"Coase v. Pigou" Reexamined

A. W. Brian Simpson

The Journal of Legal Studies, Vol. 25, No. 1. (Jan., 1996), pp. 53-97.

Stable URL:
http://links.jstor.org/sici?sici=0047-2530%28199601%2925%3A1%3C53%3A%22VPR%3E2.0.CO%3B2-2

The Journal of Legal Studies is currently published by The University of Chicago Press.

COASE v. PIGOU REEXAMINED

*A. W. BRIAN SIMPSON**

ABSTRACT

Coase's thesis in "The Problem of Social Cost" is reexamined, with particular reference to criticisms of Pigou as an enthusiast for state intervention and to Coase's understanding of the history of English tort law; the litigation in *Sturges v. Bridgman* illustrates the analysis. Pigou is defended, and his function as a straw man in a rhetorical form of argument described. An analysis of Coase's thesis—that Pigou perpetrated a fundamental error in analysis—when related to the realities of land use disputes between neighbors suggests that the logic of the Coasean theory as to the correct analysis in terms of efficiency is incapable of generating any general rule as to what should be the legal response to the problem of social cost. Unless certain problems can be solved, it cannot provide guidance for the law.

RONALD H. Coase's celebrated article, "The Problem of Social Cost,"[1] has generated a massive literature, much the product of fascination with the Coase theorem. Anyone setting out to add to this literature must do so with some diffidence. There seem, however, to be some difficulties which are internal to the original article and which have not been addressed by other writers. They center on Coase's criticisms of the late Arthur C. Pigou. I should make it clear that I approach the article from the point of view of a historian and lawyer, not that of an economist.

At the outset, Coase explained that "[t]his paper is concerned with those actions of business firms which have harmful effects on others. The standard example is that of a factory, the smoke from which has harmful effects on those occupying neighboring properties."[2] In the common law this problem was primarily handled by indictments for public nuisance,

* Charles F. and Edith J. Clyne Professor of Law at the University of Michigan. I am indebted to Valerie Brondyke, Bronwyn Croxson, Merritt Fox, John Griffith, Richard Helmholz, Jim Krier, Neil Duxbury, Richard Posner, and Barbe Vaccaro for assistance and comments.

[1] First published R. H. Coase, The Problem of Social Cost 3 J. Law & Econ. 1–44 (1960) and reprinted in R. H. Coase, The Firm, the Market and the Law 95 (Chicago, 1988). This includes additional relevant material: ch. 1 on The Firm, the Market and the Law, at 1–31, and ch. 6 on Notes on the Problem of Social Cost, at 157–85. All references are to this reprint unless otherwise indicated.

[2] *Id.* at 95.

[*Journal of Legal Studies*, vol. XXV (January 1996)]
 0047-2530/96/2501-0003$01.50

which Coase does not discuss, by tort actions for private nuisance for damages, and by suits for injunctions.[3] Where there was some tangible harmful escape, other forms of tort action, such as the action for cattle trespass, might be used. Coase illustrated the problem through a number of nuisance cases, several having been determined in the nineteenth century.[4] One, *Sturges v. Bridgman* (1879),[5] figures prominently both in "The Problem of Social Cost" and in his earlier article, "The Federal Communications Commission."[6] I shall follow him by providing an account of it and later use it to illustrate certain difficulties in his analysis.

I. *Sturges v. Bridgman*

Sturges v. Bridgman involved a successful suit by a doctor to restrain a confectioner, operating his business in adjacent premises, from using machinery causing noise and vibration. It is possible to say a little more about this case than is in the law reports.[7] The plaintiff, Dr. Octavius Sturges, was a medical man of distinction.[8] Born in London in 1833, he was educated at Addiscombe, the military seminary of the East India Company. He entered the service of the Company as a second lieutenant with the Bombay Artillery in 1853. In 1883, with the assistance of his niece, Mary Sturges, he published an autobiographical novel on his expe-

[3] These are not found before the nineteenth century; see John P. S. McLaren, Nuisance Law and the Industrial Revolution—Some Lessons from Social History, 3 Oxford J. Legal Stud. 155, 186 ff. (1983). Until 1854 an attempt to obtain an injunction involved litigation both at common law and in Chancery, and until the fusion on the courts in 1876 this practice might still be followed, as in Tipping v. St. Helen's Smelting Company (1865), on which see note 14 below.

[4] See in particular section 5 of his article, *supra* note 1, at 104–14.

[5] Sturges v. Bridgman, 1877 § 233, 11 Ch. D. 852.

[6] R. H. Coase, The Federal Communications Commission, 2 J. Law & Econ. 1–40, 27 (1959).

[7] Before the Master of the Rolls, Sir George Jessel, on May 31, 1878, in the Court of Appeal (Lord Justices Thesiger, James, and Baggallay) on June 13, 14, and 16 and on July 1. My account is based on the report in 11 Ch. D. 852; on the law report entitled Law Report, High Court of Justice, June 3 Chancery Division (before the Master of the Rolls), Sturges and Bridgman, in the Times, June 4, 1878; and on papers in the Public Record Office: J54/80 S.223 (pleadings); C32/322 (cause book); J15/1385, 1386, and 1387 (orders made in the course of the litigation); and J4/660 (S650–S654) and J4/663 (1440–42) (affidavits filed). The case is not noted in the Bakers Record and General Advertiser or in the Lancet or British Medical Journal, but is noted under the headline Quiet Consulting Room, in the Medical Times and Gazette for July 20, 1878.

[8] What follows is based on 3 Frederic Boase, Modern English Biography (1965); obituaries in the Times (November 6, 7, and 9, 1894) and in the Lancet and the British Medical Journal; the British Library Catalogue; and copies of the annual London and Provincial Medical Directory.

riences, *In the Company's Service: A Reminiscence.*[9] The hero is Norman Farquhar, one of four fellow Addiscombe cadets; one or all of them embody his own experiences. Farquhar is killed in the Mutiny of 1857, which presumably Sturges experienced. The book reflects some disgust at the ferocity with which it was put down. Sturges resigned his commission and entered St. George's Hospital as a medical student. He studied in Cambridge at Emmanuel College, and then returned to London, becoming medical registrar at St. George's Hospital in 1863. In 1868 he became associated with the Westminster Hospital, becoming physician in 1875; from 1878 he was also assistant physician to the Great Ormond Street Hospital for Children. He held both these appointments for the rest of his life. He lectured in the Westminster Medical School, and published extensively; his specialisms were pneumonia and chorea. Directories show that until 1865 he lived at 35 Connaught Square, when he purchased the lease of 85 Wimpole Street.

His opponent was also a person of distinction. Frederick Horatio[10] Bridgman was, by appointment, confectioner to Her Majesty the Queen and to His Royal Highness the Prince of Wales. In an affidavit he recounted how, in 1830, he had succeeded his late father John in the business of a cook and confectioner at 30 Wigmore Street; indeed, "my said Father and I have or one of us, during the last sixty years and upwards, uninterruptedly and in succession to each other carried on the Business."[11] So the business had been in the same premises, unaltered for 50 or probably 60 years, since about the time of Waterloo. Frederick would have started working with his father in 1828 or so, being born in about 1814.

Mid-nineteenth-century Wigmore Street was predominantly commercial. The principal trade was clothing—there were dressmakers, milliners, lace cleaners, and the like. Other businesses included a bell hanger, wax chandlers, and buttermen and, for the medical men of Wimpole Street, a dealer in medical rubber. There were no doctors in Wigmore Street. In elegant Wimpole Street, which intersects it at right angles, doctors were much in evidence. The street was primarily residential, with professionals conducting business from their homes, as did Dr. Sturges. The medical profession had been colonizing Wimpole Street for some time. Whereas in 1871 there had been only 19 physicians, of the 95 properties listed in *Kelly's Post Office Directory*[12] for 1878, 38 were occupied

[9] Octavius Sturges with Mary Sturges, In the Company's Service: A Reminiscence (1883).

[10] No doubt after Admiral Nelson.

[11] Affidavit by F. H. Bridgman. See note 7 *supra*.

[12] Kelly's Post Office Directory (79th ed. 1878).

by physicians or surgeons, and there were some dentists too. There was also Mrs. Wilson's Institute for Nurses: "For upwards of ten years the most eminent of the medical profession, and the public, have been supplied at a moments notice with my nurses, who reside at 90 Wimpole Street."[13] By 1888 another essential ancillary trade, that of undertaker, had moved in at number 3b; at the time of the litigation, medical failures had to seek this service elsewhere. In 1878 and even later, other trades remained—a diamond merchant, a confectioner, and a stocking maker, for example, and many private residences, such as that of William Patchett, Q.C. There had recently even been a future Lord Justice of Appeal in residence, Sir William Milbourne James.

So the litigation did not raise a zoning problem—do we want predominantly residential or business use in the area? Dr. Sturges was in an appropriate location, and so was Mr. Bridgman. The problem arose because effects crossed the boundary between a commercial and a residential area. Courts typically have to face the problem of social cost, if they face it all, only when either a stationary or a moving boundary is involved. The most notable of all Victorian nuisance cases, *Tipping v. St. Helen's Smelting Company* (1865),[14] which I do not discuss here, arose because a gentleman's residence and estate was close to an expanding industrial area and suffered pollution from a copper smelting plant.

Next door to Dr. Sturges—he was to be there for many more years—was Thomas Aldington Wallworth, a professor of singing. But in his affidavit Dr. Sturges does not give Wallworth's activities as the reason for his decision, in 1873, 8 years after he moved in, to build a consulting room in the very small "yard or garden" at the back of his house. There was no other suitable room; the other ground floor room was his dining room, and after 1873 the waiting room for his patients. Before 1873 his work was probably confined to hospital practice and writing; his first book, *An Introduction to the Study of Clinical Medicine*, appeared in 1873. So a boundary was being moved in the autumn of 1873 by his decision to see patients in the new consulting room. But this use was not continuous. Between 1873 and late 1875, or early 1876, he saw patients from 10 A.M. to 1 P.M. He also used the room at these hours for preparing his lectures before he left for his hospital work. The noise from Mr. Bridgman's kitchen soon began to cause him "great discomfort and annoyance."[15]

[13] Advertisement in London and Provincial Medical Directory 1878.

[14] Tipping v. The St. Helen's Smelting Company, 4 B. & S. 608, 616, 122 E.R. 588, 591. XI H.L.C. 642, 11 E.R. 1483, 1 Ch. App. Cas. 66. See my Leading Cases in the Common Law (Oxford, 1995), ch. 7.

[15] Affidavit by O. Sturges. See note 7 *supra*.

The wall which separated the two properties, and formed the wall of Mr. Bridgman's kitchen, was a party wall, one and a half bricks thick. The new consulting room was built against this party wall, adding to it a thickness of half a brick.[16] In the kitchen were two 16-inch marble mortars near its northeastern corner, close to the southwest corner of the consulting room, both set in brickwork built against the party wall. One had been there for 50 or even 60 years, the other for 26 years. They were used for crushing loaf sugar, almonds, and indeed meat and were worked by lignum vitae pestles, operated by one man. These pestles, when in operation, "are each passed through a socket in a bearer secured to a plank bolted onto or as I believe right through the said wall . . . [that is the party wall, but not the half-brick thick wall of the consulting room]." The affidavit of J. T. Christopher, an architect and surveyor employed by Dr. Sturges, went on: "A more effectual means of communicating or conveying sound and vibration could hardly be devised." Although experts hired by Mr. Bridgman disputed the passage of vibration, employing the unsophisticated balancing egg test, there was no conflict over the noise, described by Dr. Sturges as "of a thumping character . . . Every blow is distinctly heard and felt." The noise "interfered materially with the comfort of my house as a residence and its use for my professional purposes." In particular it prevented "my carrying on any work requiring continuous thought" and interfered with the use of the stethoscope; it also annoyed his patients. Similar accounts were given in affidavits by colleagues: Dr. J. W. Haward, a surgeon at St. George's; Dr. W. H. Allchin, a physician who lived at 94 Wimpole Street; and Dr. H. Donkin, a Harley Street physician. They emphasized that the noise would seriously interfere with the use of the room for normal domestic purposes. Thus, Dr. Haward said that "the noise was of a kind which would have materially interfered with one's domestic comfort if one was using the room for ordinary purposes." This was to head off the argument that it was only the peculiar nature of the use to which Dr. Sturges put the room which created the problem.[17]

This was the situation which gave rise, eventually, to the litigation. One point needs perhaps to be made at the outset. My account of the source of the dispute is based on the way lawyers packaged it in the light of their knowledge of the law and of what factors it made relevant; their work survives in the British Public Record Office, principally in affidavits. These do not directly address the problem of *social* cost (or social

[16] A standard brick is 9 × 4½ inches. The party wall was (with mortar) approximately 14 inches thick, and the consulting room increased the thickness to approximately 19 inches.

[17] Affidavits. See note 7 *supra*.

gain) at all. Clearly all sorts of people might be indirectly affected by the outcome of the dispute—Her Majesty the Queen, the Prince of Wales, Mr. Bridgman's employees, Dr. Sturges's patients—but the lawyers conceived of the dispute as only involving two individuals, unable to agree over the boundaries of their property rights. That the matter should be conceived in this way was, and is, part of the conventional ideology of the common law, and of the function of courts within the system. Anyone who suggests that such a dispute should be conceived in some different way needs to address the consequences which would follow in the way the case would have to be presented for decision.

