master reached the conclusion that the life of the mains would not be enhanced by the necessity of removing the pavements, and that the Company had no right of property in the pavements thus dealt with, and that there was neither justice nor equity in requiring the people who had been at the expense of paving the streets to pay an additional sum for gas because the plant, when put in, would have to be at the expense of taking up and replacing the pavements in building the same. He held that such added value was wholly theoretical, when no benefit was derived therefrom. We find no error in this disposition of the question."

The court's fundamental reason, it is plain, is the alleged injustice in requiring those who paid for the paving to pay also an additional price for gas merely because the paving happens to add to the replacement cost. But the reason would be just as strong had the paving, or any other municipal inprovement, increased land values, and thus added to the cost of re-acquiring the land. The other arguments as well which the master urged would be equally applicable to land increments. That the life of the mains would not be enhanced by the paving is no more true than that the life of the land is not enhanced by the increment. That the company has no right of property in the pavements has nothing to do with whether it should be allowed an increment for its mains. To say that the added value was theoretical, is to beg the question if no distinction can be maintained between the physical and the intangible property, for what the value shall be depends on what we decide as to the paving. If the distinction can be maintained, however, the added

[49] (1915) 238 U. S. 172, 35 Sup. Ct. 817.

physical value was real—the paving has increased the physical at the expense of the intangible value.[50]

Let us turn to the more detailed argument in *People ex rel. Kings County Lighting Co. v. Willcox.*[51] As Judge Miller (the present governor) attempts to distinguish the increment sought for the paving from the ordinary "unearned increment," a detailed analysis of his reasoning may repay us. As before, I shall interject my own comments and questions, in italics, into his statement. He says:

"But the new pavements in fact added nothing to the property of the relator. Its mains were as serviceable and intrinsically as valuable before as after the new pavements were laid. [*Was not land as serviceable before as after the increase in the cost of buying it? and intrinsically as valuable for every purpose except sale?*] . . . The question has a double aspect. What will be fair to the public as well as to the relator? (*Smyth v. Ames, supra*). Should the public pay more for gas simply because improved pavements have been laid at public expense? [*or because the price which the company never did and never will have to spend, but only would have to spend were conditions other than they are, has risen?*] It is no answer to say that the new expensive pavements suggest improved conditions which, though adding to the value of the plant, will not, by reason of the greater consumption, add to the expense per thousand feet of the gas consumed. The public are entitled to the benefit of the improved conditions, if thereby the relator is enabled to supply gas at a less rate.[52] The relator is entitled to a fair return on its investment, not on improvements made at public expense. [*If "investment" means the amount actually invested, the argument would exclude the land increment. If "investment" means "the amount "upon which a return should be allowed," the statement begs the question.*] It is said that the mains will have to be relaid. So will the new pavements, and much oftener. Both might possibly be relaid at the same time. [*The argument which the judge meets here would apply more properly to the allowance for depreciation than to the fair return.*] The case is not at all parallel to the so-called unearned increment of land. That the company owns. [*The very question at issue when one asks why land increment should be allowed. The land has no separate value apart from the entire plant, unless (a) the distinction between physical and intangible value can be maintained, in which case the company clearly owns a similar increment in the main, or unless (b) the company may sell the land, which is not probable, since it is not permissible to impair the efficiency of the plant. If it could, however, sell, the company is not being deprived of any sale-value by being refused a fair return on the increment so long as it remains unsold.*] It does not own the pavements [*but the claim is for an increased value in the mains; if the land value rose by reason of the*

[50] Cf. *Valuation and Rate Making*, p. 30, note 2.

[51] (1914) 210 N. Y. 494-495, 104 N. E. 915.

[52] This seems to me to be an excellent answer to the suggestion made by Commissioner Franklin K. Lane in *Advances in Rates—Western Case* (1911) 20 I. C. C. Rep. 307, 343-345, to the effect that while railroads ought not to be allowed to increase their *rates* to allow them an unearned increment, they are nevertheless entitled to whatever increment may result from the increasing density of their traffic at the same rates.

erection of a city hall, would the judge deny the land increment on the ground that the company did not own the city hall?], and the laying of them does not add to its investment [*neither does the land increment, unless the word "investment" is used in a question-begging sense*] or increase the cost to it of producing gas [*does the land increment increase the cost of producing the gas?*] The cost of reproduction less accrued depreciation rule seems to be the one generally employed in rate cases. But it is merely a rule of convenience and must be applied with reason. On the one hand it should not be so applied as to deprive the corporation of a fair return at all times on the reasonable, proper and necessary investment made by it to serve the public, and on the other hand it should not be so applied as to give the corporation a return on improvements made at public expense which in no way increase the cost to it of performing that service."

It is submitted that on Judge Miller's reasoning there is no ground for considering the replacement cost at all. The entire logic of his position is to allow a return on "the reasonable, proper and necessary "investment made by" the company.[53] That is also the logic of Justice Day's position. Judge Miller's decision in particular illustrates sharply the plight of a mind which clearly favors the actual cost policy on its merits, but which fears to apply it to so respectable an institution as the "unearned increment." The mind which faces such a dilemma seems pathetically eager to grasp at straw distinctions.

CONCLUSIONS

Not one of the arguments enumerated above—and they are all that occur to me at this writing—necessitates the adoption of replacement cost less depreciation (or "physical value"). There may be reason for protecting existing owners from too drastic a reduction in their values, there may be grounds for permitting whatever increments may be required in order to offset risks or to compensate for a shrinkage in the dollar. These may be valid grounds for making specific departures from the actual, reasonable cost rule, but not for adopting the replacement cost. Judge Miller acted on a sounder instinct when he refused to allow the company the benefit of the cost, which it never had to incur, of relaying the mains, than when he attempted to reconcile that refusal with the allowance of a cost, which never had to be incurred, of acquiring land at an increased price. The replacement rule serves neither the purposes of policy nor those of the fallacious value rule which it has supplanted. It is high time for the Supreme Court to reconsider its position in the matter.

[53] The entire discussion of the other chief point in this case—"going value"—is a very able argument for including the early deficits which have in fact been incurred and not repaid, on the ground that they constitute a cost. But the judge admits land increment on the flimsy grounds shown in the text, and he thinks his actual cost rule, and his rejection of exchange value, to be consistent not only with reproduction cost when modified, but also with eminent domain value. See note 19, *supra*.