Aesthetics and Environmental Law: Decisions and Values

Robert Broughton
This article explores the bases upon which aesthetic values might be legally protected. After analyzing the common law nuisance doctrine and various decisions with respect to zoning ordinances, Professor Broughton concludes that protection for aesthetic values might best be accomplished by other methods. Statutory recognition for such values in the administrative process, he contends, is presently the most effective means.

AESTHETICS AND ENVIRONMENTAL LAW: DECISIONS AND VALUES

Robert Broughton*

Babylon was a great city. Her merchandize was of gold and silver, of precious stones, of pearls; of fine linen; of purple, silk, and scarlet; all manner vessels of ivory, all manner vessels of most precious wood, of brass iron, and marble, cinnamon, odors, and ointments, frankincense, wine, and oil, fine flour, wheat, and beasts, sheep, horses, chariots, slaves; and the souls of men.1

—William Walton, Belshazzar’s Feast

INTRODUCTION

In 1966 Professor Charles A. Reich of Yale Law School, in an article on the law of the administrative state,2 noted various occurrences evidencing profound dissatisfaction with the way governmental agencies were managing the nation’s

*Professor of Law, Duquesne University; B.A., Haverford College; J.D., Harvard University; M.A. (Economics), University of Pittsburgh. The writer wishes to express special gratitude to Harvey J. Eger, Esq. and Robert S. Pearlstein, both of whom, as former student and student, respectively, have done extensive research into some of the issues raised herein.

1. WALTON, BELSHAZZAR’S FEAST (Oxford Univ. Press 1957). This musical choral is based on the Book of Daniel.


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resources. He noted stories of suburban housewives, businessmen, and other such societal representatives physically standing in the way of bulldozers operated by highway and dam builders. There are many other instances of citizens from all walks of life trying by political, legal, or physical means to prevent the destruction of urban amenities such as trees, parks, and historic landmarks, and national shrines such as the Grand Canyon or the great coastal redwood forests of California. Over the last dozen years or so similar stories have frequently enlivened the news. Stories of "the Fox" in the Chicago area can hardly help but excite one's imagination.

The furor of the resistance to the management of resources by the industrial state has, if anything, grown since Reich explored the subject in 1966. Since 1966 few highways have been built in urban areas without a political upheaval and often a lawsuit. Articles on "the Highway Revolt" have appeared in national news media. A book with the catchy title Superhighway—Superhoax has been published, and a coalition of conservation organizations and individuals, under the title "Highway Action Coalition," are attempting to end the earmarking of liquid fuel tax revenues for highway building. This coalition reported over 350 disputes involving highways as of November, 1971.

Dams have not been less favored. The Grand Canyon and Hells Canyon controversies are only the more publicized examples. The Army Corps of Engineers and certain power companies are planning a number of major dams in West Virginia at this moment, and each has vigorous citizen oppo-

3. Id. at 1227-28.
5. Even a casual look at the index to the ENVIRONMENTAL LAW REPORTER reveals that between 8 and 12 cases (depending on what one considers double counting) involving highways reached the published decision stage in federal courts during the first year of the publication's existence. Many more must still be in process or have been settled.
8. The address of the coalition is Room 731, 1346 Connecticut Ave., N.W., Washington, D.C. 20036. See 1 NOT MAN APART, No. 11, p. 5 (Nov. 1971, published by Friends of the Earth).
9. 1 NOT MAN APART, id.
10. These include the Blue Ridge on the Kanawha River; Rowlesburg on the Cheat River; and Gaulley Canyon on the Gaulley River. These are being
sition. Many other recent developments have been similarly opposed, for example the SST, the Florida Everglades Jetport, the Cross-Florida Barge Canal, and the Disney Mineral King Ski Resort Development.12

Is there a common element in all of these issues and, if so, what is it?

The changing values of our society produce a great number of political disputes; in America, political disputes usually become legal disputes as well. The introduction of new values into a social structure produces conflicts, and these conflicts, when they are perceived as important, often end up being tried before courts. This article deals with the conflicts arising out of the growing importance of such values as aesthetics and the intangible aspects of environmental quality—not human health so much, for life and health have always been accepted values, but such matters as ecological diversity, the integrity of natural systems, and the integrity of nature as a thing in itself, rather than as a thing to be managed by men.

Senator Henry M. Jackson introduced the May, 1970 issue of the Michigan Law Review in this manner:

In America, we have traditionally equated progress with gross national product, with the accumulation of personal goods, with economic development, and with miles of roads, number of kilowatts, and acres of land. We have been easily impressed by quantitative measures of who we are as a people and where we are going as a nation.

kept track of by the West Virginia Highlands Conservancy, in which the writer participates.


12. Sierra Club v. Morton, _____ U.S. _____, 92 S. Ct. 136 (1972). In his dissent, which favored the granting of standing for the Sierra Club, Justice Douglas cited the following article: Stone, Should Trees Have Standing?—Toward Legal Rights for Natural Objects, 45 S. CAL. L. REV. 450 (1972). Stone’s article treated basically the same problems considered herein but from a slightly different point of view. The present analysis will deal with the incorporation of newly recognized values into decision making processes. The approach will be basically “people-centered,” at least in the sense that values and decisions are not conceived of as having an independent existence apart from the people who hold such values and make such decisions. Professor Stone suggested that some of these values are important enough that they ought to be given legal recognition as if they had an independent existence. He suggests several mechanisms (e.g., guardianship) for giving such values independent legal status and explores the consequences of these mechanisms in some depth. His article should be required reading in this field.
In many respects the ways we measure progress reflect our society's traditional emphasis on the accumulation of material goods and the expansion of commerce and technology.\textsuperscript{13}

The environmental movement calls into question many of these assumptions. The emphasis of the environmentalist is typically on the quality of life and on quantity only insofar as quantity represents or affects quality. Clearly quantity will often affect quality—the quality of life of a starving Mississippi sharecropper or of a poor urban ghetto dweller may be very bad, and that low quality of life is directly due to the low quantity of food and housing. But most people who think of themselves as environmentalists realize, and society is also beginning to recognize, that what has been called "the pig principle"\textsuperscript{14} has limits. It simply is not true that a greater gross national product means a better America. For society as a whole, blind increases in gross national product may produce simply more pollution, more strip mine scars, and more urban sprawl, which for individuals means poorer health, bigger cleaning bills, more time spent waiting in traffic jams and looking for a parking space, and more ugliness where once there were beautiful woods to hunt and streams to fish. Furthermore, such increases may not especially improve the condition of the sharecropper or the ghetto dweller. Without a shift in economic and political structures sufficient to redistribute the additional gross national product, growth may actually result in bigger ghettos and, by depending on increased mechanization of agriculture, poorer sharecroppers.

Individuals and groups become involved in legal disputes when things or characteristics of things that they care about

\textsuperscript{13} Jackson, Forward: Environmental Quality, the Courts, and the Congress, 68 Mich. L. Rev. 1073 (1970). It should be pointed out that Senator Jackson balanced this description of traditional views with a well thought out account of the environmental needs of today and tomorrow.

\textsuperscript{14} This is the economic principle of behavior, at the root of so much economic theory, that anyone is better off—happier—with more of anything than less of it, and anyone is better off with more different things than less. The first economist I know of who formulated the term in print is Alexander, Human Value and Economists' Values, Human Values and Economic Policy (1967), who defined as "[i]f you like something, more is better." Id. at 107. For another recent discussion of the irrelevance of much traditional economic theory see d'Arge & Hunt, Environmental Pollution, Externalities, and Conventional Economic Wisdom: A Critique, 1 ENV. AFFAIRS 266 (1971).
deeply—deeply enough to go to great expense and trouble to try and protect them—are threatened.15

Traditionally, in determining the merits of particular conflicts, courts have either applied prevailing social values, deferred the question of value to the legislature or constructed some combination of these two sources of values. When priorities must be established, as they normally must when a particular plaintiff and defendant assert different and inconsistent values, courts resort to a variety of sources and techniques to resolve the conflict. Legislation, prior decisions, legal authors, social scientists, custom, and prevailing social mores all enter into such decisions.16

Some values, like internal peace within a community, may be overriding in a particular case and quite settled. There are very few values that can justify homicide, for example, and those that can do so, like self-defense, generally relate to the preservation of life.17 Other values, like environmental quality, are considerably less absolute.

The change over the last fifty to sixty years in the attitude of the law toward aesthetics, toward beauty and ugliness as a source of legal rights can be regarded as archetypical of the process of legal adjustments to a change in societal values. Aesthetics can to some extent be regarded as a proxy for or possibly even as an indicator of environmental quality in general. Natural systems have stability and harmony. Nature has a balance. This balance is not between a small number of factors but among many. Neither is this a static balance. The balance of nature is instead a dynamic balance of forces tending to make adjustments cyclically—water, energy, minerals, carbon, nitrogen, all of the elements of life and geology tending to be used, reused, and returned to the point of beginning. Nature moves in cycles. Energy courses through many food chains, from soil through plants, herbivores, several carni-

15. The word "things" is obviously used here in the broadest possible sense to include characteristics like color, health, fertility and sterility in soil, freedom, or any aspect or characteristic of an individual or his environment that someone might care about.


vores, and back to soil. The balance of nature is a dynamic balance of many living organisms and also non-living processes, all interacting, ever changing but, nevertheless, maintaining a harmony or stability. This dynamic balance is conservative in the sense that, while constantly changing, it tends to slow change, to produce a felt continuity. This dynamic stability of natural change with continuity, the tension of forces that balance yet are productive, men find beautiful.  

Ecology is the formal study of natural living systems and of men as a part of such systems. One of the major measures of environmental quality is ecological. Environmental quality tends to be high if the harmony of man’s constructed environment supports and can therefore be supported by the natural environment in which he lives. As Aldo Leopold put it, “Conservation is a state of harmony between man and land.” Examples might be the destruction of the dune grass along the New Jersey shoreline, its preservation along the North Sea coast of the Netherlands, or the harmony of man with the highly altered agricultural biosystem of northwestern Europe. An inharmonious example might be the steady


19. Balance is central to the aesthetic experience in art, as well. The very word “harmony” in music signifies balance in its etymology. Any work on composition, whether in writing, visual art, or music, will emphasize this. Balance is required between harmony and dissonance, between motion and stillness, between excitement and rest, and so on. See, e.g., POORE, COMPOSITION IN ART (1969); GREEN, FORM IN TONAL MUSIC (1965); COPELAND, THE NEW MUSIC, 1900-1960 (1968); KEPES, THE NEW LANDSCAPE (1956). See also TUNNARD & FUSHBERRY, MAN-MADE AMERICA: CHAOS OR CONTROL (1963).