II. Basic Ideas in "The Problem of Social Cost"

Let me now return to Coase's article and attempt to bring out certain basic ideas in it. There seem to me to be five.

The first idea, which runs through all Coase's writings, is deep skepticism as to the desirability of government intervention. Various expressions are used, but the thought is the same.[18] In "The Problem of Social Cost" this skepticism is very mildly expressed; he argues that action against a smoke-emitting factory will lead to results which "are not necessarily, or even *usually*, desirable."[19] In *The Firm, the Market and the Law* Coase hardens his position, arguing that whether government intervention is desirable or not is a "factual question" and that economic theory does not support any presumption in its favor. He goes on: "The ubiquitous nature of 'externalities' suggests to me that there is a *prima facie* case against intervention, and the studies of the effects of regulation which have been made in recent years in the United States, ranging from agriculture to zoning, which indicate that regulation has commonly made matters worse, lend support to this view."[20] There is a change of emphasis here from the original article, which was more anxious to demonstrate the significance of transaction costs, rather than that of externalities. Indeed, although the effect on third parties, and on society generally, of decisions in cases of conflict is mentioned, the expression "externality"

[18] These expressions include "direct governmental regulation," "governmental administrative regulation," "governmental regulation," "governmental action," "corrective governmental action," "State action," and "governmental intervention"; see Coase, The Problem of Social Cost, as reprinted *supra* note 1, at 117, 199, 131, 133, 135. In ch. 1 of Coase, The Firm, the Market and the Law, *supra* note 1, at 22, we have "public intervention" as well. I do not think the varied expressions used alter the basic thought. Richard A. Posner, Overcoming Law 413 (Cambridge, Mass., 1995), describes hostility to public intervention except when this will maximize wealth as a "leitmotif" of Coase's work.

[19] Coase, The Problem of Social Cost, as reprinted *supra* note 1, at 96. My italics.

[20] Coase, *supra* note 1, at 26.

is not used. Coase has explained that his failure to use the term, and his preference for the expression "harmful effects," was deliberate.[21]

The second idea is the corollary of the first; since government intervention is suspect, the alternatives to government intervention are viewed sympathetically. The drift of the argument favors leaving matters to the market. This possibility is dramatized by the thesis which has come to be called the Coase theorem: that in the absence of transaction costs the allocation of resources reached by negotiation and bargain, assuming economic rationality,[22] would be unaffected by the rule as to legal liability. This is stated in the discussion of *Sturges v. Bridgman:* "With costless market transactions, the decision of the courts concerning liability for damage would be without effect on the allocation of resources."[23] This of course is a purely theoretical view as to what would happen in a world which does not exist.[24] But Coase relates his thinking to real life by arguing, surely correctly, that in a case such as *Sturges v. Bridgman* the parties might have reached an economically satisfactory position by a bargain, or at least a position which seemed satisfactory to them, a point which is clear enough without the Coase theorem and quite independent of it.[25] Presumably, the reason why they did not is, pace Coase, either the impediment of transaction costs or the fact that one or other or both did not behave with economic rationality or because of differing expectations as to the probable outcome of litigation. Of course, litigation will involve considerable additional costs, as it did in this case.

Elsewhere, Coase gives an account of the alternatives to government intervention, which he lists: "inaction, the abandonment of earlier governmental action, or the facilitating of market transactions."[26] What "inaction" means is unclear, but I shall return to the point later. Obviously, market transactions might be facilitated by measures taken to reduce transaction costs—free legal services for the handling of negotiations, free research materials, free telephones, or whatever. This all sounds like government intervention. The implication of Coase's argument is that given facilitation, leaving the outcome to the market is the best solution.

[21] Coase, *id.* at 27.

[22] There may be other assumptions which I do not here discuss if the allocation is to be efficient—for example, some sort of embargo on violence. It may also be necessary, given the marginal utility of income, to make some assumption about relative wealth.

[23] Coase, *supra* note 1, at 106.

[24] For an account of what happened in the real nineteenth-century world in which the use of the law was extremely expensive, see McLaren, *supra* note 3; and Simpson, *supra* note 14, ch. 7.

[25] Coase, *supra* note 1, at 105–6.

[26] *Id.* at 24.

The third idea is not easy to reproduce accurately; it is most simply put by saying that the problem of social cost is, at least to an economist, a reciprocal problem. The idea, at one level, may be illustrated from *Sturges v. Bridgman*. Alterations in behavior by either Dr. Sturges (giving up the practice of medicine, selling his house to a deaf person, writing his lectures elsewhere, etc.) or by Mr. Bridgman (retirement, moving his mortars, using them at a different time of the day, etc.) will cause the problem to go away. It only arises because of the relationship between two people and their behavior. Coase however puts this in two other ways. One is negative: it rejects the idea of the arrow of causation. It is wrong to suppose that Mr. Bridgman's activities were harming Dr. Sturges, with the implication that it is Mr. Bridgman who must be restrained. The other is positive: since a decision either way will impose economic costs on the loser, the real question is—who is to be allowed to harm whom? In one passage Coase says: "If we are to discuss the problem in terms of causation, both parties cause the damage."[27] I am not convinced that it is necessary to Coase's economic argument to do this violence to the everyday conception of causation or to reject the evaluative distinction which everyday thought makes between harms and costs, but, be that as it may, his view certainly sets him apart from lawyers, who everywhere make use of causal notions and do not treat harms and costs as equivalent. A worrying implication of Coase's reciprocity is that from an economists's point of view, deciding a case such as *Sturges v. Bridgman* ought to involve evaluating a wide and perhaps unlimited range of alternative courses of action which would solve the problem. There is a tendency to discuss the reciprocal character of the problem of social cost in terms of just two activities—running railways or growing crops, making cakes or seeing patients. This can mislead; once the reciprocal nature of the problem is conceded, there is just no end to the possibilities—they include Dr. Sturges's and Mr. Bridgman's mutual suicide. The reciprocal nature of human interaction can raise emotive issues, as when women object to the idea that the way to stop sexual assaults on the streets at night is for them to stay at home. Even if they are the cheapest cost avoiders, ought this to be conclusive?

The fourth idea is much less easy to state with any precision, perhaps because it involves a number of intimately related ideas. It concerns the role of law. In the real world, as opposed to some ideal world in which there were no transaction costs, there is of course, in Coase's view, a role for law. One reason is that in his view rights have to be defined or allocated before you can have bargains. Coase argues that because

[27] *Id.* at 112.

transactions are not costless: "[T]he initial delimitation of legal rights does have an effect on the efficiency with which the economic system operates."[28] So if the initial allocation is inefficient then it may not be possible, given high transaction costs, for the parties to reallocate them efficiently. Those of more left-wing sympathies often make this point in saying that in a world in which, wherever you start, property rights are very unequally allocated, assets will not necessarily end up in the hands of those who can make the best use of them. So Coase concludes: "Even when it is possible to change the legal delimitation of rights through market transactions, it is obviously desirable to reduce the need for such transactions and thus reduce the employment of resources in carrying them out."[29] So the law should tend to allocate rights in the way in which they would be allocated by the market in a world in which the costs of market transactions, and presumably other imperfections, were not an impediment. This is a somewhat startling thesis unless it is assumed that the law should somehow at the same time not upset the existing unequal allocation of property rights, and Coase does not address the point. Although skeptical Coase concedes that there may be some situations—smoke nuisance affecting a large number of other people, where transaction costs are likely to be large—in which government intervention is appropriate: "[T]here is no reason why, on occasion, such governmental administrative regulation should not lead to an improvement in economic efficiency."[30] It all depends on the circumstances.

What seems to me to be curious is that Coase, who on questions of allocation and delimitation of rights has in mind private law, nowhere treats judicial decisions in private law by the courts of the state as a form of governmental intervention or action. Private law, evolving through judicial decisions, is, for reasons never made explicit, privileged against the criticisms he directs against government intervention. When he instances "inaction" as one possible reaction to the problem of social cost what he must really mean is leaving the matter to the common law. Since courts cannot simply wash their hands of disputes, this never means doing nothing. In the case of a smoke nuisance, it might mean imposing strict liability, liability for negligence, or no liability at all; whatever is decided entails taking sides. It may be possible to divine why Coase is sympathetic to leaving matters to the common law from his doubts about governmental decisions, which arise because they are "subject to politi-

[28] *Id.* at 115. Coase does not discuss the fact that making use of the allocation of legal rights by litigation is not costless.

[29] *Id.* at 119.

[30] *Id.* at 118.

cal pressures and operating without any competitive check."[31] So judicial decisions, though not obviously subject to competitive checks, are better because they are apolitical. This view is of course controversial. Another possible reason is that whereas the parties can contract out of a common-law ruling, they normally cannot do this where there is regulatory control, such as zoning, at least if they wish their contract to be legally effective. Coase is critical of others for discussing the problem of social cost without specifying the institutional context, as by discussing, for example, laissez-faire without telling the reader what monetary, legal, or political system is assumed to be in force.[32] However, he does not himself specify what other assumptions he is making about the state of the law. For example, in *Sturges v. Bridgman*, given a state of nature, Dr. Sturges might well have solved the problem by using his acquired military skills and bayoneting Mr. Bridgman, or Mr. Bridgman might have crowned the good doctor with one of his lignum vitae pestles.[33] Doing nothing about the problem of social cost might or might not mean that the state did not intervene in such circumstances. But this criticism goes I think more to the understanding of the Coase theorem, which is not the subject of this article.

The fifth idea may perhaps be viewed as intimately connected with his view as to the role of law. It is that the right way to decide cases involving the problem of social cost (he has in mind private nuisance cases in which an injunction is sought) is to ask "whether the gain from preventing the harm is greater than the loss which would be suffered elsewhere as a result of stopping the action which produced the harm."[34] Although the point is variously expressed, Coase's argument seems to be that in such a case as *Sturges v. Bridgman* what is needed is a cost benefit analysis—residential and medical uses of property to be weighed against cakes.[35] But, given the reciprocal nature of the problem, why just medicine and cakes? Should we not take into account a very wide and perhaps limitless range of alternative courses of action? I find Coase is not very explicit

[31] *Id.*

[32] *Id.* at 154.

[33] See note 22 *supra*.

[34] Coase, *supra* note 1, at 132.

[35] See *id.* at 106: "[T]he solution of the problem depends essentially on whether the continued use of the machinery adds more to the confectioner's income than it subtracts from the doctor's." At 107 the point is put a little differently: "And it would be desirable to preserve the areas [Wimpole Street] for residential or professional use [by giving nonindustrial users the right to stop the noise, vibration, smoke, etc., by injunction] only if the value of the additional residential facilities obtained was greater than the value of the cakes . . . lost." I have omitted references to another hypothetical case.

here, and he does not explain how, in terms of legal procedure, if that is what he has in mind, such an inquiry would proceed. I shall return to the question later.

III. The Pigovian Tendency

I now turn to the structure of the article, or rather to one striking aspect of it. This takes the form of a criticism of the work of Pigou. Coase attacks views on social policy which he attributes in particular to Pigou's *The Economics of Welfare* (1920),[36] a textbook developed out of Pigou's earlier *Wealth and Welfare* (1912).

Pigou, who was born in 1877 and died on March 7, 1959, succeeded Alfred Marshall as Professor of Political Economy in Cambridge in 1908 and held the chair until 1943.[37] Pigou was an example of a type of Oxbridge don once ubiquitous but now almost extinct—a lifelong bachelor, petrified of women, who enjoyed the company of young men but, so far as is known, abstained from any sort of close entanglement, let alone physical relationship, with them.[38] He was an undergraduate at King's, where he was a pupil of Oscar Browning, and apart from noncombatant service in the First World War, he spent his whole adult life in the college until his death in 1959. My colleague Beverley Pooley can recall him pottering about, disheveled, in old age, moving backward around the court in bedroom slippers. In recent times he has achieved a curious and undeserved notoriety; J. Costello in his *Mask of Treachery* presented him as having sinister Russian contacts and also awarded him a knighthood, which I fear he never received or could have received, since he had been a conscientious objector in the war.[39] A mountain climber of considerable ability, who even climbed with George Mallory, later to die on Everest, he suffered in 1927 a severe breakdown in health, developing fibrillation

[36] A. C. Pigou, Wealth and Welfare (1912); A. C. Pigou, The Economics of Welfare (4th ed. 1932). Coase gives references to the fourth edition of The Economics of Welfare published in 1932, and I shall follow his practice. The other editions were the second (1924) and third (1929). The fourth edition was reprinted several times (in 1938, 1946, 1948, 1950, and in 1952 with eight appendices). There may have been other reprints.

[37] Ronald Coase in his Economics and Economists (Chicago, 1991), ch. 10, gives an account of Pigou's appointment.

[38] Biographical account based on correspondence with the late Sir Austin (E. A. G.) Robinson in 1992 and Lord Noel Annan in 1994; an unsigned obituary attributed to Robinson in the *Times* for March 9, 1959; an article by Robinson in The Dictionary of National Biography 814–17 (1951–60); an article by J. de V. Graaff in 3 The New Palgrave: A Dictionary of Economics 876 (John Eatwell, Murray Milgate, & Peter Newman eds., 1994) and an article by Robert Skidelsky on John Maynard Keynes in 2 *id.* at 282, 286–87, 367, 702; and other accounts as cited below.

[39] John Costello, The Mask of Treachery 149, 176, 181 (New York, 1988).

of the heart. Thereafter, he was a shadow of his former self; he became eccentric and reclusive, and his misogyny became grotesque. Even in his country cottage in the Lake District, where he tended to unwind, and was even civil to the wives of his friends, he was hostile to talking about economics. As the late Sir Austin Robinson recorded: "[E]conomics was taboo. I have never had a serious economic discussion with Pigou."[40] He thus differed from the type of Oxbridge don—examples are the philosophers Ludwig Wittgenstein and J. L. Austin—whose ideas were disseminated orally through seminars and discussion with colleagues.

As an economist he was an uncritical follower of the views of his predecessor Marshall. Indeed, as Sir Austin told me, he tended to be intolerant of anyone who presumed to criticize the views of the master.[41] He published extensively and lectured somewhat repetitively in a style which was then quite normal.

As an economist "he set out to investigate the full conditions for maximum satisfaction, the conditions in which private and social net product (as he called them) might diverge, and the measures which could be taken to bring them into equality, and maximize satisfaction."[42] Pigou did not investigate every good thing in society, but only those which could readily be related to monetary value. Since the measures which he thought might, in principle, be employed to correct divergence would principally be legal measures, typically the collection of taxes or payment of bounties, Pigou had an economic theory as to how law might promote welfare, though he never laid any emphasis on the point, and perhaps never realized this.

Coase treats Pigou as his principal target and presents the Pigovian theory—what he calls his "basic position" or "central tendency"—thus: "[W]hen defects were found in the working of the economic system, the way to put things right was through some form of governmental action."[43] In his *Essays on Economics and Economists* (1994), Coase presents Pigou as influencing a school of economists: "Some fifteen or twenty years

[40] Don Patinkin & J. Clark Leith, Keynes, Cambridge, and *The General Theory*: The Process of Criticism and Discussion Connected with the Development of *The General Theory* 30 (London, 1978).

[41] Letters from Sir Austin Robinson to author, May 26, 1992, and June 6, 1992.

[42] In Pigou, Wealth and Welfare, *supra* note 36, ch. 7, at 148–71, Pigou gives examples of divergences. Some arise out of the form of contracts, for example in leases which provide no incentive for the tenant to maintain the fertility of the land or improve it. Examples are given of uncompensated services such as the light thrown onto a street by lamps at the entrance of private houses (see *supra*, at 158–69), and these are followed by cases where the social net product falls short of the private net product, as where motor cars wear out roads (*supra*, at 162 ff.).

[43] Coase, *supra* note 1, at 20.

ago economists, under the influence of Pigou and others, thought of the government as waiting beneficently to put things right whenever the hidden hand pointed in the wrong direction."[44] Coase has also indicated that Pigou was not really very clever. Thus, in the first chapter of *The Firm, the Market and the Law* of 1988 he records how he proposes to present to the Regenstein Library of the University of Chicago Pigou's copy of E. W. Bemis's *Municipal Monopolies;* the markings and annotations "will indicate Pigou's manner of working."[45] The context in which this is said suggests that these markings and annotations are not the product of a superior intellect, nor evidence of a sound manner of working. I have not inspected the book, and for all I know this may very well be true. In the account Coase gives of Pigou's appointment to the Cambridge chair, in which Marshall was influential, Coase remarks: "It seems clear to me that Pigou did not fulfil the high hopes which Marshall had of him. In many respects his influence on the development of economics has been bad. He seems to have lacked any feeling for the working of economic institutions."[46]

Somewhat surprisingly, Coase in *The Firm, the Market and the Law* more or less concedes that Pigou nowhere expresses the view attributed to him, or if he does, hedges it with "numerous qualifications." On the page where he makes this concession he refers to the Pigovian *tradition,* meaning thereby to refer to a view which was in some loose sense associated with Pigou, or fathered on him in oral tradition, rather than anything he actually wrote or said.[47] As I have explained Pigou's ideas were not likely to have been transmitted orally, given his dislike of discussing economics, so the source of any Pigovian tradition is likely to have been his written works, or glosses put on them by others. I shall later return to this curiosity.

IV. Pigou and Sparks from Locomotives

Coase uses a particular Pigovian illustration, involving the law relating to uncompensated fire damage caused by sparks escaping from steam railway locomotives, as an example of Pigou's failings. I shall discuss the law in more detail later; here it is enough to know that the victim of such

[44] *Id.* at 30; compare at 56. Pigou's most radical political view, not original to him, was that because of the differing marginal utility of income, wealth transfers from rich to poor would enhance utility. Coase does not discuss this view.

[45] *Id.* at 22 n.33. The work is cited by Pigou, for example, in The Economics of Welfare, *supra* note 36, at 296.

[46] *Id.* at 166 n.32.

[47] *Id.* at 20.

damage might be unable to recover compensation for it without proving negligence. This might be difficult—for example, it might be difficult to identify which locomotive was the source. In "The Problem of Social Cost,"[48] Coase discusses the sparks illustration in considerable detail. He makes three claims, based on Pigou's use of it in *The Economics of Welfare*.[49]

The first is that Pigou thought that there should be "state action" to force the railways to make compensation. This statement of Pigou's supposed view is expressed in a different form by others, for example by R. D. Cooter in an article on the Coase theorem in *The New Palgrave: A Dictionary of Economics:* "Pigou used economics to defend the common law principle that a party who caused a nuisance should be enjoined or required to pay damages. According to Pigou, the common law rules tend to promote economic efficiency by internalizing social costs."[50] But this, besides being wrong, is quite at odds with Coase's presentation.

The second claim is that the legal situation to which Pigou referred, which in Pigou's view, so Coase claims, amounted to an imperfection in the working of the economic system, was in reality itself the *consequence* of state action. So Pigou in favoring state action had dramatically got hold of the wrong end of the stick.[51] He returns to the same point in *The Firm, the Market and the Law:* "For example, as I pointed out in 'The Problem of Social Cost,' the situation in which sparks from a railway locomotive could start fires which burnt woods on land adjoining the railway without the railway having to pay compensation to the owners of the woods (the legal position in England at the time Pigou was writing and one of which he had perhaps heard) had come about not because of a lack of governmental action but in consequence of it."[52] Underlying these first two claims is Coase's general skepticism about state action.

The third claim I shall for the moment leave on one side.[53]

V. Sparks, Pigou, and State Action

As for the first claim, Pigou nowhere said that the state should do anything at all about uncompensated damage caused by sparks from rail-

[48] *Id.* at 135–42.

[49] Pigou, The Economics of Welfare, *supra* note 36, at 134. It is not used in Wealth and Welfare in the relevant passage in pt. 2, ch. 7, in particular at 162–64, but at 159 he mentions the use of devices which reduce smoke emissions as conferring an unpaid-for service on third parties.

[50] Article on "The Coase Theorem," in 1 The New Palgrave: A Dictionary of Economics, *supra* note 38, at 459.

[51] Coase, *supra* note 1, at 135–38.

[52] *Id.* at 23; see also 131.

[53] See Section IX below.

way locomotives. Much less does Pigou "defend the common law principle," as Cooter claims in the passage I have quoted.

Pigou's example has a context. He used it merely to show how social and private net products—in simple language, economic advantage or disadvantage to society generally on the one hand and to the individual actor on the other—might diverge: "It might happen, for example, as will be explained more fully in a later chapter, that costs are thrown upon people not directly concerned, through, say, uncompensated damage done to surrounding woods by sparks from railway engines."[54] Pigou was drawing attention to what economists now call "externalities."

He never used this example in discussing the merits of government intervention. It appears in the edition of *The Economics of Welfare* of 1920[55] and in all later editions, unaltered in substance. The terminology of the 1920 edition was slightly different from that used in the fourth edition quoted by Coase. In the first edition Pigou contrasted "social net product" ("the aggregate contribution made to the national dividend") with "trade net product" ("the contribution . . . that is capable of being sold and the proceeds added to the earnings of those responsible for the industry under review".)[56] Pigou was trying to make the point that in calculating private (or earlier "trade") and social net products, "All such effects must be included—some of them will be positive, others negative elements."[57] In assessing the social net product of running a railway, you have to include in the balance sheet all the effects of the operation, good or bad, on everyone who is affected, however indirectly; how this daunting undertaking was to be conducted Pigou did not explain, and as we shall see he later recognized the difficulty.[58] That is the only use to which he puts the illustration.

Coase says that Pigou's use of the example "is presumably intended to show how it is possible 'for State action to improve on "natural" tendencies.' "[59] The passage quoted from Pigou comes from Pigou's book, but not from the section in which he deals with sparks. Coase's claim seems mistaken.

Later in the first edition, in speaking of the reasons why there could be divergence, Pigou explains, without mentioning the sparks example, that "technical considerations" might prevent "compensation being en-

[54] Pigou, *supra* note 36, at 134.

[55] Pigou, The Economics of Welfare 115 (1st ed. 1920).

[56] Pigou, *supra* note 36 (4th ed.), at 149. The terminology used in the later editions of The Economics of Welfare is that used in his Wealth and Welfare.

[57] *Id.* at 134.

[58] See text around notes 62 and 85 *infra*.

[59] Coase, *supra* note 1, at 137.

forced on behalf of the injured parties" where A, in providing a service to B, renders some disservice to C.[60] He makes the same point over benefits conferred on third persons, but not paid for by them. In the fourth edition he refers to "the technical difficulty of enforcing compensation for incidental disservices."[61] It is obscure to me what Pigou meant by "technical difficulty." Conceivably, he was talking about the state of tort law, but whether he was or not, the passage makes it clear that he accepted the fact that not all damage would be compensable.

Pigou also gave no hints as to how, as a matter of principle, practicalities apart, you identify all the effects of an activity, such as running a railway, in order to take them into account. He seems to assume some sort of commonsense notion of causation. Later in his *Socialism versus Capitalism*, published in 1937, he came to the conclusion that quantifying the effects would be very difficult, though he does not there discuss how one sets bounds to the enterprise.[62] The problem is not discussed by Coase. Plainly, you cannot engage in cost benefit analysis without some scheme for allocating consequences or effects to the activity under consideration.

Why did Coase think that Pigou favored state intervention over engine sparks? Coase reaches his conclusion by relying on a much later passage in Pigou's *The Economics of Welfare*, chapter 20 of part 2. In this chapter Pigou explicitly discusses intervention by public authorities. The conclusion Pigou reaches is accurately stated in his own summary of paragraphs 4 and 5 of this chapter: "The mere failure of private industry, when left free from public interference, to maximize the national dividend does not of itself warrant intervention; for this *might* make things worse. Certain modern developments have, however, rendered government agencies better fitted for intervention than they were in former times."[63] Here Pigou is not discussing changes in private tort law. He is discussing regulatory "control over concerns left in private hands" or their "direct public management." He argues that the principal disadvantages—he lists four in particular—which had in the past adversely affected intervention by public authorities can be obviated, and he speaks favorably of "the recently developed device of Commissions or ad hoc Boards, that is to say, bodies of men appointed for the express purpose of industrial operation or control."[64] He instances the Railway Department of New South

[60] Pigou, *supra* note 49, at 159.

[61] Pigou, *supra* note 36, at 185.

[62] Arthur C. Pigou, Socialism versus Capitalism, ch. 3, 31–46 (1937).

[63] Pigou, The Economics of Welfare, *supra* note 36, at xix.

[64] *Id.* at 334.

Wales and the Port of London Authority as examples of commissions for "operation" (we would today say "management") and the Interstate Railway Commission in the United States as one for "control" (we would today say "regulation").[65] In his later *Socialism versus Capitalism* of 1937, Pigou expresses the same preference; he was not disposed to favor management by government departments, as in the case of the Post Office.[66] In a passage in *The Firm, the Market and the Law* Coase claims that in his discussion, "starting with a statement about the imperfections of government, Pigou discovers the perfect form of governmental organization and is therefore able to avoid enquiring into the circumstances in which the defects of public intervention would mean that such intervention would tend to make matters worse."[67] I can see no basis for this in what Pigou wrote; he never suggested that the newer institutions were perfect. He did say that the newer agencies did not suffer from some of the defects of the older, having in mind principally municipal authorities. His cautious approach is thus presented in *The Economics of Welfare:* "It is not sufficient to contrast the imperfect adjustments of unfettered private enterprise with the best adjustment that economists in their studies can imagine."[68]

Indeed, there is no particular reason why Pigou should have wanted private tort law to be changed. Assuming, for the sake of argument, that Pigou was reasonably well informed on the law, he was referring to the fact that most railways in Britain were not "strictly" liable, that is, liable without proof of negligence or fault. They were not immune from liability. This was the position both before and after the passage of the Railway Fires Acts of 1905 and 1923, though this legislation introduced some exceptions.[69] Pigou could well have accepted this state of the law as

[65] Coase points out that Pigou means the Interstate Commerce Commission, established in 1887.