20. LEOPOLD, supra note 18, at 243.

21. McHarg, DESIGN WITH NATURE 7-17 (1969). Dune grass is necessary to hold the primary dune, the one closest to the ocean, in place on a sand beach. Without the dune grass, the beach is unprotected from erosion and transport during storms. For those who build on or near the beach, erosion and transport of the beach is the erosion and transport of what they have built. Dune grass, it turns out, is highly valued in the Netherlands, so much of which are below sea level. The Netherlands’ national survival depends upon the dune grass. It is not valued in the United States; instead, here, the right to do what one pleases with one’s own land results in trampling the dune grass, clearing it for building, and generally ignoring its significance. Accordingly, every four or five years, a storm takes out the primary dune along some part of the chain or barrier islands off the Atlantic Coast (which consist, in general, of sand, molded by waves, currents, and wind) and cause fifty or one hundred million dollars of property damage. McHarg describes one such storm, that occurred in March, 1962. Id. at 16-17.

destruction of soil on the Great Plains through agricultural over-exploitation that led to the Dust Bowl in the 1920's and early 1930's.\textsuperscript{23}

Because men find natural harmony beautiful,\textsuperscript{24} aesthetics may well be substituted as a proxy for environmental quality. By the same token, efforts to preserve such intangible environmental qualities as wilderness, bald eagles, cleaner water than necessary for municipal supply purposes, or air clean enough not to obstruct scenic vistas, may be regarded as proxies for the effort to preserve the aesthetic.\textsuperscript{25}

This article attempts to explore some of the changes in legal rights with respect to aesthetic quality in three principle areas: the arena of private nuisance law, controlled by judicial application of common law principles; the arena of administrative law, controlled by legislation; and the arena of zoning law, which falls somewhere in between. In all three cases the growth of the law, or sometimes lack of growth, is based finally upon the value systems held by legislators, administrators, and judges; it is not based on anything that could be identified specially as legal doctrine. Aesthetics has this characteristic in common with many other values associated with environmental quality. It is also characteristic of civil rights law, poverty law, and a number of other areas where law is being applied to new problems or applied for the first time to old problems. The attempt here will be synthesis more than analysis—to try to reach some conclusions regarding the nature of a right to aesthetic quality, how it can best

\textsuperscript{23} See note 22 id.

\textsuperscript{24} Nor is it surprising, considering man's evolutionary past, that this should be so. See DUBOS, So HUMAN AN ANIMAL (1968) ; ARDREY, THE SOCIAL CONTACT (1970), (especially ch. 3, Order and Disorder). For a feel for the place of man in the history of nature, and art see EISELEY, THE IMMENSE JOURNEY (1957). For a more rigorous discussion of some of the problems of man's origins from which one gets some glimpses of the inevitability of harmony and art see MONTAGU, CULTURE AND THE EVOLUTION OF MAN (1962).

\textsuperscript{25} My delineation of what is meant by aesthetics here is clearly fairly broad; it follows somewhat the delineation made by PRAI L, AESTHETIC ANALYSIS (1967). Cases involving other intangible environmental values—wilderness, ecological diversity, etc.—may also be regarded as relevant.
be protected, and in what ways movement toward greater or lesser acceptance is likely to take place. With respect to nuisance, zoning, and administrative decisions, it is necessary in each case to examine the problem of how aesthetics fits into the differing procedural dynamics of the three types of decision processes. The speed and character of the growth in acceptance of aesthetics probably depends more on the procedural dynamics, i.e., how aesthetic values come before the particular decision maker, than on any other characteristic of the problem.

**NUISANCE**

One would expect nuisance to be an almost ideal tool with which to examine judicial value systems. Private nuisance is defined as an unreasonable interference with another's enjoyment of real property. To be actionable at all, the interference must be unreasonable. What is considered unreasonable will inevitably depend both on the values that judges hold important and on the assessment that judges make of what would be unreasonable from the point of view of the average man in the community. The latter is the official test—whether a given interference is unreasonable or not depends not on the peculiar sensibilities of elegant or dainty tastes but upon the sensibilities of the ordinary or average residents of the community. Any judge's assessment of whether the sensibilities of the plaintiff before him are normal or dainty, however, cannot be entirely separated from the judge's own sensibilities.

Further tests for the existence of a nuisance are set forth in the Restatement of Torts, which is widely followed. The Restatement defines nuisance as a substantial (or unreasonable) non-trespassory invasion of another's interest in the use and enjoyment of land. Whether the invasion is substantial or not depends upon whether the utility of the defen-

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30. RESTATEMENT OF TORTS § 822 (1939).
The defendant’s conduct outweighs the gravity of the harm. “Utility” and “gravity” are often synonyms for “value.” The explanation given in subsequent sections of the Restatement emphasizes that it is values that are in question. When a “second-level indicator” of judicially held values is added, nuisance cases should stand out as an even better tool with which to examine judicial and societal values. This second indicator is due to the fact that most nuisance cases are brought in equity where an injunction is sought to cure the problem, rather than simply to collect damages for harm done. An unreasonable interference with the use and enjoyment of land will be cognizable in equity for the same reason a contract for sale of land is—land is unique and the remedy at law is therefore not adequate. In equity, the court will balance the equities to determine whether the harm to the defendant and to society generally from an injunction will outweigh the benefits to the plaintiff. If the benefits are relatively slight and the harm relatively great, then a court of equity will refuse to act, leaving the plaintiff to his remedy at law.

A typical case arose when an electric power company in the early 1920’s built a coal fired power plant next to, and upwind from, a nursery. The sulfur dioxide and fly ash from the power plant stacks killed the plaintiff’s plants, virtu-
tually putting him out of business. The court found that the damage to the community as a whole from the non-operation of the power plant would be greater than the value of the plaintiff's business. The court refused to grant the injunction, recommending that the plaintiff should claim damages instead. In a more recent New York case, a cement plant near Albany showered the plaintiff's home with assorted particles, mostly cement dust which has an annoying tendency to absorb water from rain or dew and turn into cement, sticking to surfaces as a thin crust. The New York Court of Appeals decided that an injunction should not issue because (1) the employment provided by the plant was important for the economy of the area and (2) the solution to air pollution problems should not be fashioned by courts on a case by case basis but should be undertaken by the legislative and executive branches of the government in a coordinated way.

Cases in which undue ugliness or an extreme shift in aesthetic quality is asserted under nuisance doctrine as an unreasonable interference with the use and enjoyment of real property must thus overcome two hurdles. First, a court must be convinced that the decrease in aesthetic value represents an interference with the use and enjoyment of land that is substantial or unreasonable and of which the law ought to take cognizance. Second, if an equitable remedy is sought, the court must be convinced that, in balancing the social importance of each party's interests, the benefit to the plaintiff (and hopefully the community) from an injunction outweighs the detriments to the defendant and the community from that injunction.

As might be gathered from these limitations and from a consideration of nuisance principles generally, aesthetic nuisance cases will involve not the protection of exceptional

35. Id. at 173-77, 126 A. at 349-53.
37. Id. 257 N.E.2d at 872 (quoted note 44 supra).
38. It is not customary to include in the balance the benefit to members of the community other than the plaintiff, although it does seem to be customary to include in that balance the detriment not merely to the defendant but also to the defendant's employees and even to the rest of the community. See, e.g., Boomer v. Atlantic Cement Co., supra note 36; Elliott Nursery Co. v. Duquesne Light Co., supra note 34.
beauty but the prevention of unusual ugliness. It is certain that a particular act may be a nuisance in one setting and not in another. A piggery, for example, would probably not be held to be a nuisance in a rural setting but may be a nuisance in an urban area. But even with that proviso, one should anticipate limitations on nuisance as a tool to protect beauty.

In particular nuisance cases aesthetic interests must ordinarily be balanced against economic interests, but the value conflict will not be merely between tangible economic interests and intangible aesthetic interests but between the interest in freedom of people to do what they wish with their own property and the interest of society in a pleasant community. Traditionally, courts refused to recognize aesthetics as a basis for enforceable rights and gave two reasons: (1) courts viewed aesthetics as pertaining to luxury, whereas the more obvious economic interests generally could be linked to jobs, production of goods, and thus to necessity; (2) courts have felt that beauty is a matter of individual taste, that there are no reasonably stable standards.


40. Aside from the research of Messrs. Eger and Pearlstein, referred to above, mention should be made here of two articles that cover aesthetic nuisance cases rather well. Noel, Unaesthetic Sights as Nuisances, 25 CORNELL L. REV. 1 (1969); Comment, Aesthetic Nuisance: An Emerging Cause of Action, 45 N.Y.U. L. REV. 1076 (1970). The reader will note, below, that this writer does not entirely agree with the conclusion implicit in the latter article that aesthetic nuisance will make its way into the law quickly. I do tend to agree that such a recognized cause of action would do much to prevent the kind of harm that absolutist notions of property rights have encouraged.

41. This is, one finds, the critical conflict of values in cases involving the constitutionality of zoning ordinances. See, e.g., Nectow v. City of Cambridge, 277 U.S. 188 (1928); City of Passaic v. Patterson Bill Posting, Advertising, and Sign Painting Co., 72 N.J.L. 285, 62 A. 267 (1905). See also BLACKSTONE, COMMENTARIES 138-39 (1782), where he discusses the inherent right of every Englishman to use his property as he sees fit without any diminution in that right or violation of it, “not even for the general good of the whole community.”


It is probable that the enactment of section 1 of the ordinance was due rather to aesthetic considerations than to considerations of the public safety. No case has been cited, nor are we aware of any case which holds that a man may be deprived of his property because his tastes are not those of his neighbors. Aesthetic considerations are a matter of luxury and indulgence rather than of necessity, and it is necessity alone which justifies the exercise of the police power to take private property without compensation. With respect to the problem of setting standards, see below at note 48, et. seq.
As the problems of survival have receded and Americans have begun to view and feel themselves an affluent nation, the importance attached to the quality of life as compared with the social interest in allowing particular landowners to become wealthy has grown. One of the earliest cases recognizing aesthetic interests was Parkersburg Builders Material Co. v. Barrack.\(^{43}\) In that case the defendant operated an automobile junkyard, and suit was brought by surrounding residents. The court issued a stirring statement in favor of the principle that ugliness is actionable.\(^{44}\) Following this statement, however, the court went on to reverse the trial court, which had found for the plaintiffs on the ground that the junkyard would be a nuisance only if it were located in a community that was of unquestioned residential character.\(^{45}\)

\(^{43}\) See also Houston Gas and Fuel Co. v. Harlow, 297 S.W. 570 (Tex. Civ. App. 1927).
\(^{44}\) 118 W.Va. 608, 191 S.E. 368 (1937).
\(^{45}\) Id. 191 S.E. at 371. In reversing, the court said:

> Happily, the day has arrived when persons may entertain appreciation of the aesthetic and be heard in equity with vindication of their love of the beautiful, without becoming objects of opprobrium. Basically, this is because a thing visually offensive may seriously affect the residents of a community in the reasonable enjoyment of their homes, and may produce a decided reduction in property values. Courts must not be indifferent to the truth that within essential limitations aesthetics has a proper place in the community affairs of modern society.

Of course, equity should not be aroused to action merely on the basis of the fastidiousness of taste of complainants. Equity should act only where there is presented a situation which is offensive to the view of average persons of the community. And, even where there is a situation which the average person would deem offensive to the sight, such fact alone will not justify interference by a court of equity. The surroundings must be considered. Unsightly things are not to be banned solely on that account. Many of them are necessary in carrying on the proper activities of organized society. But such things should be properly placed, and not so located as to be unduly offensive to neighbors or to the public.

The court also quoted from State ex rel Carter v. Harper, 182 Wis. 148, 196 N.W. 451, 455 (1923), where the Wisconsin court confronted the standards issue:

> It seems to us that aesthetic considerations are relative in their nature. With the passing of time, social standards conform to new ideals. As a race, our sensibilities are becoming more refined, and that which formerly did not offend cannot now be endured. That which the common law did not condemn as a nuisance is now frequently outlawed as such by the written law. This is not because the subject outlawed is of a different nature, but because our sensibilities have become more refined and our ideals more exacting. Nauseous smells have always come under the ban of the law, but ugly sights and discordant surroundings may be just as distressing to keener sensibilities. The rights of property should not be sacrificed to the pleasure of an ultra-aesthetic taste. But whether they should be permitted to plague the average or dominant human sensibilities well may be pondered.