[66] Pigou, *supra* note 62, at 138. See also his Alfred Marshall and Current Thought (1953), written in the light of the actions of the postwar British Labour government.

[67] Coase, *supra* note 1, at 21–22.

[68] Pigou, The Economics of Welfare, *supra* note 36, at 296–99.

[69] The Railway (Fires) Act of 1905 imposed strict liability for some fire damage (basically, damage to agricultural land or crops) caused by railways up to a limit of £100, subject to certain procedural requirements. The Railway (Fires) Amendment Act of 1923 put the limit up to £200. Damage outside the scope of these acts could only be claimed by showing negligence. The Act of 1905 was first introduced in 1901 as the Compensation for Damage to Crops Bill (see Parl. Deb. 90, cols. 737–63). For its passage see Parl. Deb. 142 (4th ser.), cols. 348–74 (1901); Parl. Deb. 148 (4th ser.), cols. 1478–92 (1905). One ground for opposition was that when part of a tract of land was acquired for a railway, the price paid by way of compensation commonly included a figure for severance. This could be viewed as providing compensation for future damage; in some instance apparently the conveyance transferring the land included a provision to this effect.

reasonable. In the history of tort law there have always been some who think liability should be based on fault and others who favor some version of strict liability based on causation alone. One practical aspect of the latter is that it considerably reduces the cost of litigation to the plaintiff for proof of negligence may involve, for example, expensive expert witnesses.

Pigou's writings do not, however, suggest that he had any interest in tort law; liability for damage through sparks only momentarily attracted his attention. About tort law generally Pigou is silent; I imagine he neither knew nor cared about it. This would be typical of economists of his generation, and of virtually all the nineteenth-century political economists, though some did have an interest in accidents.[70] They showed scant interest in the private law structure of the world they discussed. I have not investigated the matter, but it would not be surprising if Coase himself was the first economist to devote any attention to tort law. The only legal arrangements which Pigou actually mentions for encouraging activities leading to desirable third-party effects, or discouraging those which led to undesirable ones, are administrative control by regulatory bodies, bounties, and taxes.[71] Neither Pigou nor Coase considers the possible development of the law of unjust enrichment to cope with situations when there are beneficial effects on third parties; at the time they were writing, this branch of the law was in England very little developed.

My belief that Pigou never considered changes in tort liability is strengthened by another of his publications. One of his *Essays in Applied Economics* discusses, as a question of ethics informed by economics, how individuals should spend their money.[72] He argues that "in our selection of objects on which to spend, it is our duty to take account of certain indirect consequences which our action produces upon other people. Some sorts of spending cause labor and equipment to be employed in ways that inflict injury on members of the general public, for which they receive no compensation. . . . *Per contra* other sorts of spending indi-

[70] John Ramsey McCulloch favored imposing liability on factory and mine owners; see his Principles of Political Economy with Some Inquiries Respecting their Application and a Sketch of the Rise and Progress of that Science 307 (Edinburgh, 1849). Edwin Chadwick, a follower of the political economists, thought the same; see S. E. Finer, The Life and Times of Sir Edwin Chadwick 61, 93, 148–50 (London, 1980). Neither had in mind tort law as the instrument. See Simpson, *supra* note 14, at 129–32.

[71] See Pigou, Wealth and Welfare, *supra* note 36, at 164; Pigou, The Economics of Welfare, *supra* note 36, at 192–96; and A. C. Pigou, A Study in Public Finance (3d rev. ed. 1947), pt. 2, ch. 8, at 94–100, on Taxes and Bounties to Correct Maladjustment. Coase, *supra* note 1, at 151 refers to this discussion, his reference being to the third edition of 1947, which I have not seen.

[72] A. C. Pigou, The Private Use of Money, in Essays in Applied Economics 1 ff. (rev. ed. 1924).

rectly confer a benefit on members of the general public, for which they pay no price."[73] Here was an opportunity to say that ethics requires the actor to pay compensation to those injured, or required that those benefited should pay for what they gain. Pigou does not take this opportunity.

There seems to be no warrant for Coase's claim that the use by Pigou of the example of uncompensated damage caused by sparks from railway engines "is presumably intended to show how it is possible 'for State action to improve on natural tendencies.' "[74] Had he said that he would of course have been right, as Coase concedes—the critical word is *possible*.

Indeed, Pigou would have been completely off his head if he had argued in favor of intervention, either by regulation or administrative control, or by bounties and taxes, in every situation where a divergence existed between social and private net product. His examples show that he was perfectly well aware of the ubiquity of externalities. Pigou seems to have viewed them as part of the natural order of things.

From Pigou's writings his real views on government intervention can readily be discovered. They are similar to those of Henry Sidgwick, whose lectures he attended. Sidgwick made the point that utility to the individual and utility to society might diverge. He concluded that there was, in consequence, a case for state intervention, but added a caution lest it be thought a compelling case: "It does not of course follow that wherever *laisser faire* falls short government interference is expedient: since the inevitable drawbacks and disadvantages of the latter may, in any particular case, be worse than the shortcomings of private industry."[75] Pigou's own view is most fully explained in a work which Coase does not cite, *Economics in Practice: Six Lectures on Current Issues*.[76] Here he argues that "it sometimes happens that only a portion of the benefit or damage due to a person's private action is reflected in the reward that person receives; and, consequently, that he tends to carry that action less far or further than the general interest of society requires."[77] He gives examples of harmful and beneficial effects.[78] He ar-

[73] *Id.* at 9.

[74] Coase, *supra* note 1, at 137.

[75] H. Sidgwick, The Principles of Political Economy, bk. 3, ch. 2, 419 (London, 1883). See the Dictionary of National Biography article, *supra* note 38.

[76] A. C. Pigou, Economics in Practice: Six Lectures on Current Issues (London, 1935). Four of these lectures were delivered at the University of London in 1934, but the relevant one, lecture 5 on State Action and Laisser-Faire, was not.

[77] *Id.* at 118 ff.

[78] In the first edition the examples are a little different. Thus, the rabbit damage is caused by game-preserving activities. With regard to smoke prevention devices, he argues that in many instances they might actually be profitable to the users, but that the public interest requires their use even though they may not "pay" the installer. See *id.* at 160–61.

gues that in such cases "there is a *prima facie* case for State intervention, in the first case by restriction, in the second by stimulation." As these terms indicate he has in mind here bounties and taxes. The same remedies for what he calls "maladjustments" are mentioned in his *A Study in Public Finance,* which Coase does cite.[79] He speaks here of "a discommodity for which those on whom it is inflicted are unable to exact compensation." He gives examples and then sets out possible disadvantages of the use of taxes or bounties.[80]

He seems blissfully unaware of the relevance of tort law, though another passage in his lectures indicates that he assumes a background of what he calls, vaguely, "the ordinary forms of law": "When private self-interest, acting freely, subject only to the ordinary forms of law, does not lead to the best results from a general social point of view, there is, as I have indicated, a *prima facie* case for State action."[81] Pigou then goes on to set out numerous problems about state action and again argues that governmental institutions, such as Public Service Boards and Commissions, are better than they used to be. The conclusion is: "The issue about which popular writers argue—the principle of laissez-faire *versus* the principle of State action—is not an issue at all. There is no principle involved on either side. Each particular case must be considered on its merits in all the detail of its concrete circumstance."[82]

The simple point Pigou made, which seems to me to be wholly unaffected by Coase's criticisms, is that if individuals act out of self-interest, narrowly defined,[83] they will tend not to take into account third-party effects for which they do not have to pay if harmful, or for which they will not be paid if beneficial. Consequently, it may be economically though not ethically rational for them to act in ways which do not enhance general welfare, or fail to act in ways which would. Taxes and bounties may be used to provide incentives to deal with this problem, but intervention may do more harm than good. It is hardly an exaggeration to say that Pigou demonstrated that self-interest operating through the market is unlikely to lead to an optimal use of resources but that he had no developed idea as to what, if anything, should be done about this. Curiously enough, Pigou does not anywhere argue, as I suppose he might have done, that in the absence of corrective measures the lack of respon-

[79] See Pigou, note 71 *supra.* In this work the examples given of losses inflicted on third parties do not include damage from sparks or rabbits.

[80] *Id.* at 99–100.

[81] *Id.* at 124.

[82] *Id.* at 127–28.

[83] If altruistic conduct, or conduct motivated by a desire to appear noble or the like, is defined as self-interested, then the analysis is different.

sibility for the creation of public harms accompanied by the lack of reward for the creation of public goods will tend to produce a world in which there are more of the former than of the latter.

By 1937, when he published his *Socialism versus Capitalism,* he had come to have grave doubts even about the use of bounties and taxes in either a capitalist or a communist system. The problem, as he saw it, was that although economists had suggested the use of these devices, no government has ever tried to use them,[84] and the economists "have never attempted the quantitative study that would be necessary before the suggestion could be applied in practice."[85] His idea was that such study would be needed to settle the level of taxation. Ignorance of the facts militated against the use of these possible remedies.[86] Curiously enough, his view here is similar to that presented by Coase in his "Note to the Problem of Social Cost," but much less developed.[87]

Pigou's view was thus much the same as that of Coase, though he was marginally less skeptical about the merits of state action. A curiosity of Pigou's view is that taxes for damage do not compensate those harmed, since it is not suggested that the tax revenue should go to them. Perhaps the explanation is that compensation is usually justified on the ground of its being just or fair to the individual, whereas Pigou supposed himself to be interested in providing incentives to discourage activities which were harmful to society generally; his taxes serve the same purpose as deterrent punishment in the criminal law, which does not directly benefit the immediate victim. Bounties, however, do benefit directly the person who provides the service.[88]

[84] In fact they had—the imposition of tolls to reward those who ran lighthouses is a form of taxation. See David E. Van Zandt, The Lessons of the Lighthouse: "Government" or "Private" Provision of Goods, 22 J. Legal Stud. 47, 61 ff. (1993).

[85] See Pigou, *supra* note 62, ch. 2, at 42–44.

[86] William J. Baumol in On Taxation and the Control of Externalities, 62 Am. Econ. Rev. 307 (1972) has set out a practical scheme for getting around this difficulty, using the example of a smoke-producing factory and adjacent laundries. After fixing a desired level of pollution/cleanliness, you impose a tax and adjust it in the light of experience until the desired level is achieved. He further argues that compensation must not be paid to the laundries. One reason is that this might encourage too many laundries (or whatever) to move into the area—"an excessive influx of neighbours." The influx might be excessive if the aggregate harm resulting was greater than it had been without compensation, when trades sensitive to smoke would keep away. Baumol does not in a short treatment attend to the complexity of his scheme, under which those who moved in, once pollution was reduced, might not be laundries but orchid growers, nudists, or whatever. He also relies on a theoretical argument: public harms are to be analogized to public goods, when one person's use does not reduce the supply of the good to others. So the fact that one adjacent laundry is harmed does not reduce the amount of harm available to another laundry. It is not easy to see why this is an argument against providing compensation.

[87] Coase, *supra* note 1, at 184.

[88] *Id.* at 151.

The subject of interference by government had long excited the political economists, and they tended to say much the same as each other, relying not on formal proofs or empirical studies, but on appeals to common sense and assertions of the supposedly obvious. Thus, J. R. McCulloch back in 1849 ended his chapter on the subject with a typical fanfare, couched in appropriately loaded language: "It cannot, however, be too strongly impressed upon those in authority, that non-interference should be the leading principle of their policy, and interference the exception only; that in all ordinary cases individuals should be left to shape their own conduct according to their own judgement and discretion; and that no interference should ever be made on any speculative or doubtful grounds, but only when its necessity is apparent, or when it can be clearly made out that it will be productive of *public* advantage."[89] The practice was to assert in rhetorical tones, as this example illustrates, the validity of propositions so broad as to be quite incapable of falsification or demonstration. That this technique could be effective cannot be doubted; the most notable victims of the early political economists were the Irish peasants who died in the Great Famine, for Charles Trevelyan, the civil servant responsible, was passionately committed to the view that government intervention in the Irish food market would only make things worse, failing to attend to the fact that so far as the peasantry were concerned there was, as an institution, no food market.[90]

VI. Pigou as Straw Man

Since Pigou did not express or apparently hold the view attributed to him, the question arises as to what he is doing in the article at all. One possibility is that he functions as a surrogate for what Coase calls the Pigovian tradition. It may well be that in the exposition of Pigou's supposed views by others, but not by him, ideas were expressed by economists, and passed on to their pupils, which conform to Coase's account and formed a coherent oral tradition.[91] Yet if Coase is not really criticizing an economic doctrine purveyed by Pigou, but merely some sort of pervasive sentiment in favor of regulation by the state, it remains hard to see why Pigou is treated as a target.

[89] McCulloch, *supra* note 70, at 308.

[90] By "market" I mean a set of institutional arrangements which facilitate exchange. See C. Woodham-Smith, The Great Hunger (1977), generally and especially at 54–55; Christine Kinealy, This Great Calamity: The Irish Famine, 1845–1852 (1994), esp. ch. 9.

[91] Coase, *supra* note 1, at 149–53. For an example see 1 Hugh Dalton, Call Back Yesterday: Memoirs 1887–1931, at 58 (London, 1953), cited in E. Durbin, New Jerusalems: The Labour Party and the Economics of Democratic Socialism 5 (London, 1985). Durbin's book suggests that control over pollution was not a topic which excited left-wing economists.