Later cases confirm the hesitancy of the West Virginia courts to follow the principle that ugliness is actionable, which was announced in dicta in Parkersburg Builders. One, Martin v. Williams,46 enjoined a used car lot on the complaint of nearby homeowners but noted that the area was residential. The court based its opinion largely on the noise and the bright lights of the car lot. Cases from other states where auto junkyards were enjoined discussed aesthetics, but none that this writer has found based their holdings on aesthetics.47

In the context of this dual set of hurdles, one should notice that, in contrast to visual aesthetics, offensive smells and loud and continuous noises have long been held actionable.48 This is so probably because of concern for the direct effects upon health and other more indirect effects caused by lack of sleep, appetite, and the like. Sights are felt to present problems of defining a reasonably certain standard,49 probably due in part to the very use of the word “aesthetic” (which reminds people a little of ascetic effeminateness) and in part due to a feeling drawn from the great changes in schools of art and music during the last 100 years or so50 that there are no stable standards of beauty.

This differentiation of sight nuisances from smell and sound nuisances has been severely criticized by Professor Dix W. Noel of Cornell Law School,51 by some student notes,52 and by J. J. Dukeminier, Jr.53 They argue cogently that the

47. See, e.g., Annot., 110 A.L.R. 1461 (1937); Annot., 30 A.L.R. 1427 (1924); Annot., 88 A.L.R. 970 (1934); Annot., 84 A.L.R.2d 653 (1962).
51. This response to the changes in at least art and music is probably not correct. There is at least as much in the way of continuity in these fields as change. Critics sometimes seem to accentuate the change; however, the differences between one period in art or music and another, rather than the similarities, are the elements that make for continuity. See, e.g., Gombrich, THE STORY OF ART (1961) (especially chs. 24-27), where the differences between various schools of modern art are emphasized.
52. See notes 40, 48 supra.
problem for nuisance cases is not the determination of what is beautiful. A fortiori the problem is not the determination of what is beauty. The problem is whether the conduct of a particular defendant interferes unreasonably with the use and enjoyment of the plaintiff’s land. Finding a standard of visual ugliness that would unreasonably disturb a normal, average citizen in the community is no more difficult than finding a standard of olfactory ugliness that would do the same thing. The writer recalls a story told him in childhood by the late T. V. Smith, Professor of Politics, Poetry and Philosophy at Syracuse University, who described having lived for some time downwind of the now defunct Chicago Stockyards. In pure self-defense he learned to distinguish seventeen different smells, only six of which were unpleasant. Over time, he taught himself to ignore the six that were unpleasant and enjoy the other eleven. Just as sights can be less unpleasant if one looks the other direction, so can smells, despite being more pervasive, be sifted and ignored. Similarly, everyone probably has experienced situations where they have become accustomed to very loud noises, even to the point where such noises did not disturb sleep or daily living habits. Most, perhaps, even noticed the absence of the noise when they went somewhere else. The distinction between smells, sounds, and sights does not withstand analysis, as the various writers cited above demonstrate.

Two related series of cases present interesting examples of how close one can get to a case involving visual aesthetics yet still not be able to use such cases effectively as precedents. First, there are the funeral home cases. Suppose a landowner wants to build a funeral home in an established residential neighborhood or wants to convert a house in such a neighborhood to funeral home use. The neighbors object and have quite frequently been successful. Earlier cases tended to emphasize questions such as odors from the embalming, noise from ambulances, funeral processions, traffic congestion, and the danger from contagious diseases. Later cases emphasize

54. The anecdote was related to this author in a personal conversation with Professor Smith.
the constant reminders of death and the consequent mental depression that the presence of a funeral home would bring to a residential neighborhood.\textsuperscript{58}

Second, there are the obscenity cases. These are clearly based on the offensiveness of particular sights to people of ordinary sensibilities in the community. The courts have here met a number of the problems that they complain in aesthetics cases are insuperable. The determination of the standards of the normal citizen, the one with the ordinary sensibilities, and the distinction of that standard from the standards of the prude has given courts relatively little trouble.\textsuperscript{57} The constitutional difficulty, \textit{i.e.}, the balancing of the standard of obscenity against the interest in freedom of speech, has been more of a problem.\textsuperscript{58} Such difficulty, however, will usually not be present in aesthetic nuisance cases.\textsuperscript{59} The distinction between the obscenity cases and aesthetic cases does not seem to be in the difficulty of finding or applying a coherent body of law, but in the strength which the courts feel are in the underlying values at stake. The Puritan tradition in America is strong enough that confronted with a blatant appeal to sex, especially "prurient" sex, the emotional response of judges is likely to be quite strong. The extent and bitterness of the public recriminations and accusations over the Fortas appointment to the United States Supreme Court serve as some evidence of how deeply values relating to obscenity are felt in America.\textsuperscript{60} It is hard to imagine a similarly bitter and

\textsuperscript{56} Saier v. Joy, 198 Mich. 295, 164 N.W. 507 (1917); Williams v. Montgomery, 186 S. 302 (Miss. 1939); Street v. Marshall, 316 Mo. 698, 263 S.W. 494 (1927); Toreman v. Kettleran, 304 Mo. 221, 263 S.W. 292 (1924). Clearly "early" and "later" are relative terms here; one does discern less willingness in more recent cases to justify a remedy for an essentially psychic harm on bogus physical grounds. Powell v. Taylor, 222 Ark. 896, 263 S.W.2d 906 (1954).


\textsuperscript{59} \textit{But see} accompanying notes 91, 92 \textit{infra.}

\textsuperscript{60} See the reporting of this episode in the New York Times, Sept. 6, 1968, at 1, col. 4; Sept. 14, 1968, at 17, col. 6-7; Sept. 22, 1968, at E7 (News of the Week in Review). Another example I have personally seen in more than one community within the past three years, including the community in which I reside, is the emotion with which sex education in the schools has been
angry debate arising over a matter of ugliness unrelated to sex. And it may well be that it takes this type of strength of feeling to overcome the difficulties obstructing the use of nuisance law as a practical remedy for interference with the quality of life.

With all of the restraints and difficulties in the way of a practical application of nuisance principles to aesthetic problems, one might predict that aesthetics may find its way into the law as a legally protected interest after some analogy with nuisance law. Nevertheless, this will not be the direct result of judicial broadening of the traditional scope of private nuisance law. Nuisance law, therefore, while almost an ideal point of departure for examination, is not likely to be the place where greatest movement will occur in the future. Some statutory prodding will be necessary. Changing values in society and among individual judges may increase the effectiveness of statutory language, but it will probably not suffice to convince judges to extend the law of nuisance, independent of any legislative encouragement.

ZONING

Two types of legislative treatment of aesthetic problems should be distinguished: (1) laws directly regulating private conduct, either restraining action or requiring certain action; and (2) laws requiring action by government or restraining such action in the interest of aesthetic quality. Of the former, zoning is probably the most pervasive. Laws requiring utility companies to undertake certain activity, such as placing transmission or distribution lines underground, are beginning to be promulgated. However, utility companies, due to their semipublic nature, the structure of their rates and the way the rates are set, are less able to complain about this sort of thing as an interference with or taking of private property rights than are other private landowners.62

resisted, and I have been surprised at the intensity of this emotion on the part of many people.

61. See, e.g., MD. ANN. CODE art. 78, § 64A (1969); Central Maine Power Co. v. Waterville Urban Renewal Auth., 281 A.2d 233 (Me. 1971).

62. Utility company rates are set in such a way as to cover operating and maintenance costs, plus reasonable capital costs, and to afford a reasonable rate of return on invested capital. For a general reference see PRIEST, PUBLIC
Zoning can be viewed as being somewhere between the nuisance cases and the governmental action cases because of the tendency for courts to look to nuisance law for analogies when determining whether a particular zoning ordinance is constitutional. As far back as Euclid v. Ambler Realty Co., the United States Supreme Court justified direct regulation of the use of land on the basis that incompatible uses could give rise to situations which would be very similar to nuisances, even if not directly restrainable as nuisances. The Court held that zoning ordinances must be justified by some aspect of the police power but that the common law of nuisances, while not controlling, would be helpful in determining the scope of the police power. As the Court indicated, nuisance law was never directly a limitation. Zoning, and later subdivision control, could regulate and restrain land uses if, without regulation or restraint, conditions closely analogous to nuisances might arise. It was sufficient to uphold an ordinance if the particular regulation was reasonably necessary to further or preserve the public health, safety, or welfare.

But courts were never too happy about the public welfare criterion. Except for obscenity, nuisance cases were not generally found to depend on a harm to one's welfare, as distinguished from health or safety. Courts did enjoin welfare nuisances occasionally, but doing it seemed to be stretching the power of the state to restrain use of private property. When aesthetics arose, usually at first in billboard cases, the courts balked. The early attitude toward aesthetics has already been noted—beauty was a matter of luxury, and interference with the freedom to use property as the owner saw fit was permissible only where necessity, life or health was at stake.

Over time, as Americans came to conceive of themselves as affluent and as aesthetics began to seem more important,
such a rationale was bound to be questioned. The argument was first questioned seriously in a series of billboard cases beginning with *St. Louis Gunning Advertising Co. v. City of St. Louis,*\(^67\) where the court invented an almost wholly fictitious health, safety, and welfare rationale for holding valid an ordinance that prohibited various classes of billboards in the city of St. Louis.\(^68\)

This decision provided a basis for a doctrinal shift that was ultimately accepted by a large number of courts. As expressed by Dukeminier, this consensus, as of the time he wrote in 1955, was approximately as follows:

From *St. Louis Gunning* and later cases following it emerged the postulates of contemporary doctrine:

(a) the police power may not be used to attain objectives primarily aesthetic; but

(b) the police power may be used to attain objectives primarily related to health, safety or morals;

based upon the following proposition of fact:

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\(^{67}\) 235 Mo. 99, 137 S.W. 929 (1911), *appeal dismissed,* 231 U.S. 761 (1913).

\(^{68}\) The court said:

[T]his is a legitimate and honorable business, if honorably and legitimately conducted, but every other feature and incident thereto have evil tendencies, and should for that reason be strictly regulated and controlled. The signboards and billboards upon which this class of advertisement are displayed are constant menaces to the public safety and welfare of the city; they endanger the public health, promote immorality, constitute hiding places and retreats for criminals and all classes of miscreants. They are also inartistic and unsightly. In cases of fire they often cause their spread and constitute barriers against their extinction; and in cases of high wind, their temporary character, frail structure and broad surface, render them liable to be blown down and to fall upon and injure those who may happen to be in their vicinity. The evidence shows and common observation teaches us that the ground in the rear thereof is being constantly used as privies and dumping ground for all kinds of waste and deleterious matters, and thereby creating public nuisances and jeopardizing public health; the evidence also shows that behind these obstructions the lowest form of prostitution and other acts of immorality are frequently carried on, almost under the public gaze; they offer shelter and concealment for the criminal while lying in wait for his victim; and last, but not least, they obstruct the light, sunshine, and air, which are so conducive to health and comfort. House signs and sky signs are similar to billboards and are used for the same purposes, except they are attached to the walls of building or are constructed upon the roofs thereof. They endanger the public safety only in being liable to be blown down and injure people in their fall. They also assist in the spread of fire and greatly interfere with their extinction.

*Id.* 137 S.W. at 942.
(a) billboards and signs are primarily deleterious to health, safety or morals. 69

The consensus was not monolithic, however. The Massachusetts Supreme Judicial Court in 1935 noticed that the factual basis for the St. Louis Gunning rationale did not exist (except for, in many particular cases, a substantial relation to safety). The court went on to hold that aesthetics was a sufficient basis for a statute regulating billboards. 71 As Dukeminier noted, a number of lower court decisions recognized the adequacy of aesthetic goals even when he wrote. 72 There were also numerous statements purporting to uphold aesthetic purposes when combined with other sufficient reasons. 73 Since the cases containing such statements upheld ordinances on other grounds, most such statements amount to a declaration that the promotion of beauty will not make a zoning ordinance invalid if it would be valid in the absence of a tendency to make the community more beautiful.

Since 1955 several states have come to regard billboard regulations and other types of aesthetic zoning as legally permissible. 74 One impetus for the growing acceptance of

69. Dukeminier, supra note 53, at 220.
70. General Outdoor Advertising Co. v. Department of Public Works, 289 Mass. 149, 193 N.E. 799 (1935), appeal dismissed, 297 U.S. 725 (1936). The Massachusetts court appointed a special master who took evidence for 114 days; the court quoted his conclusions on these questions at length:

In some isolated cases, certain signs and billboards in this Commonwealth have been used as screens to commit nuisances, hide law breakers, and facilitate immoral practices. Around some few filth has been allowed to collect, and some have shut out light and air from dwelling places. In and around others, rubbish and combustible materials have been allowed to collect, which to some degree tends to create a fire hazard. These instances were all so rare compared with the total number of signs and billboards in existence, that I am unable to find upon the evidence that signs and billboards, in general, as erected and maintained in this Commonwealth, have screened nuisances, or created a danger to public health or morals, or facilitated immoral practices, or afforded a shelter for criminals, or created or increased the danger of fire, or hindered firemen in their work.

Id. 193 N.E. at 809.
71. Id. 193 N.E. at 816-17.
73. Dukeminier, supra note 53.
74. For some discussion, see Moore, Regulation of Outdoor Advertising for Aesthetic Purposes, 8 ST. LOUIS L.J. 191 (1963); Williams, Legal Techniques to Protect Aesthetics Along Transportation Corridors, 17 BUFF. L. REV. 701 (1968); Comment, Aesthetic Purposes in the Use of Police Power, 1960
beauty is probably the decision in *Berman v. Parker*, an urban renewal case (as distinguished from a zoning case). Justice Douglas, justifying the exercise of eminent domain in an urban renewal project in Washington, D.C., said:

We do not sit to determine whether a particular housing project is or is not desirable. The concept of the public welfare is broad and inclusive. . . . The values it represents are spiritual as well as physical, aesthetical as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well-balanced as well as carefully patrolled.76

Following this, a series of cases has developed to the point where the recognition of aesthetic objectives as a sufficient basis for zoning ordinances can very nearly be called a trend. Two of the more notable cases are *United Advertising Corp. v. Borough of Metuchin*,77 in New Jersey, and *People v. Stover*,78 in New York. In *Metuchin*, the court rejected the morals and safety argument and justified the aesthetic basis for the regulation of billboards largely on economic grounds. The court held that “the aesthetic impact of billboards is an economic fact which may bear heavily upon the enjoyment and value of property.”79

The *Metuchin* court also dealt with one of the more common defenses to billboard zoning laws. Since local businessmen vote and pay taxes, municipal legislative bodies often find it politically advantageous to ban large signs erected as separate structures on vacant lots but not signs advertising local businesses. Since the latter signs will frequently be erected on the property on which the business is conducted or, if not, will be relatively smaller than the standard highway

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76. Id. at 32.
77. 188 A.2d 447, 448 (1964).
billboard, ordinances may exempt signs advertising businesses located on the same premises as the sign, exempt signs less than a certain size, or both. In an early Connecticut case, *Murphy, Inc. v. Westport*, 80 an ordinance exempted signs advertising businesses located on the premises without regard to size. The court, applying the safety and morals test of *St. Louis Gunning*, 81 held that this was illegally discriminatory since the effect of such signs on health, safety, and morals did not depend on where they were located. The Borough of Metuchin limited the sizes of "on-premises" signs and also prohibited "off-premises" signs throughout the municipality. The court noted that the enabling act related to the uses of a structure as well as to the character of the structure and that the effect of a sign on the community might well depend on its use in relation to the business to which it might be ancillary or as an independent sign. 82

*People v. Stover* 83 was the culminating case in a series of New York cases dating back at least as far as 1930. 84 Judge Fuld, in *People v. Stover* recognized that the law in New York was unsettled and noted that the Court of Appeals "since 1930 ... has taken pains repeatedly to declare that the issue is an open and 'unsettled' one in New York." He went on to quote

80. 131 Conn. 292, 40 A.2d 177 (1944).
82. The court reasoned:

[It] proves nothing to say that a sign is a sign. There are obvious differences between an on-premise sign and an off-premise sign. Even if the baleful effect of both be in fact the same, still in one case the sign may be found tolerable because of its contribution to the business or enterprise on the premises. The hurt is thus supported by a need or gain not present in the case of the off-premise sign. This difference, it seems to us, suffices to support the classification.

Moreover, the sensibilities of neighbors and customers may offer a restraint which the off-premise advertiser would not feel.

198 A.2d at 450.
84. In 1930, Justice Cardozo said:

The organs of smell and hearing, assailed by sounds and odors too pungent to be borne, have been ever favored of the law ... more conspicuously, it seems, than sight, which perhaps is more inured to what is ugly or disfigured. ... Even so, the test for all the senses, for sight as well as smell and hearing, has been the effect of the offensive practice upon the reasonable man or woman of average sensibilities. ... One of the unsettled questions of law is the extent to which the concept of nuisance may be enlarged by legislation so as to give protection to sensibilities that are merely cultural or aesthetic.

Justice Douglas' opinion in *Berman v. Parker* and concluded that the ordinance's validity was dependent not upon the propriety of an aesthetic objective but upon the appropriateness of the restriction as a method of achieving an attractive community.

*People v. Stover*, although not a billboard case, discussed the problem of the conflict between freedom of speech and aesthetics. The Stovers protested a tax increase in the City of Rye and chose to demonstrate their displeasure by hanging tattered rags, scarecrows and underwear from clotheslines in the front and side yards of their house in a residential section of Rye. Starting with one clothesline in 1956, the Stovers added one additional line each year until 1961. During the six year period they publicized the purpose of the display by speaking out at various town meetings. In 1961 the city passed an ordinance prohibiting clotheslines in front and side yards unless the Building Inspector found "that drying of clothes elsewhere on the premises would create a practical difficulty or unnecessary hardship." The Stovers, not unreasonably, claimed that the ordinance was passed for the purpose of quieting their protest, rather than for any valid purpose of municipal well being. The New York Court of Appeals dismissed the contention. It admitted that as a form of nonverbal expression the Stovers' clotheslines were entitled to some first amendment protection; but that their rights were neither absolute nor unlimited, and specifically were subject to such regulation as the Rye ordinance provided when the form of protest was such as to work an injury to property. The Supreme Court's dismissal of the Stovers' appeal for lack of a substantial federal question may indicate tacit approval of this proposition but certainly leaves the issue very

86. 191 N.E.2d at 275.
88. 191 N.E. at 276.
89. 375 U.S. 42 (1963). It may also indicate merely that the Supreme Court intended to limit forms of nonverbal expression that would be protected by the First Amendment, or perhaps even to limit the extent to which the First Amendment would protect nonverbal expression. See discussion in Street v. New York, 394 U.S. 576 (1969); Comment, Zoning, Aesthetics, and the First Amendment, 64 COLUM. L. REV. 81, 91, 98, 99 (1964).
much in existence with respect to verbal forms of expression, e.g., billboards.\(^9\)

Zoning and other formal land use control devices, as they have grown in the comprehensiveness of the values that are sought to be included within their purview, serve as examples of the extent to which courts will follow suggestions and probing from legislative pronouncements, especially when supported by widespread evidence of public support for and understanding of shifts in values. Interestingly, one of the comments on People v. Stover illustrates the difference between what is required of judges in responding to such legislative prodding and what would be required of them in constructing a new extension of the law of private nuisance to apply to any but the most extreme cases of unaesthetic sights:

... The court’s standard—conduct that is unnecessarily offensive to the visual sensibilities of the average person—is only marginally useful at best and conflicts seriously with its own initial analysis of aesthetic considerations. The court supports this standard with the proposition that the legal protection afforded against offensive smells and sounds should be extended to offensive sights. Yet, in all but the most extreme instances, there is far less agreement regarding what is offensive to sight than what is offensive to smell and hearing. A man of average olfactory or aural sensibilities may be a useful standard since most men would agree that a given smell or sound is offensive. But the man of average visual sensibilities does not exist except in any but the most unusual instances. The Stovers’ protest—six lines of tattered rags, scarecrows, and underwear

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\(^9\) If the Stovers had posted a number of signs on their land, detailing various aspects of the injustice of high taxes and calling for the defeat at the next election of the officials who had imposed the high taxes, it would have been much more difficult to have framed and upheld an ordinance prohibiting the conduct. Judge Fuld justified this restriction partly on the ground that this prohibition bore “no necessary relationship to the dissemination of ideas or opinion.” 191 N.E.2d at 277. He held: “Although the city may not interfere with nonviolent speech, it may proscribe conduct which incites to violence or works an injury on property, and the circumstance that such prohibition has an impact on speech or expression, otherwise permissible, does not necessarily invalidate the legislation.” 191 N.E.2d at 276. Clearly, the first amendment issue has not been foreclosed. For one possible route, applying only to one medium see Note, The Fairness Doctrine, the Automobile, and Ecological Awareness: An Affirmative Role for the Electronic Media in the Pollution Crisis, 57 Cornell L. Rev. 121 (1971). The potential impact of the fairness doctrine on possible regulation of billboard advertising, where some of the objects of regulation are quite different, needs more.
strung in full view in an exclusive residential neighborhood—may be such an instance, but it represents the exception rather than the rule. The great majority of challenged aesthetic ordinances are directed at objects that would not seriously offend the man of average visual sensibilities. The range and complexity of aesthetic objectives makes it extremely unlikely that a crude test borrowed from the law of nuisance can be useful in judicial review of such legislation.91

To the extent that the courts are asked to create new lines of authority distinguishing unreasonable interferences from those reasonable interferences that it is necessary to tolerate if society is not to become hermitic, this comment is a correct analysis. Given the difficulties of which the commentator speaks, one should not be surprised that courts occasionally make stirring statements of principle, as in Parkersburg Builders Material Co. v. Barrack,92 and then back off from holding that the law has been violated.

If a court is not constructing its own line between what is permissible interference with aesthetic sensibilities and what is impermissible, but is instead judging whether a legislative or an administrative body has overstepped the bounds of reasonableness, then the commentator’s analysis above is not correct. The difference is between a court having to make the decision and a court having to determine whether someone else’s decision was reasonable. Once admitting that the interest in question has some legitimate claim to protection by the law, the line-drawing or standard-setting difficulty of the courts is vastly different in the two cases. Responses of the courts seem to bear out this conclusion. Courts have clearly been more ready to permit a legislative body, even a municipal legislative body, to draw distinctions between permissible and impermissible interferences with the interest of the community in aesthetic appearance than they have been to draw such distinctions themselves.