The explanation is perhaps this. Coase is anxious to convince his readers that his own skepticism as to the merits of government intervention in the economy is so justified as to raise a presumption against it. Yet it is hard to see how this could be demonstrated. It does not seem to be self-evidently true; as for empirical proof the claim is of such an all-embracing generality that there is no way in which it could be either supported, or attacked, by deploying some body of scientific knowledge called economics. No doubt in particular cases it is possible to come up with evidence of a persuasive or fairly compelling character, but the global claim is neither supportable nor falsifiable. It has no truth value. Those who put forward such global claims report their own political preferences and are reduced to attempting to convince others by rhetoric. For the claim hardly falls short of the assertion that, prima facie, government is a bad thing; it seems difficult to think of any form of government intervention which does not affect the working of the economy. This may or may not be true, but there is just no way of being sure or even mildly confident. Hence Coase, in the tradition of the political economists, adopts a rhetorical device, which is first of all to attribute a commitment to the merits of government intervention to Pigou and then to present Pigou as a deeply confused thinker. The form of the argument then is this: if you believe X, then you are in bad company, for you believe something particularly associated with the thinking of Y, a deeply confused economist. The very fact that Y believed X becomes itself a reason for skepticism.

The function of Coase's second claim relates to this rhetorical device: it is to show how confused a thinker Pigou was.

This second claim is, as I have explained, that in his use of the sparks example Pigou got hold of the wrong end of the stick. The immunity of railways from liability for fire damage, insofar as such immunity exists or used to exist, was itself a *consequence* of governmental action.[92] In *The Firm, the Market and the Law* Coase repeats his point in a passage I have already quoted.[93] In another passage Coase puts his belief that the partial immunity under discussion was the consequence of government action in an even stronger form: "In the real world Pigou's example could only exist as a result of *a deliberate choice of the legislature.*"[94] By "governmental action" Coase apparently had in mind some kind of ministerial or cabinet decision expressed in legislation, or at least a decision by Parliament embodied in legislation. In another passage Coase, after

[92] Coase, *supra* note 1, at 138.

[93] See text around note 52 above.

[94] Coase, *supra* note 1, at 138 (my italics).

quoting from an American case,[95] dramatizes his argument. Most economists seem to be unaware that

> [w]hen they are prevented from sleeping at night by the roar of jet planes overhead (publicly authorized and perhaps publicly operated), are unable to think (or rest) in the day because of the noise and vibration from passing trains (publicly authorized and perhaps publicly operated), find it difficult to breathe because of the odour from the local sewage farm (publicly authorized and perhaps publicly operated), and are unable to escape because their driveways are blocked by a road obstruction (without any doubt, publicly devised), their nerves frayed and mental balance disturbed, they proceed to declaim about the disadvantages of private enterprise and the need for governmental regulation.[96]

As R. A. Posner puts it, "Coase appears to be blaming all pollution on government."[97] Of course, horrors of the character of those mentioned by Coase have existed throughout history, long before the rise of the modern regulatory state.[98]

But did Pigou really misunderstand the matter in so serious a way? To answer this question requires some account of the history of this branch of the law.

Railways were never immune from liability; the immunity in question was partial, an immunity from strict liability only. Coase based his view on a passage in *Halsbury's Laws of England*,[99] and although there is a doctrinal sense in which this is correct, it misled Coase. To explain why requires a somewhat tedious analysis of a complex body of nineteenth-century case law.

In the past fires were a major scourge of cities; reported cases are curiously rare, and the problem was handled largely by regulatory controls and techniques other than tort actions.[100] Liability for the escape of fire existed in medieval common law and originally seems to have been centered on house fires, deliberately kindled.[101] In *Turberville v. Stampe* (1697),[102] this liability was extended to cover agricultural fires deliberately kindled. Whether in pre-nineteenth-century law liability for the escape of

[95] Smith v. New England Aircraft Co. (1930), 270 Mass. 511, 170 N.E. 385, at 390.

[96] Coase, *supra* note 1, at 131.

[97] Posner, *supra* note 18, at 410 n.18.

[98] For an account of pollution in Victorian England, see McLaren, *supra* note 3.

[99] Railways and Canals, vol. 31 in Halsbury's Laws of England (Viscount Simonds ed. 1952–64), at 474–75.

[100] Frank Sharman, Fires and Fire Laws up to the Middle of the Eighteenth Century, 22 Cambrian L. Rev. 42 (1991).

[101] The Year Book case is Beaulieu v. Finglam (1401), Y.B. 2 Hen.IV, folio 18, plea 5.

[102] Turberville v. Stampe (1697), 1 Ld.Raym. 264, 91 E.R. 1072.

fire was strict, or based on negligence, or some sort of hotchpotch between them, is obscure. It may be an unreal question, since standards of liability were then matters of jury discretion, rather than questions of law to be settled by the judiciary.

During the eighteenth century a series of fire prevention statutes was passed; they include provisions dealing with fires which began "accidentally."[103] In 1774 a comprehensive *Fires Prevention (Metropolis) Act* was passed;[104] section 86 appears to assume that at common law there might be liability, possibly strict, for fires which escaped from premises but had not been deliberately kindled, but the provision is obscure. The underlying assumption seems to have been that fires which caused damage to neighbors would normally either have been deliberately kindled, and allowed by negligence to spread, or have begun through negligence, but that there might be situations where a fire was accidental in the sense that it had not spread through negligence.[105] The Act of 1774 does not clearly indicate what the standard of liability was then supposed to be, perhaps for the reason I have explained. However, Blackstone in his *Commentaries* (1765–69) thought that the effect of the Act was to exonerate a householder from liability either for his own negligence or that of his servant.[106] However, a servant responsible was made liable to a penalty, with imprisonment in default of payment. Since serious fires would commonly leave a potential defendant without means, tort actions may have had little value.

The first reported nineteenth-century case which explicitly addressed the standard of liability as a matter of law was *Vaughan v. Menlove* (1837).[107] The fire arose from the spontaneous combustion of a hayrick and was spread by the wind to adjacent property. All the lawyers involved assumed that liability must be based on proof of negligence. The case is, indeed, notable as laying down, for the first time, the objective test of negligence in tort law. It contains no suggestion that strict liability applied. *Filliter v. Phippard* (1847) held that the exemption for accidental

[103] 6 Anne c.31 (1707) was a temporary act. It provided that in the case of a fire which began accidentally, the defendant could, if sued, plead the general issue and give this in evidence. The implication is that the jury might treat it as a defense. This act was made perpetual by 10 Anne c.14 (1711) s.1. There were further Acts in 1760 (33 Geo.II c.73) and 1772 (12 Geo.III c.73).

[104] 14 Geo.III c.78.

[105] I base this on a comparison of sections 134 and 136 of the Fires Prevention (Metropolis) Act of 1774.

[106] 1 William Blackstone, Commentaries on the Laws of England 419 (facsimile 1st ed. of 1765–69, Chicago, 1979).

[107] Vaughan v. Menlove (1837), 3 Bing. N.C. 468, 132 E.R. 490, 7 Car. & P. 525, 173 E.R. 232, 4 Scott 244, 3 Hodges 51.

fires provided by the Act of 1772 did not apply to fires begun or spread by negligence, but does not clearly indicate what the common-law rule was then thought to be. It suggests that there was only liability for negligence.[108]

In *Viscount Canterbury v. Attorney General* (1843),[109] Lord Lyndhurst thought that common-law liability was for negligence and was unaffected by the Act of 1774; he referred, in addition to *Vaughan v. Menlove*, to an unreported decision at nisi prius by Baron Alderson, where liability was so based. He decided the case before him on another ground and commented on the curious lack of case law on the matter.

However, during the nineteenth century the idea that liability for accidental damage ought to depend on proof of negligence was in competition with the idea that those who caused damage, or those from whose activities damage resulted, ought to be strictly liable. Strict liability received support some years later in *Rylands v. Fletcher* (1868),[110] a case which did not, however, involve the escape of fire, but of water. Shortly after the decision of the Court of Exchequer Chamber in that case, and in the same year, *Jones v. Festiniog Railway*,[111] which did involve fire, came before the courts. The defendant company had been empowered by an Act of 1832[112] to make and maintain a railway. But the private act gave no express power to operate locomotive steam engines. Probably the original scheme was to use horse-drawn trains. By the mid–nineteenth century the company was using steam locomotives to draw passenger trains. Sparks from an engine burnt the plaintiff's hayrick. Mr. Justice Blackburn, formulator of the "rule in *Rylands v. Fletcher*," who had delivered the opinion of the Court of Exchequer Chamber in that case, took the view that his rule applied to the escape of fire as well.[113]

Between 1837 and 1860, the latter being the date of *Vaughan v. Taff Vale Railway*,[114] which, as we shall see, was the critical decision on the partial immunity of railways from liability for fire damage, it is by no means easy to say what the common-law principle governing escape of

[108] Filliter v. Phippard (1847), 11 Q.B. 346, 116 E.R. 506.

[109] Viscount Canterbury v. Attorney-General (1843), 1 Phillips 306, 41 E.R. 648.

[110] L.R. 1 H.L. 330.

[111] Jones v. The Festiniog Railroad Company (1868), L.R. 3 Q.B. 733.

[112] 2 Wm.IV c.cxlviii.

[113] The Queen's Bench decided this case on June 26, 1868. Rylands v. Fletcher was decided by the Court of Exchequer Chamber on May 14, 1866, and by the House of Lords on July 17, 1868. By the time the report of *Jones* was published, it was possible to insert a reference to the House of Lords decision.

[114] Vaughan v. The Taff Vale Railway Company (1860), 3 H. & N. 743, 157 E.R. 667, 5 H. & N. 679, 157 E.R. 1351. The case is mentioned by Coase, *supra* note 1, at 137.

fire from steam powered locomotives onto adjacent land was. The point was, as lawyers say, arguable.[115] But all the reported actions against railways for the escape of fire were for negligence.

In 1860, however, *Vaughan v. Taff Vale Railway* ruled, for the first time, that an action against a statutorily authorized railway for the escape of fire had to be based on negligence. But it was not until 1868 that *Jones v. Festiniog Railway* ruled that the common law, in the absence of statutory authorization, imposed strict liability. Hence from 1868 onward such railways as the Taff Vale Railway were thought to enjoy an exemption from what had now become the normal rule. Before 1868 it was by no means clear that this was an exemption. So the partial immunity which Coase discusses was only established, as such, in 1868.

VII. The Doctrinal Background to *Vaughan v. Taff Vale Railway*

The background to the decision in *Vaughan v. Taff Vale Railway* was as follows.

Railways could be operated without statutory authority, but most sizable ones were authorized by Local and Personal Acts of Parliament—"special" Acts.[116] One reason for these Acts was that the undertakers required power to override private property rights for survey or during construction, and to acquire land compulsorily, on payment of compensation. An enormous range of privately operated utilities were so authorized—canals, turnpike roads, markets, bridges, reservoirs, docks, and of course railways. They were the principal legal underpinning of both the agricultural and the industrial revolutions.[117] Originally each Act would be individually tailored to the particular promotion, but Parliament came to insist on the inclusion of certain standard clauses. The next step was general legislation—"Clauses" Acts—whose provisions were automatically incorporated into individual special Acts. Thus, from 1845 onward all Railway Acts were governed both by the Land Clauses and Railway Clauses (Consolidation) Acts of that year, as well as by the provisions in the special Act.[118]

[115] Further uncertainty arose because a case involving fire damage could be categorized as a nuisance case, and although in a nuisance action it no doubt helped to show that the defendant's operations were negligently conducted, it was not thought essential to do so.

[116] See generally R. W. Kostal, Law and English Railway Capitalism, 1825–1875 (Oxford, 1994), pt. I. Kostal does not, however, deal with the law relating to property damage caused by railways.

[117] See A. W. B. Simpson, Legal Liability for Bursting Reservoirs: The Historical Context of Rylands v. Fletcher, 13 J. Legal Stud. (1984), at 209, 252–54, and generally.

[118] Rex v. Pease (1832), 8 and 9 Vict. c.18 and c.20. Other examples are the Waterworks Clauses Act of 1847 and Town Police Clauses Act of the same year.

Neither special Acts, nor Clauses Acts, clearly spelled out how the operations of authorized undertakings fitted into the scheme of common-law liability. Only by degrees did there emerge a clear body of principle. The judicial task was not made easier by the fact that during this period the common law itself was not some settled body of doctrine—it too was in a state of flux; the legal culture embodied ideas which pulled in different directions.

The starting point was a criminal case, *Rex v. Pease* (1832).[119] It concerned the Stockton and Darlington Railway, the first to be open to public use, constructed and operated under two special Acts.[120] The permitted line ran close to a highway, and trouble arose when steam locomotives were used. The undertakers were indicted at the York Lent Assizes for public nuisance. The indictment alleged that the operation of the railway close to the highway made its use dangerous because "the said engines, furnaces and stoves, and the fires burning therein as aforesaid, exhibit terrific and alarming appearances, and make divers loud explosions, shocks and noises." In defense of the company, J. F. Pollock[121] argued: "The enterprise in this case is private: but it is one in which the public are largely interested. Like Waterloo Bridge, or the London Docks, it has a mixed object; profit for the adventurers, and public benefit." The trial judge, Sir James Parke,[122] influenced by this analysis, based his decision on section 8 of the special Act: "[I]t shall and may be lawful for the said company . . . to make and erect such and so many locomotive or moveable engines as the said company shall from time to time think proper and expedient, and to use and employ the same in and upon the said railway and tramroads."[123] This he thought incompatible with holding that operating the railway was in itself indictable—a nuisance per se. However, neither this nor any other section said anything specific about criminal or civil liability, and he went on to consider whether the act gave the company an absolute power to run the railway without incurring criminal liability: "or only with some implied condition or qualification, that they should employ all practicable means to protect the public against any injury from them." Such means might include building screens, or laying the railway further from the road; if the power was

[119] The King against Edward Pease and others (1832), 4 B. & Ad. 30, 110 E.R. 366. Edward Pease, who came from a Darlington Quaker family, was the entrepreneur principally responsible for the building of the Stockton and Darlington Railway.

[120] 1 & 2 Geo.IV c.xliv and 4 Geo. IV c.xxxiii.

[121] Pollock lived from 1783 to 1870; he was later Chief Baron Pollock.

[122] He was later to become Lord Wensleydale.

[123] 4 Geo. IV c.33.

merely conditional, the running of the railway might or might not be a public nuisance, depending on the circumstances. He might well have taken this view, and many years later, in *Metropolitan Asylum District v. Hill* (1881),[124] the House of Lords applied a doctrine which came close to it. The reasoning in that case could have led to a conviction in *Rex v. Pease*, so long as it would have been possible to site or manage the railway so as not to cause a nuisance. But in the event, the judge held that there was no such qualification. There was nothing unreasonable, he thought, in supposing that the legislature knew that the railway would inconvenience the public, but would compensate for this in the public benefit conferred. The idea that if an activity which would normally constitute a public nuisance could be shown to confer a public benefit, it might not for this reason rank as an indictable nuisance, may have derived from *Rex v. Russell* (1827).[125] The question to be considered was, "Did the public benefit countervail the prejudice to individuals?" This was to become a common argument for immunity in tort law.

The application of this notion to civil liability is first met in an argument presented by Serjeant Bompas in *Aldridge v. Great Western Railway Co.* (1841).[126] However, the court expressed no opinion; the question did not arise, since the action was based on negligence. In another action against a railway, *Piggot v. Eastern Counties Railway Co.* (1846),[127] it was assumed that the common law imposed liability only for negligence and that an authorized railway would be so liable. *Rex v. Pease* was not mentioned, and as the issue was there conceived, no immunity or exception to a general common-law rule was involved.

The application of *Rex v. Pease* to civil liability is first considered judicially in *Vaughan v. Taff Vale Railway* (1857–60).[128]

This case had a curious history. It was tried before Baron Bramwell at the Glamorgan Spring Assizes in 1857. A fire damaged a wood on the Aberdare branch of the railway; it had caught fire on several previous occasions. The action was based on allegations of negligence; at this time it would be supposed in the profession that proof of negligence was necessary, following *Vaughan v. Menlove* (1837). One count alleged negligence in the operation

[124] Metropolitan Asylum District v. Hill (1881), 6 App. Cas. 193.

[125] The King against Russell and others (1827), 6 B. & C. 566, 108 E.R. 560. This was questioned in R. v. Ward (1836), 4 Ad. & E. 385 at 400, 111 E.R. 832 at 837, and in 1873 held to be overruled in Jollife v. Wallasley Local Board (1873), L.R. 9 C.P. 62.

[126] Aldridge v. The Great Western Railway Company (1841), 3 Man. & Gr. 515, 133 E.R. 1246, 4 Scott N.R. 156.

[127] Piggot v. The Eastern Counties Railway Company (1846), 3 C.B. 229, 136 E.R. 92.

[128] November 20, 1858, before the Court en banc 3 H. & N. 743, 157 E.R. 667; before the Exchequer Chamber May 12, 1860, 5 H.& N. 679, 157 E.R. 1351.

of the railway, the other in the management of the bank of the railway. The trial judge, Baron Bramwell, strongly believed in the idea that industry should, as we would now say, internalize its costs. J. P. S. McLaren has pointed out in his classic article how Bramwell believed as strongly in the conception of individual responsibility. In consequence, his decisions were erratic, according to which idea prevailed in a particular case.[129] In *Vaughan v. Taff Vale Railway*, internalization won. He told the jury that "if, to serve his own purposes, a man does a dangerous thing, whether he takes precautions or not, and mischief ensues, he must bear the consequences: that running engines which cast forth sparks, is a thing intrinsically dangerous, and that if a railway engine is used, which in spite of the utmost care and skill . . . is dangerous, the owner must pay for any damage occasioned thereby." This sounds like strict liability, but Baron Bramwell's point was that there must have been negligence or the fire would never have happened. He suggested precautions which might have been taken—the railway banks might have been made of gravel and not covered with inflammable grass. Bramwell's view that the facts spoke for themselves was to be dignified as "res ipsa loquitur" in *Byrne v. Boadle* (1863).[130] The jury obediently found the defendants liable, apparently on the first count. The claim based on the supposedly negligent management of the bank was not taken any further.

The case then went before the full Court of Exchequer. No doubt because it seemed difficult to uphold the direction of Baron Bramwell, if negligence was the basis of liability, counsel now argued that running railway engines was like keeping a dangerous animal, such as a tiger, for which liability was strict. At the time such liability was sometimes explained by saying that keeping a dangerous animal was in itself an unlawful act. Chief Baron Pollock responded to this, distinguishing keeping tigers from running this railway, which the defendants were empowered to run by statute. He referred to *Rex v. Pease*, in which he had as we have seen been counsel for the winning side. It is from this intervention that the civil immunity of authorized railways and other utilities from liability, in the absence of negligence, derives. But as we have seen it was not until some years later, after *Jones v. Festiniog Railway* (1868),[131] that their legal position can be *contrasted* with a normal common-law regime of strict liability. In the event, the court treated the case as a negligence action, and, in an opinion delivered by Baron Bramwell himself, held that his direction was unobjectionable.

[129] McLaren, *supra* note 3.

[130] Byrne v. Boadle (1863), 2 H. & C. 722. Bramwell was one of the judges but delivered no separate opinion.

[131] Jones v. Festiniog Railway Company (1868), L.R. 3 Q.B. 733.

The case then went to the Court of Exchequer Chamber.[132] It ruled that Baron Bramwell had misdirected the jury. Chief Justice Cockburn picked up Pollock's reference to *Rex v. Pease*, saying that if the action of running the railway was authorized, then there was only liability for negligence. The doctrine derived from *Pease* would only of course make a difference if the normal common-law standard of liability, which would apply to fires caused by locomotives operated without express statutory authority, was strict, and the case contains no ruling that this was so. However the reliance on *Pease* made it unnecessary for the court to go into the matter.[133]

Although the Taff Vale Railway Company won the case, it paid the damages, perhaps to head off an appeal to the House of Lords and the risk of a decision unfavorable to the railway interest. Mr. Justice Willes was involved: "[T]he parties afterwards came before me in Chambers and I made an order by consent, staying the proceedings on payment of the damages and costs. The Company in that case had allowed the embankments of the railway to be in such a state as to be peculiarly liable to ignite from anything that might fall from an engine."[134] So the outcome of the case turned on an aspect of the claim never pressed in the actual trial.

The next two cases to raise the matter were *Jones v. Festiniog Railway*,[135] decided by the Queens Bench, consisting of Blackburn and Lush JJ., on June 26, 1868, and *Brand v. Hammersmith and City Railway Co.*,[136] which was before the courts between November 1865 and July 13, 1869, when it was finally determined by the House of Lords.

As we have seen in *Jones v. Festiniog Railway*, Blackburn applied the principle of *Fletcher v. Rylands*[137] to the defendant company. It was conceded that under *Rex v. Pease*, as applied in *Vaughan v. Taff Vale*

[132] Chief Justice Cockburn and Justices Williams, Crompton, Willes, Byles, and Blackburn comprised the court.

[133] Bramwell himself did not rely in any way on *Pease* in supposing that the common-law liability of railways for causing fires depended on proof of negligence. And Bramwell later took the view that both *Pease* and *Vaughan* had been wrongly decided; see Brand v. Hammersmith and City Railway Co. when before the Exchequer Chamber (1867), 2 Q.B. 223, at 230–31.

[134] Sir Thomas Freemantle Bt. and Bliss v. London and North Western Railway Co., 10 C.B. N.S. 89, 142 E.R. 383, and at nisi prius 2 F. & F. 341, 175 E.R. 1088.

[135] Jones v. Festiniog Railway (1868), L.R. 3 Q.B. 733. The action had been heard in the County Court of Carnaervonshire at Portmadoc, and came before the Queen's Bench on a case stated.

[136] Brand v. Hammersmith and City Railway Co. (Nov. 27, 1865), L.R.1 Q.B. 130 (1867), L.R. 2 Q.B. 223 (July 3, 6, 1868, April 22, July 13, 1869), 4 H.L. 171.

[137] Litigated between September 1862 and July 17, 1868. The decision of the Court of Exchequer Chamber was delivered by Blackburn on May 14, 1866. The citation was to the decision of the Court of Exchequer Chamber; see L.R. 1 Ex. 265, 279.

Railway, the company would only have been liable for negligence if their operation of steam locomotives had been authorized, but they had not been. Hence, the company was liable even though it had taken all reasonable precautions. And by 1878 Blackburn, now a Lord of Appeal in Ordinary, was able to say in *Geddes v. Proprietors of Bann Reservoir*:[138] "For I take it, without citing cases, that it is now thoroughly well established that no action will lie for doing that which the legislature has authorized, if it be done without negligence."

The reason for Blackburn's confidence was the fact that the House of Lords had, on July 13, 1869, decided the highly controversial case of the *Brand v. Hammersmith and City Railway Co.*[139] in which two out of the three House of Lords judges, Lords Chelmsford and Cairns, expressly approved the *Pease* and *Vaughan* doctrine. Thereafter it was regarded as settled and beyond argument, though it was to be much refined. Decisions of the Lords were at this time binding both on all inferior courts and on the House itself. In 1880, in *Powell v. Fall*,[140] in conformity with the doctrine, the operator of a steam locomotive on the highway, who was not viewed as being statutorily authorized, was held to be strictly liable for a fire caused by escape of sparks.

The line of cases from *Rex v. Pease* through *Vaughan v. Taff Vale Railway* to *Geddes v. Proprietors of Bann Reservoir* settled the partial immunity of railways and other utilities from common-law liability to pay damages for the fires they caused. There was no government decision to this effect, in the sense in which Coase uses this concept. Instead, the doctrine was evolved by the judges, just like the common law itself.

One cannot conclude that Pigou got the history of the matter right; there is absolutely no evidence that he ever addressed the matter. But he did not get hold of the wrong end of the stick; rather, he never got hold of the stick at all. His supposed error serves to dramatize the confusion embodied, so it is argued, in the Pigovian tradition.

VIII. Dr. Sturges Has Recourse to Litigation

I shall continue to postpone consideration of Coase's third claim and return to *Sturges v. Bridgman*. One of Coase's points is that problems arising from conflicting land use can be settled by a bargain between the parties. The sort of bargain he has in mind involves a one-way payment,

[138] Geddes v. Proprietors of Bann Reservoir (1878), 3 App. Cas. 430, at 455–56.

[139] L.R. 1 Q.B. 130, 2 Q.B. 223, 4 H.L. 171.

[140] Powell v. Fall (1880), 5 Q.B.D. 597 (Court of Appeal, Lord Justices Bramwell, Baggallay and Thesiger). Bramwell said that the hearing had hardened his view that *Pease* and *Vaughan* were wrongly decided.

based on a rational calculation of respective alternatives and costs: "The solution of the problem depends essentially on whether the continued use of the machinery adds more to the confectioner's income than it subtracts from the doctor's."[41] He adds, "Note that what is taken into account is the change in income after allowing for alteration in methods of production, location, character of product, etc." In this passage he seems to be thinking of a bargain after the case was decided, but his reasoning would apply to one preceding litigation as well.

Dr. Sturges did try negotiation, first complaining personally, and then, in the spring of 1876, through his solicitor. The precise form of the negotiations is unrecorded, but from what Mr. Bridgman said in reply we may guess that there was some suggestion that he might arrange to use the mortars at times when the consulting room was not in use. Apparently, the problem was most serious during the London season, that is, from May to the end of July, when the upper classes repaired to London to engage in conspicuous consumption; the defendant's business consequently increased. Dr. Sturges at least believed that the problem had progressively worsened. There are hints in the affidavits of deteriorating personal relations; thus, Dr. Sturges's surveyor was refused access to Mr. Bridgman's property on the second occasion on which he tried to inspect it.