92. 118 W.Va. 608, 191 S.E. 368 (1937).
And considering the fundamental consequences to the community from the distinctions made, one cannot blame them. The issues are not such as are likely to be resolved by an occasional private nuisance case any more than is the issue of air pollution. As the New York Court of Appeals noted in Boomer v. Atlantic Cement Co.:

It seems apparent that the amelioration of air pollution will depend on technical research in great depth; on a carefully balanced consideration of the economic impact of close regulation; and of the actual effect on public health. It is likely to require massive public expenditure and to demand more than any local community can accomplish and to depend on regional and interstate controls.

A court should not try to do this on its own as a by-product of private litigation and it seems manifest that the judicial establishment is neither equipped in the limited nature of any judgment it can pronounce nor prepared to lay down and implement an effective policy for the elimination of air pollution. This is an area beyond the circumference of one private lawsuit. It is a direct responsibility for government and should not thus be undertaken as an incident to solving a dispute between property owners and a single cement plant—one of many—in the Hudson River Valley.93

The above is a rather short treatment of aesthetic zoning. It also treats only one part of the issue—billboards. Architectural controls, junkyards, landscaping, maintenance and open space all present additional and interesting aspects of the aesthetic zoning issue. They are all getting considerable attention from the law reviews.94 But, just as nuisance law will not be the place where a breakthrough in the acceptance of new values occurs, the leading edge of the shift toward the

legal inclusion of aesthetics and similar intangible environmental values as primary factors influencing resource management decisions will probably not come through zoning. The decision of a court to permit a limitation on the use of private property by means of the police power requires that the court accept the objectives sought by the regulation. It would be necessary, then, that a court accord at least some relative weight to aesthetics in order to validate a zoning ordinance which seeks to protect aesthetic values.

To wait for aesthetics to be introduced into the law through zoning, then, means to struggle through two stages—the acceptance of aesthetics as a value and the development of some sophistication relative to the weight to be accorded it. This latter problem is related to the standards problem. The weight to be allowed for any given degree of ugliness or beauty, in deciding whether that degree of ugliness or beauty justifies a specific interference with private property, requires a reviewing court to define some standard. The standard defined should be replicable to serve as a guidepost on the question of just how far a municipality can go in restricting the use of private property. Thus, while the position, such as that of the Pennsylvania Supreme Court, that aesthetics cannot serve as a basis for zoning restrictions are bound to be overruled in time, one can nevertheless predict that it will be some considerable time before courts feel confident to draw the comparisons that will be necessary in close cases.

The nuisance issues and the types of distinctions necessary in zoning cases are not entirely unrelated and are certainly not entirely dissimilar. Aesthetics and other intangible environmental values may best be dealt with on a more or less case by case basis by an administrative agency having the time to examine and sift public and private interests with

95. Judge Fuld, in People v. Stover, for example, recognized that this problem might arise, but simply dismissed it, as applied to that case: "Cases may undoubtedly arise, as we observed above, in which the legislative body goes too far in the name of aesthetics ... but the present, quite clearly, is not one of them." Quite clearly, not all cases will necessarily be quite so clear.

regard to these values and having the expertise and inclination to deal with them intelligently. Indeed, this procedure has been largely adopted so far as positive governmental activities and conduct are concerned. The Department of Transportation, the Army Corps of Engineers, the Bureau of Reclamation, the Soil and Water Conservation Commission, the Forest Service, the Atomic Energy Commission, the Federal Power Commission, and many others are all partly (and to differing degrees) involved with approving the actions of other agents and partly involved with activities of their own. They are all actively involved with managing and with changing the environment, however. They all have specialized functions and, therefore, the values of specialists. To impose upon these agencies values, such as aesthetic values, that are not directly a part of their specialties represents a third facet of the response of the law to new values. This is the area where the greatest progress has been made to include aesthetics as a primary factor in the decision making process.

Administrative Value Systems

Organic acts creating government agencies generally give them some specific task relating for example to transportation systems,97 navigation,98 utilization of the nation’s water potential,99 the development of nuclear energy,100 or some other similarly detailed and specific purpose. In making a particular decision, the agency may be deciding to undertake some specific project itself (as in the case of the Corps of Engineers, Bureau of Reclamation, or a state highway department), deciding on the appropriation of federal funds to a state for a project (as in the case of the Department of Transportation), deciding whether to license a private or municipal-type agency to undertake a project (as in the case of the Federal Power Commission), or deciding on some combination of licensing and agency action (as in the case of the Atomic Energy Commission).

It has already been noted that in the recent past a number of decisions made by these agencies have aroused considerable public outcry.\textsuperscript{101} If the decisions are made on a rational basis, why should this be so? The decision making process must be examined because that process is central to this question as well as to the basic inquiry.

Any decision by a government agency to undertake or approve a project involves a balancing of expected gains against expected costs for that project. The process is referred to as benefit-cost analysis, and it has been described at length both officially and unofficially.\textsuperscript{102} The obvious costs of building a highway are the money expenditures of buying the land and building the highway on it. The expected benefits are measured in terms of the money value of the saving in time and auto mileage from using the highway and possibly development benefits. The obvious costs of a dam are the same—the value of land occupied by the structure and to be inundated and the cost of materials and labor necessary to build the structure. The benefits include flood control, dilution of pollutants, recreation, and perhaps navigation, water supply, and hydroelectric power production.

In each case the facility should in theory not be built unless the value of the benefits exceeds the value of the costs. If there are several projects, then the one where the benefits exceed the costs by the greatest amount should be built,\textsuperscript{103} at

\textsuperscript{101} See text accompanying notes 2-12 supra.
\textsuperscript{102} U.S. INTERAGENCY COMMITTEE ON WATER RESOURCES, PROPOSED PRACTICES FOR ECONOMIC ANALYSIS OF RIVER BASIN PROJECTS (1958) (known as the Green Book); U.S. SENATE PUBLIC WORKS COMMITTEE, SENATE DOCUMENT 97 (1966); FEDERAL POWER COMMISSION, PROCEDURES FOR EVALUATION OF HYDROELECTRIC PROJECTS (1968); HOWE, BENEFIT-COST ANALYSIS FOR WATER SYSTEM PLANNING (1971); ECKSTEIN, WATER RESOURCE DEVELOPMENT (1958); MCKEAN, EFFICIENCY IN GOVERNMENT THROUGH SYSTEMS ANALYSIS (1958). See Prest & Turvey, Cost Benefit Analysis: A Survey, 75 ECON. J. 683 (1965).

103. Mathematically expressed, the criterion that is generally used is the ratio of benefits to costs—the requirement being that this be greater than one. This has been severely criticized. See MCKEAN, supra note 102. What we should be trying to maximize, after all, is not the ratio of benefits to costs, but total net social benefits: the difference, benefits minus costs. The ratio is likely to favor smaller projects. One may question whether other inaccuracies in the procedure, some of which it is almost impossible to avoid, so overwhelm any differences that may arise from this difference in criterion that it doesn't matter. Certainly one does not notice the Army Corps of Engineers or the Bureau of Reclamation, for example, systematically favoring smaller projects over larger ones. What probably actually happens is that benefit-cost analysis is used merely to make sure that benefits exceed costs, and the final selection between several projects whose benefits exceed their costs is made on other grounds, possibly political.
least if there is some limit on the total amount of money available to build projects as will usually be the case.

On the face of it, this sounds like a good, rational decision making procedure. There are two reasons why it so often results in decisions that are disliked: (1) the procedure has a built-in bias that overvalues the things that are easiest to reduce to money terms, and (2) the procedure is not too difficult to manipulate in order to reach a result favored by the person applying it.

The bias exists partly because of the need in any rational decision making procedure for a common yardstick. The most available yardstick for values is money; but to value something in money terms requires either a functioning market or some reasonably close substitute. Benefits like electric power, irrigation, drinking water, or even navigation improvements can be priced and sold on some market. Costs like concrete, land, fuel for bulldozers, wages for bulldozer operators can also be priced. But if the market mechanism does not function properly or does not function at all with respect to some particular value, then the money values of the costs and benefits will not demonstrate the true social values involved in the decision. Some costs and/or benefits will be over or under valued, and some will be excluded altogether. It is instructive to examine the reasons why the market mechanism may prevent prices from adequately reflecting true values, since one finds that all of the reasons apply to aesthetic costs and benefits.

Market failure is analyzed from the viewpoint of economic allocation theory by F. M. Bator as "the failure of a more or less idealized system of price-market institutions to sustain 'desirable' activities or to estop 'undesirable' activities." Bator traces five modes or identifiable classes of market failure to three possible causes, any one or more of which may cause the competitive market pricing system to

break down. These he terms "ownership externalities," "technical externalities," and "public goods externalities."¹⁰⁵

Ownership externalities are identified as instances when, if a benefit is conferred, the legal system gives no legally enforceable right to collect a price for conferring it. An example might be where a manufacturer installs water purification equipment with the result that the discharge from his plant into a river is cleaner than required by law. A benefit is conferred on downstream landowners from whom payment cannot, as the legal system is now set up, be extracted. Conversely, if the same manufacturer fails to install any waste treatment facilities at all, the recourse of downstream landowners who suffer thereby cannot ordinarily be to the market, partly because of traditions and customs (which are to some extent contained in the legal structure) about who ought to bear the cost of waste treatment and partly because of the difficulties of organizing the market mechanism. Another example illustrates the latter problem better—zero priced parking at suburban shopping centers is paid for indirectly by those who shop there but not by those who park without shopping. Assuming that the number of non-shopping parkers is significant, it can be argued that the number of parking spaces is non-optimal, being too large. It is quite likely, however, that the cost of enforcing payment of a price equal to the marginal cost of the extra parking spaces on the non-shopping parkers would be larger than the marginal cost of the extra parking spaces. If this is so, then shopping parkers might well prefer to bear the incremental costs of accommodating freeloaders rather than to bear the incremental costs of excluding them or making them pay.¹⁰⁶

Technical externalities are identified with indivisibilities or increasing returns to scale. A river is basically indivisible; the number of dams that can be built on it is subject to a relatively inflexible maximum. Further, each facility must ordinarily be of a certain minimum size, dictated by geographic and geologic factors as well as by the purpose for which the

¹⁰⁵. Bator, id.
facility is built. Certain uses are more indivisible than others, of course: electric power can be sold in small units, as can irrigation water; flood prevention cannot be parcelled out among downstream beneficiaries. Increasing returns to scale mean that larger plants produce at a cheaper cost per product unit than smaller plants. Ordinarily this is expected, but it is also expected that there will be a limit to the size increases for which greater size means greater efficiency. Technically, increasing returns to scale implies that goods will be priced to equal marginal cost at a level where average cost may yet be greater than marginal cost. Practically, increasing returns to scale means that a larger company will always be able to undersell a smaller company no matter how big the two companies are. This will normally lead to monopoly and was recognized as the case of natural monopoly even by the classical economists.\textsuperscript{107} Electric power production is one example.

Public goods externalities were originally defined by P. A. Samuelson\textsuperscript{108} as existing where one person's consumption of a commodity leads to no subtractions from any other person’s possible consumption of a commodity. Scenery, an aesthetic value, is perhaps the most typical public good; but benefits from public beaches, benefits from lighthouses, viewing of television programs are also frequently cited as examples of public goods. In general, such goods need not be rationed between individuals since they are not scarce in the economic sense. It is important to recognize here that this is true only within broad limits. One additional swimmer using a public beach may not subtract anything from any other swimmer's use of the same beach; 50,000 additional swimmers may make it impossible to find a vacant patch of sand. One additional person looking at Yosemite Falls may have no affect on any other spectator; when 40,000 people want to look at Yosemite Falls on a summer weekend, however, the smoke and smog produced by their campfires and

\textsuperscript{107} Bator, \textit{supra} note 104; see Posner, \textit{Natural Monopoly and Its Regulation}, 24 STAN. L. REV. 548 (1969) where the extent to which natural monopoly automatically calls for regulation is questioned.

automobiles may make it impossible for any one of them to see the falls at all.\(^{109}\)

A listing of some of the methods of estimating for purposes of benefit-cost analysis the money worth of two specific benefits, i.e., flood control and recreation, will demonstrate both the problems involved and their scope.\(^{110}\)

Benefits from flood control are generally calculated by estimating the damage that would have been caused by floods but for the flood control facilities. Difficulties arise from the tendency of people to move farther down on the flood plain of a river after flood control dams have been built. This can make potential damage appear astronomical. The propensity of people to move income producing activities lower on the flood plain when they feel secure from floods raises a further question as to whether that increased economic activity should be included as part of the benefits. Presumably it should not (even aside from the double-counting problem) if the alternative (without flood control) would merely have been to develop identical economic activity elsewhere. A problem, of course, is that one never knows what would have happened in the absence of the project.\(^{111}\) An additional problem with valuing flood control benefits is that

109. The 40,000 figure is from the Wall Street Journal, June 24, 1966, at 1, col. 1. The use of recreational facilities created in conjunction with water resource development projects is approaching a density in many places such that this problem must be taken into account.

110. See Dorfman, Measuring Benefits of Government Investments (1964), for a description of a number of specific benefit evaluation techniques. This volume contains many good ideas, but shows also how far we are from having any readily available means of measurement acceptable to or duplicatable by more than a very small number of people. It may be relevant that even where something like land value in eminent domain cases is involved, where one would expect definitions of value to be reasonably well established, appraisers commonly appear in court proceedings with figures that differ by as much as a factor of 10. This is caused, most often, not by bias, but by honest disagreement on the measuring criteria. In one of the standard reference works, the author takes almost 1,200 pages to define the various components of fair market value, how they affect the quantitative outcome, and how (and how much) courts weigh these components. Orgel, Valuation Under the Law of Eminent Domain (2d ed. 1953). Where the government is using land it already owns, of course, as in the Grand Canyon Dams case or in the case of a highway using park land, the price, hence the cost, is zero. This social cost, on the other hand, is the value of the opportunities foregone because this piece of land was used in this way.

111. For a good recent discussion of some of the problems of flood management, integrated with other aspects of water management see White, Strategies of American Water Management 1-14, 34-56 (1969).
it is not known when they will occur and, therefore, it is unknown what the size of the time-discount factor should be.\textsuperscript{112}

The most common methods of measuring recreation benefits are (1) to simply count the number of people passing a certain point as visitor days and total the numbers or make an extrapolation of the increases past figures into the future, and (2) to interview people with the object of finding out how much they have spent to make use of particular facilities and how much they would be willing to pay if a charge were imposed. Both methods have grave defects. The first tends to count several times people who move about within a recreation facility and results in large and impressive use figures. The second is subject to several opposing sources of error: first, users may express willingness to pay a large admission fee if they believe that destruction of the area is being contemplated; alternatively, they may name a very small figure if they think that the question is being asked in preparation for actually charging admission. These two sources of error tend to bias the results of interviewing in opposite directions, and there seems to be no way, at least none has been devised to date, to accurately assess either their relative or their absolute magnitudes.\textsuperscript{113}

A further difficulty with the interview technique is that it measures what people would be willing to pay for the entire area under an imagined downward sloping demand curve. Even assuming the measure is accurate, it measures gross potential revenues as though that figure included consumers' surplus.\textsuperscript{114} The measure has nothing in particular to do with

\textsuperscript{112} For analyses of some of the problems of time discounting and of the problem of selecting an appropriate interest rate Baumol, Economic Theory and Operations Analysis (1961), esp. pp. 407-74; Bierman & Smidt, The Capital Budgeting Decision (2d ed. 1966); Conrad, An Introduction to the Theory of Interest (1959). Ultimately, the selection of an interest rate must probably be an almost entirely arbitrary decision, depending on the decision maker's valuation of the moral or aesthetic value of the particular cost or benefit involved. As a lover of wilderness, for example, this writer thinks that it is fair to say that he puts approximately a zero discount rate on wilderness values. See Leopold, A Sand County Almanac 264-79 (1970).

\textsuperscript{113} For a fairly complete review of techniques of valuing recreation resources and the difficulties with each see Clawson & Krench, The Economics of Outdoor Recreation (1966).

\textsuperscript{114} Given a normal demand curve, as the price falls (viewing quantity of demand as a function of price) more and more people buy the product. Everybody, because of the institutional structure of the market, will pay the same price,
the normal measure of the value of benefits—price per unit times quantity of units sold. Neither estimation technique, furthermore, takes any cognizance of option demand, the demand of people who do not go to the facility in question on the days when either type of survey may be made but who would, if asked, be willing to pay to continue to have the facility available in the future.\footnote{115} Option demand, of course, would be even harder to measure than actual current user demand.

The second deficiency in the benefit-cost analysis method of decision making is related to the first. Because many intangibles are hard to measure, the judgment factor tends to be biased according to the person doing the evaluation. If the administrative decision maker values highways, then he is likely to undervalue visual damage that might be done by a particular highway. If he thinks dams are beautiful, he is likely to undervalue the destruction of a stretch of wild water. This inherent administrative bias is demonstrated in case law. In Road Review League, Town of Bedford v. Boyd,\footnote{116} one of the contentions of the plaintiffs was that their alternative location for the highway in question would better "preserve the natural beauty of the countryside."\footnote{117} The court dealt with this contention in terms of the ordinary rule of administrative law that an administrative decision can be reversed only if it is arbitrary and capricious or otherwise in violation of law. In evaluating the evidence, the court said:

It is apparent from Whitton's testimony, and from some of his letters, that he feels differently about highways than the citizens of Bedford do. In

\footnote{\footnotetext{115. The demand for wilderness has a large element of option demand in it. It is difficult to imagine that people who actually use wilderness could have generated the political force necessary to get passed the Wilderness Act of 1964, 16 U.S.C. §§ 1131-36. It turns out that many people who do not actually use wilderness, and never intend to, strongly favor wilderness designation. (This information was gleaned in a nonstatistical manner from many conversations with many people about wilderness values, generally, and about the designation of particular areas as wilderness areas.)}}

\footnote{\footnotetext{116. 270 F. Supp. 650 (S.D.N.Y. 1967).}}

his decision of April 6, 1966, he expressed the opinion that highways "enhance the area through which they pass," and that "those who want to preserve, enhance, and increase our natural and recreation resources will take pride in this facility." I have no doubt that he is sincere in this belief. I can well appreciate, however, that people whose property and interests are affected by these great six-lane roads not only dissent from these opinions, but consider them so bizarre as to be almost irrational. But this attitude on the part of highway officials toward highways in general does not necessarily make their selection of a particular route arbitrary or capricious.118

Similarly, in the recent dispute over the building of two dams in the Grand Canyon by the Bureau of Reclamation,119 the Bureau and some other proponents of the dams argued that the substitution of lakes in place of the existing wild water would enhance the beauty of the canyon.120 Apparently, and not too surprisingly, if one has picked highway building, dam building, nuclear physics, or anything else as one's life work, there is a tendency to accentuate the positive aspects and discount the negative aspects of that work.

These two forms of bias support each other. It is easier for an administrator to over or under value some cost or benefit if it is intangible and difficult to determine in value. It is also harder for either the administrator or a critic to know that bias has crept into the evaluation process if many key factors are intangible.

Nothing, however, is intrinsically intangible. Intangibility—meaning here difficulty of measurement—exists in part because no one has gone to the effort to work out some method of quantification. Weisbrod121 pointed out that un-

doubtedly many people regarded "feeling hot" or "feeling cold" as fundamentally intangible and unquantifiable until Gerhard Farenheit came along and worked out a temperature scale based on expansion and contraction of a column of water according to the temperature of the liquid.

As work proceeds on the problem of quantification of environmental values, such as aesthetics, in terms of units compatible with measurement of other benefits and costs, one cannot say that such work will be unsuccessful. But part of the reason why this work was not accomplished in the past is because decision makers did not want to—they did not regard aesthetics, for example, as important enough to try. This also has tended to support the first form of bias: the fact no one has tried to quantify these values has resulted in their continuing to be unquantifiable, which has resulted in their continuing to be under or over-valued according to the bias of the administrative decision makers.

This combination of defects—a built-in bias (in favor of "economic" goods and services) supporting administrators' personal bias (in favor of building any particular facility), the latter to some extent built-in by the process of self-selection of administrators—has sparked a considerable number of proposals for reform. 122 Many of the earlier proposals which were enacted into legislation require that planning for particular projects be coordinated with some other government activity. The Fish and Wildlife Coordination Act 123 is such a statute. It is one of the earliest, having been passed originally in 1934; its requirements are approximately what one would expect from the title. The Multiple Use Sustained Yield Act of 1960 124 is in effect such a coordination statute, controlling the purposes and functions of a single agency, the United States Forest Service. The problems of dealing with


Forest Service management of the lands and other resources under its control is illustrative for purposes of this article. The Multiple Use Sustained Yield Act of 1960 provides in its operative section:

'It is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.'

Apart from the fact that aesthetics is not mentioned explicitly and would have to be interpreted into the Act through a broad construction of outdoor recreation and/or wildlife and fish purposes, the Act says nothing about how these various purposes are to be balanced. Two cases have arisen interpreting this language, Dorothy Thomas Foundation v. Hardin, involving a timber sale in a national forest in North Carolina, and Sierra Club v. Hardin, involving a timber sale in Tongass National Forest in Alaska. In both cases the plaintiffs claimed that the forests were not in fact being managed for multiple uses; in neither case did the plaintiffs succeed. The courts in both instances held that, absent a showing that the administrative decisions were arbitrary or capricious, the possibility that the administrator's balancing of the enumerated values is extremely biased does not mean that his decision was arbitrary or capricious. Such a statutory provision does not, therefore, really mean much to a party objecting to an administrative decision.