In his affidavit Mr. Bridgman took the line that it was the doctor's problem, not his. He pointed out that Dr. Sturges had "instead of building a separate and distinct wall . . . utilized the North Wall of my said kitchen." He went on to state the length of time the mortars had been in use, and the fact that there had previously been only one complaint, in about 1848. An invalid lady then living in number 85 had asked him not to use the mortars before 8 A.M.; he had explained that in his business this was impossible, and she never complained again. Nor had there been any complaints for 18 months after the consulting room was built. He had done what he could to confine the use of the mortars to times which did not trouble Dr. Sturges; since July 1876 all sugar had been pounded between 8 A.M. and 9.30 A.M., and, in response to the doctor's request, pounding between 11 A.M. and 1 P.M. had been avoided so far as possible. He could do no more if he was to run his business. So it was that nothing was achieved in the negotiations, and the dispute came to litigation, presumably at very considerable cost, much greater in all probability than those eventually incurred by Mr. Bridgman in conforming to the court's order. In the event, Mr. Bridgman would have had to pay these costs.

Negotiation will normally precede litigation in nuisance cases of this

[41] Coase, *supra* note 1, at 106.

character. The story which emerges from the affidavits is a very everyday account of a dispute between neighbors of this kind, with an attempt to work things out amicably. Although we do not know the details, it would be astonishing if Dr. Sturges considered for one moment the possibility of paying Mr. Bridgman money to change his ways, much less that Mr. Bridgman would have considered offering Dr. Sturges money to change his, for example, by reducing the number of patients he saw, or seeing them in his dining room, or whatever. Much less is there any hint that either Dr. Sturges or Mr. Bridgman considered moving elsewhere or changing their employment. It would also be quite astonishing if the doctor and the confectioner approached the matter by supposing that "[t]he solution of the problem depends essentially on whether the continued use of the machinery adds more to the confectioner's income than it subtracts from the doctor's"[142] or that they engaged in some elaborate cost benefit analysis of the infinite range of options open to them. The calculations required would include an assessment—by both Dr. Sturges and Mr. Bridgman of course—of the potential loss of income which Dr. Sturges "would suffer from having to move to a more costly or less convenient location, from having to curtail his activities at this location or (and this was suggested as a possibility) from having to build a separate wall which would deaden the noise and vibration." In fact nobody suggested building a separate wall. The function of the reference to the wall in the affidavit was merely argumentative: Mr. Bridgman was making the point that the trouble was not his fault, but arose because Dr. Sturges's builder did not do a good job.

The elaborate calculations envisaged may perhaps take place in situations in which two forms of land use are, in practical terms, suspected of being quite incompatible. There may be situations in which relocation turns out to be the only viable solution; given the costs of litigation, and the English rule as to responsibility for them, there must, in the nineteenth century, have been many cases in which the victim of pollution relocated, but they do not feature in law reports.[143] Coasean cost benefit analysis bears little relationship to how neighbors usually behave in real life in situations where the situation is not so intolerable as to present the stark choice between litigation or relocation. If they are trying to solve a dispute, they have to accept the broad outlines of the situation: the confectioner's kitchen is going to remain in operation, the consulting room will continue to be used for consulting. To reach an amicable ar-

[142] *Id.*

[143] For nineteenth-century examples of situations in which litigation in private or public nuisance induced a polluting enterprise to relocate, see Simpson, *supra* note 14, ch. 7.

rangement they must accept each other's rights, and concentrate on finding some simple or cheap method whereby the exercise of these rights may be mutually accommodated. No doubt Mr. Bridgman thought he had a perfect right to go on using his mortars as he and his father had done in the past, and you do not offer to pay people money for a right you already possess. He was prepared to behave reasonably and thought he had done so; anyway the trouble was all Dr. Sturges's fault. And no doubt Dr. Sturges, perhaps after taking legal advice from his solicitor, thought that he had a right to peace and quiet in his home, so that he could see his patients and write his lectures, and again you do not offer to pay people money for what is yours already. It was all Mr. Bridgman's fault; all he had to do was to employ an engineer to come up with a new way of arranging his machinery, or perhaps alter his working schedule. In short, I doubt if either of the two men questioned for one moment the right of the other to continue to pursue their business on their property. An offer of money by Dr. Sturges to help over any costs involved in moving or insulating the mortars might well have been socially acceptable, but anything more than that on either side would surely have bordered on the offensive.

The reason why a market transaction in the sense of a purchase and sale of rights is usually not possible in such situations is that the parties are not willing to place their rights in the market. Once this is understood it becomes offensive not to respect this unwillingness. Life would indeed be quite intolerable if individuals did not in general respect social limits to the market—when invited to a dinner party it is unacceptable for a guest to make offers for the silverware or the wine or the pictures which adorn the dining room, or to attempt to sell life insurance to fellow guests.

Hence, solving a conflict of this character does not entail attempting to reach an economically efficient solution to the general question of how the two tracts of land should be used. Nor does it mean agreeing to a market transaction whose paradigm is a sale. It means agreeing on some form of mutual accommodation which brings the dispute to an end, and this will usually be marginal in character. The process resembles the manner in which large numbers of people contrive, by a process of cooperative adjustment, to use a sidewalk without colliding with each other. The aim of the negotiations is not to maximize the value of production; it is more modestly to avoid the costs, in particular legal costs, which will be imposed on both parties if a dispute is not resolved. If what is perceived as expenditure is needed to settle the dispute, then the smaller the expenditure, the better the chances of a solution being agreed. The possibility of reaching some form of marginal accommodation entails accepting the idea that the problem is a reciprocal one, but only in a weak

sense which severely limits the range of optional adjustments which the parties are prepared to consider.

Coase argues that an essential prerequisite to the sort of market transaction which he has in mind is that the rights of the parties must be settled or be well defined. Thus, he says: "It is necessary to know whether the damaging business is liable or not for damage caused, since without the establishment of this initial delimitation of rights there can be no market transactions to transfer and recombine them."[144] This may be true of buying and selling, but it is certainly not true over negotiated settlements of problems of land use conflict between neighbors. Even if both Dr. Sturges and Mr. Bridgman agreed to differ on whether or not Bridgman had a right to make the noise, they could perfectly well reach an agreement which resolved any dispute about it. The significance of allocation of rights in a case such as this is surely that it allocates power in negotiations, not that it permits them. If Dr. Sturges is legally in a position to stop Mr. Bridgman from using the mortars, he does not have to bargain with him at all, and he can reject offers from Mr. Bridgman which, if he was rational homo economicus, he would accept. This is sometimes called the problem of hold out, but this characterization is a mistake. In a system of private property law it is not a problem at all. It is, instead, central to the institution, as Sir William Blackstone long ago explained: "There is nothing which so generally strikes the imagination, and engages the affections of mankind, as the right of property; or that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe."[145] Despotic dominion is what the right of private property is all about, and it includes the right to behave in ways which make no contribution whatsoever to the national wealth.

In the event, the negotiations failed, and the case came to court. The judge was Sir George Jessel, Master of the Rolls, and the evidence made it pretty clear, and indeed there was really no dispute, that Mr. Bridgman's activities were seriously interfering with Dr. Sturges's enjoyment of his property. There was no suggestion that Dr. Sturges's activities were causing any problem for Mr. Bridgman. So from a legal point of view, the first question to settle was whether Mr. Bridgman was, as he claimed, entitled to continue his noisy activities, through having, over the years, acquired a right to do so under the fictitious doctrine of lost

[144] Coase, *supra* note 1, at 104. Compare at 158: "the delimitation of rights is an essential prelude to market transactions . . . the ultimate result (which maximizes the value of production) is independent of the legal decision."

[145] Blackstone, *supra* note 106, vol. 2, at 2.

grant. It was more or less conceded that unless Bridgman could show that he had acquired a right to make the noise, he had invaded the rights of Sturges. The judge ruled that no such right had been acquired. It is possible in English law to acquire such a right by long use and acquiescence on the other side, but the judge took the view that until the consulting room came into use the noise was not causing any trouble, and was thus not actionable, nor was Dr. Sturges or his predecessor in a position to stop it. Hence, it would have been wrong to infer that the doctor and previous occupiers of 85 Wimpole Street had in any way acquiesced in the noise.

So Mr. Bridgman had not acquired a right to make the noise, and Dr. Sturges was given his injunction. Plainly, the issue in the case, as seen by Sir George Jessel, had nothing whatever to do with the Coasean question—"whether the continued use of the machinery adds more to the confectioner's income than it subtracts from the doctors."[146] In his scheme of things that was not a matter for a court to decide. The injunction did not go into specifics as to what should be done; it maximized the liberty of the defendant property owner by merely requiring Mr. Bridgman not to use his pestles and mortars "in such a manner or at such times as to be a nuisance to the plaintiff." There was no suggestion that his business must be closed down or relocated. Indeed, Sir George Jessel gave time to Mr. Bridgman "to make the necessary alterations to his premises; and no doubt he would find some skillful mechanic in London who would tell him how to work these machines without making any noise at all." So the injunction was not enforceable until August 1, 1878. This was to reduce the cost of making the accommodation required and minimize the risk of further costly procedures. So here economics indeed played a role, but at the margins.

The case was then taken on appeal, and the main issue ventilated was the same—had Mr. Bridgman acquired a right to make the noise? The judges thought that he had not. An analogy was offered with a hypothetical case: a noisy blacksmith's forge situated in what had long been a barren moor, near which a residence has recently been built:

> As regards the blacksmith's forge, this is really an *idem per idem* case with the present. It would be on the one hand in a very high degree unreasonable and undesirable that there should be a right of action for acts which are not in the present condition of the adjoining land, and possibly never will be any annoyance or inconvenience to either its owner or occupier; and it would be on the other hand in an equal degree unjust, and from a public point of view, inexpedient,

[146] See note 35 *supra*.

that the use and value of adjoining land should, for all times and under all circumstances, be restricted or diminished by reason of the continuance of acts incapable of physical interruption, and which the law gives no power to prevent. The smith in the case supposed might protect himself by taking a sufficient curtilage to ensure what he does from being at any time an annoyance to his neighbor, but the neighbor himself would be powerless in the matter.

This opinion of Lord Justice Thesiger claims that any other principle would "produce a prejudicial effect upon the development of land for residential purposes."[147]

The judicial opinions in the case, like the affidavits on which they are based, make not the least attempt to investigate the economic or social value of the activities of either the doctor or the confectioner; legally speaking, such specific questions were quite irrelevant, as they must in general be in a capitalist system which respects the right of private property. It is not the business of the courts to substitute their despotic dominion for that of the litigants. As occupiers of property the parties must be treated equally, respecting their rights to do what they like on their property, however inefficient, so long of course as this does not violate some legal prohibition. The whole point of the law of nuisance is to protect that equality, and in consequence the law intervenes when either party engages in activities which significantly abridge the freedom of their neighbor. Valuable though the distinction is, confusion can be caused here by contrasting entitlements protected by property rules from entitlements protected by liability rules, or property *rights* with liability *rules*.[148] The statement of a property right is the statement of an entitlement which the law protects; in a sense it represents the statement of an ideal. The mechanisms whereby property rights are protected are complex, involving both the criminal and the civil law; legal remedies and procedures represent as it were the outworks of rights. A landowner's property rights are protected by criminal law, property rules, liability rules, not to mention such institutions as that of testamentary succession, contract law, etcetera. The enthusiasm or intensity of protection varies, so that in the case of personal property, much of which is socially fungible, orders for specific restitution are commonly not available. To view this as a legal recognition that people can take other peoples' personal property so long as they pay for it seems to me to be mistaken; in the world we live in, partially structured by law, that is not the understanding. Hence, to do

[147] Sturges v. Bridgman, 11 Ch. D. 865–66.

[148] See William M. Landes & Richard A. Posner, The Economic Structure of Tort Law 29 (Cambridge, 1987), based on Guido Calabresi and A. D. Melamed, Property Rules, Liability Rules and Inalienability: One View of the Cathedral, 85 Harv. L. Rev. 1089 (1972).

so will usually, though not always, constitute a criminal offense. With rights in land, specific recovery in cases of dispossession is available partly because it is more practicable, and partly because land is not treated as fungible. For interference involving entry but no dispossession there are in some instances criminal sanctions, and the civil action of trespass. But the protection provided by trespass would in some contexts be inadequate unless less tangible interference was remedied, and the law of private nuisance offers a remedy. In nineteenth-century English law substantial interference was actionable, giving rise to a right to damages and, by mid-century, an injunction. After some controversy it came to be settled that this basic principle was not to be displaced by the public interest in economic development.[149] The common law rejected the idea of permitting what has come to be called the economically efficient level of pollution. I suppose, though this is nowhere said, that the common law thereby adopted a position of strong defense of the autonomy of property owners and left the hidden hand to worry about economic development. However, the judges, and no doubt juries, in determining what is to rank as an actionable nuisance, have always accepted the idea that some level of mutual tolerance and adjustment between landowners is necessary if life is to go on, given the fact that effects of land use are bound to cross boundaries, and a rough and ready economic calculus has no doubt been significant at the margins. To this weak extent the reciprocal nature of problems of conflicting land use has been accepted by the oracles of the law, and no doubt also by juries. In modern American law such decisions as that in the well-known and controversial case of *Boomer v. Atlantic Cement Co.*[150] have retreated from the protection of property rights by refusing injunctions in situations in which, although there is substantial interference, the cost of abating a nuisance is thought to be very much greater than the damage caused; given certain arrangements about the recovery of damages, this may allow a polluting landowner to acquire the right to pollute without the consent of the victim on payment of a price fixed by the court, a bizarre state of affairs in a capitalist society. But even today, and certainly not in the nineteenth century, courts do not enter into general open-ended investigations of the efficient use of adjacent tracts of land and allocate rights accordingly. To do that would be the end of the right of private property. The Boomer

[149] See Simpson, *supra* note 11, ch. 7, discussing Tipping v. St. Helen's Smelting Co. (1865), 4 B. & S. 608, 616, 122 E.R. 588, 591, 11 H.L.C. 642, 11 E.R. 1483, 1 Ch. App. Cas. 66.

[150] Boomer v. Atlantic Cement Company (1970), 26 N.Y. 2d. 219, 257 N.E. 2d. 870, 309 N.Y.S. 2d. 312. For discussion, see Landes & Posner, *supra* note 148, at 44 ff.

case certainly seriously weakens the protection of that right. In nineteenth-century law economic considerations operated only at the margins, and then impressionistically, as when Jessel in *Sturges v. Bridgman* guessed that Mr. Bridgman would find some fairly cheap way of dealing with the problem caused by his mortars.

The judge seems to have been right, for Mr. Bridgman, somehow or other, dealt with the problem. The business did not move as a result of the litigation, and in due course Bridgman's son, whose name was James, joined him, appearing for example in *Kelly's Directory* for 1888 and 1889. But in 1891 James is in business at 792 Old Kent Road, and the Bridgmans do not figure in the *Directory* for 1890, so we may assume that Frederick died or retired in that year. Figures produced for the litigation, designed to rebut the argument that the nuisance was increasing, indicated that in 1878 the gross income of Bridgman's business had been falling for some years—in 1852–53 it had been £9,416, but in 1876–77 it was £5,340, and it presumably eventually became unprofitable. At about the turn of the century, 28–34 Wigmore Street was redeveloped and became Norfolk Mansions, the building which now stands on the site.

As for Dr. Sturges he practiced from 85 Wimpole Street until his death. In spite of the success of his action, he became rather deaf, and he did not hear the approach of a rubber-tired hansom cab which knocked him down in Cavendish Square on October 16, 1894. He died of internal injuries at his home on November 3. The premises at 85 Wimpole Street, however, remain just as they were at the time of the litigation and are now occupied by Adlers, a firm of Surveyors, Estate Agents, and Property and Development Consultants, who use Dr. Sturges's consulting room for their meetings. If you visit there you will see the original roof light, installed no doubt to enable the doctor the more easily to examine his patients and indicating to this day the original function of the room.

IX. Pigou's Fundamental Error

It is now time to return to Coase's third claim, again based on the sparks example. It is that the Pigovian conclusion—that the railway be required to compensate—was based on a fundamentally flawed analysis. The Pigovian view, so Coase argued, was that a divergence between social and private net products justified state action to correct the divergence; hence, what needed to be compared was social and private net product. According to Coase what needs to be compared is the social net product without government action and the social net product with government action. Is the world a better place after intervention than it was before? And Coase's instinct is to expect that commonly it will be

worse. Whether this expectation is correct or not, Coase certainly shows that it can be worse. He gives a hypothetical example, giving figures as to crop loss and so on, which show that if the railway was liable to compensate it would not be run. But if it was run, then the value of total production would be increased by $20. He goes on: "Of course, by altering the figures, it could be shown that there are other cases in which it would be desirable that the railway should be liable for the damage it causes. It is enough for my purpose to show that, from an economic point of view, a situation in which there is 'uncompensated damage done to surrounding woods by sparks from railway engines' is not necessarily undesirable. Whether it is desirable or not depends on the particular circumstances."[151] This illustration is intended to show that the Pigovian analysis is fundamentally flawed.

The next paragraph explains why. Now one basic reason why Pigovian analysis might be wrong, and which would be compatible with much of what Coase says, is this. Whenever the government intervenes in the world, the world can and does alter in response to that intervention. The world with the intervention is not just the same world as it was before, with the intervention added. It is a world changed in other respects. It may respond in ways which may bring about a worse state of affairs than the one we started with. Thus, suppose the city of Pigovia has a considerable rat population, and news of the approach of bubonic plague induces the government to introduce a bounty system to encourage rat control, fifty cents for each rat tail delivered to the local rat bounty office. Enterprising children find it profitable to breed rats in disused buildings in order to collect the bounty; their security arrangements are lax, and many rats escape. Soon the bounty-issuing officers find it profitable to resell tails back to those presenting them for forty cents or less; tails may under this system be presented numerous times. Entrepreneurs import tails from abroad. In order to counter these and other abuses, the City has to expend considerable sums enhancing customs control and policing the bounty offices. Rumors of a change in the bounty rate induce entrepreneurs to establish a rat tail futures market; this outrages local citizens who believe in animal rights, who start a powerful Save the Rat movement. Riots break out, and the premises of those selling rat traps and rat poison are burned down. The City diverts funds from public health to riot control. Soon there are more rats in Pigovia than there ever were before. . . . Awareness that this sort of thing may happen does not of

[151] Coase, *supra* note 1, at 140–41. It is of course undesirable for the owner of the wood, whose interests are to be sacrificed to some conception of the common good. Note how Coase himself here employs the notion of causation to set up the example.

course point to any particular view as to the merits of government intervention in general; all we can do is our best in a world in which information is often lacking and prediction difficult.

Secondary responses might be the crux of the matter. But in the bulk of the paragraph which follows the illustration, Coase does not identify Pigou's fundamental error in this way at all.[152] What he says is quite different. He writes:

> The question at issue is not whether it is desirable to run an additional train or a faster train or to install smoke preventing devices; *the question at issue is whether it is desirable to have a system in which the railway has to compensate those who suffer damages from the fires which it causes or one in which the railway does not have to compensate them.* When an economist is comparing alternative social arrangements, the proper procedure is to compare the total social product yielded by these different arrangements. The comparison of private and social products is neither here nor there.

Coase gives the example of a motorist who, because he would otherwise be fined, stops at a red traffic light although there is no risk of an accident if he did not stop. If he passed the light, the social product would be increased since he would reach his destination earlier; he stops because private product would be decreased by the fine. The invitation is to agree that this would be no reason for altering the general rule whereby motorists who cross red light are fined. We need to compare a system in which motorists have to stop with one in which they do not, and Coase seems to think it obvious what the answer would be; he does not consider a range of possible other systems.[153] So the Pigovian error is not to compare the social product of systems.

At the end of the paragraph, however, he makes a point which is much closer to my first suggestion: "The Pigovian analysis shows us that it is possible to conceive of better worlds than the one in which we live. But the problem is to devise practical arrangements which will correct defects in one part of the system *without causing more serious harm in other parts*."[154] Elsewhere, when criticizing the use of the notion of causation, which notion he himself here uses, he hints at a quite different point: the Pigovian error is failing to see that the farmer (in the sparks example)

[152] *Id.* at 141–42 (my italics).

[153] For example, permitting the motorist to turn right on red or whatever.

[154] Coase, *supra* note 1, at 142 (my italics). This, for better or for worse, is one of the classic conservative arguments for resisting change, familiar to anyone who has sat through a few faculty meetings.

might be the cheapest cost avoider.[155] This is a familiar interpretation of his essay.

So it does not seem to me to be entirely clear what the Pigovian error is. Perhaps a fair interpretation would be to say that Pigou did not realize that what must be compared, in the case of fire damage from engines, was the world with and the world without a system of enforced compensation and that in constructing the two worlds for comparison we must take into account all possible courses of action, and not just changes in behavior by one party identified by the conception of active causation. This would be a sort of amalgam of the points which Coase makes. One could perhaps add another point, which is that in the calculus any public good produced by the railway ought to be included—perhaps its activities give enormous pleasure to railway buffs.

It also does not seem to me to be absolutely clear whether Coase, in "The Problem of Social Cost," is suggesting that courts ought, in deciding cases such as *Sturges v. Bridgman*, to engage in economic analysis along the lines he recommends. Some passages seem consistent with the view that he does think this. Thus, he criticizes the judges who decided the case for being unaware of the correct economic analysis of the problem presented by the litigation; the only point of being aware of it would be for it to influence their decision.[156] He argues that because transaction costs may impede the reaching of an economically efficient solution by bargain it is desirable to reduce the need for bargains; this implies that courts ought to pay heed to considerations of efficiency by coming to a conclusion as to what bargain the landowners would have reached in an ideal world people by homines economici.[157] He also suggests in what seem to be tones of approval that to a limited extent the judges did consider the economic consequences of their decision in *Sturges v. Bridgman*.[158] From a passage which I have already quoted, which is in the opinion of Lord Justice Thesiger, Coase drew the conclusion that the judges thought they were "settling how the land involved in the case was to be used".[159] But other passages appear to concede that courts and economists are engaged in different enterprises and that courts may be

[155] *Id.* at 96–97.

[156] *Id.* at 107.

[157] *Id.* at 119.

[158] *Id.* at 107, 122.

[159] *Id.* at 107. The passage continues by saying that this belief would only be true "in the case in which the costs of carrying out the necessary market transaction exceeded the gain which might be achieved by any arrangement of rights." I do not think Coase's interpretation of the opinion of Thesiger is correct, but that does not affect the argument here.

properly influenced by noneconomic considerations.[160] I do not think it is possible to obtain from "The Problem of Social Cost" any clear picture of the degree to which Coase thinks that courts should allow economic considerations to condition their decisions; it was not a subject which he directly addressed. Others may have read into Coase's article views which are not really to be found there. And certainly Coase does not address the procedural complexities.

I suppose it is conceivable that a court might, in a case like *Sturges v. Bridgman*, allocate the rights of the parties in such a way as to maximize their view of economic efficiency. One thing this would mean would be that the court would decide whether peace and quiet for Dr. Sturges would contribute more to the gross national product than pounded loaf sugar for Mr. Bridgman. Under the strong sense of reciprocity, a more or less infinite range of alternative courses of action is open to the doctor and the confectioner, and the resulting cost benefit analysis, unless some sort of limit was imposed on its scope, would occupy the court for a lifetime. In any event, the data required did not then exist, and would not exist today in a comparable case. The imagination boggles at the complexities. The idea seems wholly fanciful. This is certainly not the way the judges approached the matter, nor is it the way the parties asked them to approach it. The affidavits presented by the parties address four questions—the severity of the noise, the length of time the mortars have been in use, whose fault it is that the problem exists, and the practicality and cost of some adjustment in behavior which might make the problem go away. They are simply not concerned with questions of social net product, nor do they address alternative possibilities.

Suppose for one moment that the court, in allocating the rights of the parties, did attend to general considerations of economic efficiency along the lines suggested by Coase's argument, and suppose, for the sake of argument, that a cost benefit analysis was practicable. There is an even more radical difficulty. The comparison I have suggested, if limited to the circumstances of the dispute between doctor and confectioner, would not be a comparison of *systems*. To put the point in a slightly different way, a cost benefit analysis of the facts of a particular dispute will generate no general rule even as to what should be done about disputes between doctors and confectioners, or denizens of Wigmore and Wimpole Street. It inexorably follows from Coase's analysis that imposing liability may in some cases makes things better, in others worse. But law has to operate through generalization refined only to a limited extent by excep-

[160] *Id.* at 114. See in particular the passage at the top of the page.

tions. This conclusion has no doubt occurred to him, and in the passage I have already quoted, which seems to me to be of critical importance, he seems to try to escape his own logic and propose a way in which economic analysis can generate a general rule. Hence the sudden appearance of systems. Let me quote it again: "[T]he question at issue is whether it is desirable to have a *system* in which the railway has to compensate those who suffer damage from the fires which it causes or one in which the railway does not have to compensate them."[161] So, in terms of law, railways either have to compensate, or not.

How one can compare two *systems* in terms of their contribution to wealth creation is nowhere explained, and the idea seems again to be wholly fanciful, the complexity being quite limitless.

Nor is this the only problem. In addition there is a critical question of initial definition: what systems do you compare? A system for railways limited to sparks from engines, another for straying cattle? Or atmospheric pollution? Or cats? Or more generally, a system covering all damage to neighbors? There is the further problem of allocating effects to a particular activity. Cost benefit analysis is no doubt a valuable activity, but cost benefit analysis in the air is the stuff of dreams or nightmares, not of practical government and law.

In view of the problems I have indicated, it is not easy to see how Coasean economics can provide guidance for lawyers, whose business is with general rules, as to what ought to be done about the problem of social cost. Everything will turn on the particular facts of different situations; on this at least Pigou was right, and the consequence is that no general economic solution is possible.

My conclusion is that the arguments presented by Coase in his criticism of Pigou, and the use to which Pigou is said to have put the sparks example, are unconvincing, and that the idea of employing economic analysis and the Coasean conception of reciprocity, with all its implications, to resolve problems which are currently handled by courts as raising questions of social, political, or moral rights is beset with some very serious difficulties. It is at least arguable, though I myself can see no strict way in which this could be demonstrated, that courts make their most useful contribution to economic efficiency in a capitalist system when they studiously avoid attempting to second-guess the operations of the hidden hand and confine their activities to the vigorous protection of rights.

[161] *Id.* at 141–42 (my italics).