A similar provision was suggested at one point for the Federal Aid Highway Act of 1968 to modify Section 4(f) of the Department of Transportation Act, adopted in 1966. The proposal was to require that a project include

126. To find a command in the above language to protect aesthetics is possible but strained. The issue, among others, has arisen in connection with the dispute over clearcutting in the National Forests, and some groups have suggested that aesthetics be added explicitly to the list of purposes in the Multiple Use Sustained Yield Act. See, e.g., RECOMMENDATION 1 OF THE WEST VIRGINIA FOREST MANAGEMENT PRACTICES COMMISSION, REPORT TO THE LEGISLATURE ON FOREST MANAGEMENT PRACTICES ON NATIONAL FOREST LANDS IN WEST VIRGINIA 23 (1970).
all possible planning, including consideration of alternatives to the use of such land, to minimize any harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use.\textsuperscript{130}

A dissenting voice in the House Committee on Public Works, Representative Richard D. McCarthy, argued that the proposal would only necessitate a most abbreviated and summary consideration of alternatives.\textsuperscript{131}

The amended provision finally adopted by Congress reads as follows:

It is hereby declared to be the national policy that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed. After the effective date of the Federal-Aid Highway Act of 1968, the Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from an historic site of national, State, or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreational


\textsuperscript{131} Id. at 48:

The committee's amendment would permit any freeway, airport, railroad line, or any other type of transportation facility to be constructed through such areas of historic or natural importance simply on the basis that an engineer has given 'consideration of alternatives.' What does it mean when an engineer states that he has given all of five minutes thought to an alternative but remains firmly convinced that the route through a park is best because it is the straightest line or requires the least land acquisition costs. Such attitudes have been advanced in some cities, such as New Orleans, San Francisco, Washington—and such attitudes have helped magnify the opposition to urban freeway construction.
area, wildlife and waterfowl refuge, or historic site resulting from such use.\textsuperscript{132}

The provision setting forth a "policy that a special effort should be made to preserve the natural beauty of the countryside"\textsuperscript{133} has, to this author's knowledge, never been applied by a court. This author did, however, as counsel for plaintiffs, urge this language as one controlling statutory provision in \textit{Pennsylvania Environmental Council v. Bartlett},\textsuperscript{134} but the argument was ignored by both the district court and the court of appeals. It may well be that the provision has been urged by counsel in other cases also, but it does not seem to have shown up in court opinions.\textsuperscript{135} The problem may be that while a court would uphold the Secretary of Transportation in refusing to approve the expenditure of federal moneys for a proposed project based on this language, courts are unwilling to substitute their own judgment for that of the Secretary of Transportation with regard to what constitutes a sufficient "special effort," given the particular degree of natural beauty involved in any given case.

The courts have not been quite so reticent in determining the standard regarding the existence of a feasible and prudent alternative to the use of parkland for a highway, at least they have not been so since \textit{Citizens Committee to Preserve Overton Park v. Volpe}\textsuperscript{138} was decided by the Supreme Court.

In that case the Court had before it an approval by the Secretary of Transportation of a highway that would bisect Overton Park, a 342 acre park in Memphis, Tennessee. Just-


\textsuperscript{135} It may well be that by going through the files of briefs indexed and catalogued in the Environmental Law Reporter Bibliography and Facsimile Service, 1 ENV. LAW REP. 65001-65191 (1971), one could find such arguments. Now that such a catalogue exists, an examination of relationships, or lack of relationships, between briefs and court opinions in this area might prove very worthwhile and enlightening.

\textsuperscript{136} 401 U.S. 402 (1971). In earlier proceedings in this case, the District Court for the Western District of Tennessee granted summary judgment to the defendants. 309 F. Supp. 1189 (W.D. Tenn. 1970). The Court of Appeals for the 6th Circuit affirmed. 432 F.2d 1107 (6th Cir. 1970). Since the Supreme Court reversed and remanded, there has been one pretrial order. 1 ENV. LAW REP. 20447 (1971). There has also been a remand by the District Court to the Secretary of Transportation. ___ F.Supp. ___, 2 ENV. LAW REP. 20061 (1972).
tice Marshall, speaking for eight members of the Court, noted that the Department of Transportation Act was only one of several recent statutes designed to curb the accelerating destruction of our country's natural beauty. He held that "feasible" meant feasible as an engineering matter and that the meaning of "prudent" was limited by the statutory history and the plain meaning of the statute:

Respondents argue, however, that the requirement that there be no other "prudent" route requires the Secretary to engage in a wide-ranging balancing of competing interests. They contend that the Secretary should weigh the detriment resulting from the destruction of parkland against the cost of other routes, safety considerations, and other factors, and determine on the basis of the importance that he attaches to these other factors whether, on balance, alternative feasible routes would be "prudent."

But no such wide-ranging endeavor was intended. It is obvious that in most cases considerations of cost, directness of route and community disruption will indicate that parkland should be used for highway construction whenever possible. Although it may be necessary to transfer funds from one jurisdiction to another, there will always be a smaller outlay required from the public purse when parkland is used since the public already owns the land and there will be no need to pay for right-of-way. And since people do not live or work in parks, if a highway is built on parkland no one will have to leave his home or give up his business. Such factors are common to substantially all highway construction. Thus if Congress intended these factors to be on an equal footing with preservation of parkland there would have been no need for the statutes.

Congress clearly did not intend that cost and disruption of the community were to be ignored by

137. Justice Douglas did not participate. Justice Black wrote a special concurring opinion in which Justice Brennan joined, agreeing with the main rationale but arguing that the case should be remanded to the Secretary of Transportation instead of the district court. Justice Blackman wrote a specially concurring opinion, agreeing that the decision of the Secretary of Transportation was wrong and agreeing with the reasons stated by Justice Marshall but saying he was not too surprised at that fact.

the Secretary. But the very existence of the statute indicates that protection of parkland was to be given paramount importance. The few green havens that are public parks were not to be lost unless there were truly unusual factors present in a particular case or the cost or community disruption resulting from alternative routes reached extraordinary magnitudes. If the statutes are to have any meaning, the Secretary cannot approve the destruction of parkland unless he finds that alternative routes present unique problems.\(^\text{139}\)

This lengthy quote is illustrative of one important way in which courts, given encouragement by a legislative enactment, can frame an interpretation that will protect to a maximum extent the values a statute purports to protect. A court may so construe a statute without being compelled to intrude upon the policy making process and decide itself what the decision should be. The Court, here, merely stated the nature of the burden of proof upon the Secretary of Transportation and the evidence required before he could decide to build a highway through a park. The Court did not and did not offer to make the decision for the Secretary.

The Overton Park case thus goes considerably beyond the earlier Scenic Hudson Preservation Conference v. Federal Power Commission.\(^\text{140}\) There the Second Circuit held that natural beauty had to be considered and substantially dealt with by the Federal Power Commission. One gathers that the court meant a great deal more than "all of five minutes" consideration by an engineer.\(^\text{141}\)

The Scenic Hudson controversy was remanded to the Federal Power Commission, was reexamined, rethought, and it was again decided that the need for electric power outweighed all of the detrimental effects.\(^\text{142}\) The scenic impact question was again considered, and one must say, substantially dealt with. A number of changes were made to make the power plant and the transmission lines less obtrusive in the

\(^{139}\) Id. at 411-12.

\(^{140}\) 345 F.2d 608 (2d Cir. 1966).

\(^{141}\) See note 131 supra.

Hudson River Gorge.\textsuperscript{143} Many of the changes were cosmetic as distinguished from fundamental in character, however. This in part prompted an argument based on the integrity of the mountain—an argument that the shape and structure of Storm King Mountain, set in the surroundings of the great gorge of the Hudson,\textsuperscript{144} should not be so tampered with as to destroy its meaning in the eyes of beholders. But the Commission balanced on the side of approving the project, and the Second Circuit, on October 27, 1971, had to agree that substantial consideration had been given by the Commission to intangible factors such as aesthetics.\textsuperscript{145}

In \textit{Overton Park}\textsuperscript{146} on the other hand, the district court on remand has already (1) interpreted the above language as justifying a pre-trial order refusing to allow the defendants to submit evidence of the cost of rerouting the highway around the park\textsuperscript{147} and (2) remanded to the Secretary of Transportation to study alternatives to the route through the park, applying the standard of selection or rejection outlined by the Supreme Court to such alternatives.\textsuperscript{148} Clearly under this test it

\begin{itemize}
\item \textsuperscript{143} \textit{Id.} at 382-94, 472-91. See 44 F.P.C. 350, 419-24, where the commission considered the aesthetic benefits of undergrounding of transmission lines east of the Town of Nelsonville and, one must say, considered these effects seriously but ended up making what must be called an economic judgment not to require such undergrounding. Ultimately, decisions such as that one must be made by some person, and that person's personal value system will influence his decisions.
\item \textsuperscript{144} Sive, \textit{Securing, Examining and Cross-Examining Expert Witnesses in Environmental Cases}, \textit{Law and the Environment} 48, 68 (1970). Sive quotes one witness, Charles Callison, also quoted by the Commission opinion (44 F.P.C. at 383) as follows:
\begin{quote}
Moreover none of the other rivers has the history, the drama of the Hudson. None has been as much the very waterway of history, the gateway to the north and west, the 'northwest passage' to an empire, if not to the Orient as Henry Hudson thought it might be. In short, the Highlands and Storm King Mountain are unique topographical and scenic features, not only in the East, but in the entire country. In the far West there are rivers that run through deeper gorges, the Colorado, the Snake, the Yellowstone, the Salmon, and the Columbia, to name a few. But none of them, except perhaps the Columbia, is so great a river of history, of commerce, and of empire, connecting great mountains and wilderness with a great city and seaport at its mouth.
\end{quote}
Sive, \textit{supra} at 56. Sive feels that the issue of the conflict of aesthetic values with more traditional economic values will be present in perhaps most environmental law cases.
\item \textsuperscript{145} 463 F.2d 463 (2d Cir. 1971).
\item \textsuperscript{146} Citizens to Preserve Overton Park, Inc. v. Volpe, 1 ENV. LAW REP. 20447 (1971).
\item \textsuperscript{147} \textit{Id.}\textsuperscript{148} Citizens to Preserve Overton Park, Inc. v. Volpe, \textit{...} F. Supp. \textit{...}, 2 ENV. LAW REP. 20061 (1972).
\end{itemize}
will be much harder for the Secretary again to select the Overton Park route than it was for the Federal Power Commission again to approve the Storm King pumped storage site. This is not to say that the Federal Power Commission acted in bad faith or that the outcome was preordained in any way. It is only to say that the underlying outlook of people who have spent their lives in a certain kind of endeavor predisposes them in favor of that endeavor. There is, therefore, a bias, and the judicial standard for decision making in a particular case must be framed so as to force the decision maker to justify his decision thoroughly on grounds other than those usual in his thinking. This is so if the administrator is to be pushed very far along new paths. The Department of Transportation Act, as interpreted by the Supreme Court in Overton Park, appears to do this.

Other techniques for forcing a consideration of aesthetics and related values into the administrative process have also been recently invoked by Congress. Before passing to the National Environmental Policy Act, other general attempts to deal fundamentally with basic administrative decision making procedures, various statutes meant to protect particular values (aesthetics or values closely related to aesthetic values) in particular situations, should be considered. The Wilderness Act, The National Wild and Scenic Rivers Act, the Highway Beautification Act, the Endangered Species Act, and the National Historic Landmarks Preservation Act are all of this type.

The Wilderness Act has been interpreted by the courts on at least two occasions to require that the Forest Service fully consider the possibility of designating areas as wilderness under the procedures set forth in the act before irrevocably committing resources in an area that has potential for

149. See discussion in note 143 supra.
inclusion in a statutory wilderness area. The Court of Appeals for the Tenth Circuit in *Parker v. United States*\(^{157}\) cited *Overton Park* for the proposition that ordinary rules of law relating to the extent of discretion allowed administrative decision makers, and the limitations of judicial review of the exercise of such discretion, do not limit a court where there is "law to apply." In *Parker*, the plaintiffs sought to enjoin a timber sale in the East Meadow Creek area of White River National Forest in Colorado. They contended that the area was contiguous to and geographically part of the Gore Range-Eagles Nest Primitive Area and should be preserved so that it might be considered by the President and Congress for inclusion in the ultimately designated wilderness area.\(^{158}\) The court, after discussing the standard of the Wilderness Act and noting the trial court's conclusion that the East Meadow Creek Area met that standard,\(^{159}\) went on to hold that there was "law to apply" in that case. The court stated that to afford the appellants "the discretionary right to destroy the wilderness value" of the area would be violative of the legislative intent that the President and Congress have an opportunity to add other contiguous areas to existing wilderness areas.\(^{160}\)

Other legislative acts passed to protect aesthetic values include such things as Article I, Section 27, of the Pennsylvania Constitution, which provides:

\(^{157}\) 448 F.2d 793 (10th Cir. 1971).

\(^{158}\) 16 U.S.C. § 1131(e) (1970), quoted by the court, 1 ENV. LAW REP. 20490, as follows:

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, education, scenic, or historical value.


\(^{160}\) 448 F.2d 793, 797 (10th Cir. 1971). The legislative intent referred to is embodied in 16 U.S.C. § 1132(b) (1970).
The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of the resources, the Commonwealth shall conserve and maintain them for the benefit of all the people. 161

This was adopted in May of 1971. It contains several references to aesthetics, but none have been tested in the courts to date. 162 Its usefulness involves the same problem as that inherent in common law nuisance: it does not provide a definite standard. Its principal impact, therefore, may well be its encouragement of the legislature to adopt legislation affirmatively asserting itself as public trustee.

Another type of legislation is that adopted in West Virginia to control coal strip mining. The West Virginia Strip Mine Control Act 163 provides that the Director of the Department of Natural Resources can refuse altogether to issue a permit to strip mine if stripping will unreasonably and irreparably interfere with the property rights of others. Included among such property rights is the aesthetic value of the potentially damaged property. The Director of the Department of Natural Resources has since 1967 been someone with a background in wildlife management rather than coal mining. As a consequence, the problem of bias in favor of strip-mining and resource development has not been operative. Because of the forcefulness in representation of economic interests before any state government agency, it is unlikely that the problem of reverse bias will really be a problem. Clearly, whether a provision such as this actually solves the problem of undervaluing aesthetic interests will tend to depend on the man in charge. So far, only one permit has been refused under

162. One case, involving an observation tower proposed to be built adjacent to Gettysburg National Battlefield, has been decided by a lower court in Adams County. Commonwealth v. National Gettysburg Battle Tower, 3 Env. Law Rep.—Cases, Recent Dev. Vol. 1270 (Adams County Ct. C.P. 1972). There the court decided on the application of the Attorney General that the proposed tower would not violate the above constitutional provision. That case is currently on appeal.
conditions where the only reason that could be given was damage to aesthetic values. The case involved an attempt to physically sever the top of a ridge immediately adjacent to Grandview State Park.\footnote{164} While the Director's refusal of a permit has been approved by the departmental appeals board and argued before the local court, no decision has yet been made. Given the extreme nature of the case, however, the supreme court of the state where the decision in Parkersburg Builders' Supply\footnote{165} was written should not have too much trouble approving his action.

Some of the objections to government decision making on the basis of benefit-cost analysis are quite broad in concept, criticizing not the fact that particular values are not sufficiently taken into account but rather the structural adequacy of the process itself.\footnote{166}

Any new proposed structure must recognize that, as ecologists have pointed out, everything really is connected to everything else and that the decision making process is improved by considering all conceivable factors. Specifically, some of the ferment that was generated by controversy over specific water resource management projects, especially the Grand Canyon Dams proposal, probably contributed to the framing of the decision procedures outlined in the National Environmental Policy Act (NEPA).\footnote{167} These procedures probably constitute the most important recent change to take place regarding the inclusion of aesthetics and other intangible environmental values as significant factors influencing resource management decisions. One major respect in which benefit-cost analysis was deficient is that it did not require the explicit consideration of alternatives.\footnote{168} The way in which

\footnote{164. Petition of Sparks Coal Company before the West Virginia Coal Reclamation Board.}
\footnote{165. Parkersburg Builders Material Co. v. Barrack, 118 W.Va. 698, 191 S.E. 368 (1937).}
\footnote{166. See Carlin, supra note 122; Findings and Recommendations, WATER RESOURCES COUNCIL, supra note 122.}
\footnote{167. 42 U.S.C. §§ 4331-35 (1970) [hereinafter referred to as NEPA].}
\footnote{168. Arguably it did through the concept of "opportunity cost"—the idea that the cost of any item is defined as the value of opportunities foregone. The only really satisfactory way of valuing any proposal is to compare it with alternatives. Benefit cost analysis did consider alternatives, but in a much more restricted manner. See Carlin, The Grand Canyon Controversy, supra note 122. And the valuing of alternatives was, to use Toffler's phrase, "econocentric". See Toffler, Future Shock (1970).}
NEPA has tended to resolve this problem is discussed below.169 The key to bringing aesthetics and other similar values into the decision making processes is to structure the process to force the decision maker to consider fully all values which society treasures. A procedure that requires the explicit comparison of all alternatives is probably the strongest way to force this consideration. Explicit comparison of alternatives, with all of the secondary and tertiary effects of each alternative spelled out, allows an accurate gauge for the opportunity cost of the selection of any one alternative. Comparison of alternatives thus affords a method of valuation, even where it does not reveal a price.

The National Environmental Policy Act has a number of provisions that ought to be helpful in broadening the protection of aesthetic and related values.170 The requirement in Section 102(2) (B)171 to identify and develop methods and procedures for taking into account presently unquantifiable environmental amenities in making decisions has already been referred to at least once in connection with aesthetics. In the Hells Canyon Dams applications,172 Presiding Examiner William C. Levy in his initial decision on remand, after noting the requirements of Section 102(2) (C) of NEPA173 for full treatment and documentation of environmental problems, said of the scenic value of the canyon:

Finally, it must be recognized that we cannot measure directly in dollars or quantifiable economic terms for purposes of any meaningful comparisons changing environmental scenic values, esthetics,

169. See text accompanying note 176 infra. See also § 42 U.S.C. 4332 (C) (i) (1970). NEPA requires all agencies to:
   (C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—
   (i) the environmental impact of the proposed action,
   (ii) alternatives to the proposed action.

or the loss to future generations of the existing river and its present or prospective uses and values.\textsuperscript{174}

The ultimate outcome of this question, of course, will have to await the final decision by the Commission and probably an appeal to the courts. In the meantime, it is significant that the mandates of NEPA with respect to the appropriate consideration of "presently unquantified environmental amenities"\textsuperscript{175} like aesthetics were heeded. Moreover, NEPA requires a broad consideration of alternatives and Examiner Levy so considered alternatives.

Probably the most important single decision, to date, on the procedural requirements of NEPA has been \textit{Calvert Cliff's Coordinating Committee, Inc. v. Atomic Energy Commission}.\textsuperscript{176} In this case the Calvert Cliffs Coordinating Committee challenged Atomic Energy Commission regulations as being at variance with Section 102(2)(c) of NEPA\textsuperscript{177} on a number of bases. The Court of Appeals for the District of Columbia held that NEPA does impose a substantive duty to consider environmental factors and "to 'use all practicable means and measures' to protect environmental values"\textsuperscript{178} in the administrative processes. Among the means and measures, the procedure for making decisions must be modified so as to "give environmental costs and benefits their proper place along with other considerations"\textsuperscript{179} in that process. One of the most important modifications is the requirement that alternatives must be explicitly examined and a thorough docu-

\textsuperscript{174} 1 \textsc{Env. Law Ref.} 30026-27 (1971). An earlier attempt at the quantification of aesthetic values is found in \textsc{Birkhoff, Aesthetic Measure} (1933). Dr. Luna B. Leopold attempted to quantify these aesthetic values, but the hearing examiner rejected this attempt, saying: Dr. Leopold's mathematical formulation of aesthetic values has little application to the choice between a river and a lake and the high "uniqueness" factor assigned to undesirable as well as desirable features limits its usefulness in license proceedings. The "unique characteristics of the canyon—narrow valley floors, high adjacent mountains, availability of distant vistas, and little or no urbanization"—exclude the river itself and will continue with or without the proposed development. The surrounding landscape will remain relatively as attractive, unique, and exceptional after development as before. However, there will be a substantial increase over present usage.

\textsuperscript{175} \textit{Id.} at 30027.
\textsuperscript{176} 449 F.2d 1109 (D.C. Cir. 1971).
\textsuperscript{177} 42 U.S.C. § 4332(2) (C) (1970).
\textsuperscript{178} 1 \textsc{Env. Law Ref.} 20347 (1971).
\textsuperscript{179} \textit{Id.}
mentation of the environmental impact of each alternative must be made.\textsuperscript{180}

The court went on to examine the Atomic Energy Commission’s procedures. These procedures required the introduction of an environmental impact statement in contested licensing proceedings. Such introduction, however, was to be in a manner that would not be disruptive of the thought processes of decision makers conditioned by existing procedures which considered no environmental factors other than radiological hazards.\textsuperscript{181} The court considered such procedures and viewed the Commission’s compliance with NEPA as minimal, saying:

The one thing the Commission has refused to do is take any independent action based upon the material in the environmental reports and “detailed statements.” Whatever environmental damage the reports and statements may reveal, the Commission will allow construction to proceed on the original plans. It will not even consider requiring alterations in those plans (beyond compliance with external standards which would be binding in any event), though the “detailed statements” must contain an analysis of possible alternatives and may suggest relatively inexpensive but highly beneficial changes. Moreover, the Commission has, as a blanket policy, refused to consider the possibility of temporarily halting construction in particular cases pending a full study of a facility’s environmental impact. It has also refused to weigh the pros and cons of “backfitting” for particular facilities (alteration of already constructed portions of the facilities in order to incorporate new technological developments designed to protect the environment). Thus reports and statements will be produced, but nothing will be done with them. Once again, the Commission seems to believe that the mere drafting and filing of papers is enough to satisfy NEPA.\textsuperscript{182}

\textsuperscript{180} Id. at 20349.
\textsuperscript{182} 449 F.2d 1109, 1127 (D.C. Cir. 1971).
The court further held that such considerations as a national power crisis and delays in programs under existing construction permits do not justify disregard of the factors which NEPA requires to be considered.183 The proposed regulations were sent back to the Atomic Energy Commission for revision with very strong language regarding their eventual contents.

CONCLUSION

Given the strong language in Calvert Cliffs, it might not be such an onerous task for a plaintiff to get a reversal of a particular decision on grounds that the environmental factors listed in NEPA were undervalued to such an extent as to invalidate the decision. In the meantime, those involved in legal work for the environment may have to depend on efforts in the political arena for attaining ultimate goals, using as best they can delays awarded by the courts to try to gather public support.184 Ultimately, however, it is a question of values; new values, before being woven into the legal fabric, must find support in society as a whole.

Of the three methods for working aesthetic values into the law—common law nuisance, the use of police powers, and legislative requirements placed upon the administrative process—it would seem that the latter provides the best means for success and that the use of common law nuisance presents the most remote chance for success. The most important feature of the new requirements for administrative decision making is that the procedure must now be responsive to all of the consequences of the decision and to changes in the priorities which people of this nation attach to values.

183. See also Greene County Planning Board v. F.P.C., 3rd F.2d, 2 Env. Law Rep. 20017 (12d Cir. 1972), where the Second Circuit returned a case to the Federal Power Commission on similar grounds, also refusing to be swayed by arguments respecting delays and a national power crisis, 2 Env. Law Rep. at 20022.

184. Since this was written a lot has happened. Major confrontations have developed, especially over energy: Congress has amended the Atomic Energy Act to permit limited avoidance of NEPA in operating nuclear power plants; offshore oil drilling has been challenged; the Alaska pipeline approval has been challenged. A summary of developments is given in 5-72 CF Letter (Conservation Foundation 1972).