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THE RATIONALITY OF U.S. REGULATION OF THE BROADCAST SPECTRUM

by

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may not dare to tread in the paper press.[1] It is the foundation which entitled analysts and regulators to speak of "the resolution of the conflict between the first amendment and the need for rational frequency apportionment, with the consequent imposition of a public service requirement" (Marks 1970, 390-1). It is the dirty little secret of the U.S. broadcasting experience that "physical scarcity" of the airwaves is neither unique to the medium, nor a constraint of nature. The scarcity of channel capacity to which we are limited has not been the premise for creating government regulation, but the consequence of political control. In fact, the issue of frequency interference is logically unconnected to the issue of frequency allocation, except insofar as it legally facilitates political control to be exercised over broadcasters despite the constitutional prohibition of government regulation of the press. It is that political efficiency that has tied the interference question to the "public interest" evaluation of licensees.

I. The Interference Rationale for Licensing

The first U.S. policy was to seize the spectrum for governmental use only: the Navy took the entire band for military communication.[2] But private users lusted for access to electronic speech, and were successful in persuading Congress to direct the Secretary of Commerce to license private broadcasters in the Radio Act of 1912. The federal government was asserting ownership of the scarce electromagnetic resource but in a rather peculiar way: the Secretary took no payment, and issued no exclusive frequency rights. "Licensing" was but a zero-priced club admission to unlimited use of the band.

By the time this bizarre "ownership" rule became fully evident (in a federal court case in 1925 and a subsequent opinion of the U.S. Attorney

The ironic nature of this "non-market" policy regime was articulated by the late Professor Pool:

> In fact, however, there is a market in spectrum. It is a market in tangible things because what is bought and sold is broadcasting stations. The government initially gives away licenses for free; these are then sold in a second hand market. What is excluded from market allocation is only the initial grant of a frequency by the government to its first "owner"...under existing practice the original licensees make a windfall profit by selling the license to someone else...If the market mechanism created for broadcasting had been pushed one level further back and the government had offered spectrum rights for lease or sale at a price reflecting market value, any windfall would have gone to the public, not to politically favored individuals (1983, pp. 139-40).[3]

The essential question, then, is: Why does the FCC not divvy up the electromagnetic spectrum into non-interfering "parcels" and auction them to highest cash bidders. This has been advocated repeatedly since at least the early 1950s (see Herzel 1951), could be easily accomplished technically (see De Vany, et al., 1969) and has been suggested as a politically advantageous solution to spectrum scarcity in that it captures any available rents associated with band use for the public treasury. As Congressman Henry Reuss noted in 1958, in defense of his (unsuccessful) bill to require certain applicants to bid dollars for spectrum space: "The airwaves are public domain, and under such circumstances a decision should be made in favor of the taxpayers, just as it is when the government takes bids for the logging franchise on public timerland" (in Coase 1959, p. 24).

Something is amiss. Finiteness of the spectrum is the constraint of nature; this gives rise to the problem of interference, hence, some users must be excluded. But this is simply the economist's definition of scarcity, and the textbook treatment to soothe the pain of scarcity is to allow the price mechanism to direct the valued resource to where it fulfills the most intense demands. Yet just here, on the premise of scarcity, the state prohibits the price mechanism and--in the "public interest"--bestows vast profits on fortuitous private broadcasters who are allowed to use this scarce spectrum without charge.[4]

II. The Riddle of the Auction

This strange policy format loses its mystery when the licensing decision is analyzed from the vantage point of the licensors (now at the Federal Communications Commission). The interference problem is one of defining separate broadcast "properties"; it is logically unconnected to the issue of who is to harvest those properties. To confuse the definition of spectrum rights with the assignment of spectrum rights is to believe that, to keep intruders out of your backyard, the government must own (or license) all the houses. It is a public policy *non sequitur*.

Indeed, even when the government does own the property, keeping people from interfering with each other remains a problem. Hence, the FCC has not solved interference by allotting licenses; a renegade broadcaster could still interrupt an assigned broadcast frequency. The interference solution comes in allowing the assigned broadcaster the right to punish such interlopers. And that comes by virtue of his title to spectrum, which could be purchased (under a different policy) on the open market just as easily as it is assigned as a three-year rental by government administrators.[5]

The confusion is that solving the interference problem is a two step process squeezed -- quite intentionally -- into one. The first, of course, is to define what frequencies may reasonably operate at what times and where. The second is to allocate those legal rights to the spectrum. Selecting who broadcasts is not necessary in order to solve the interference problem, and (by itself) would not solve the interference problem; that is accomplished by virtue of legally defining the assorted property rights and issuing them to some economic agent. As shown in Table 2, chaos is associated with a lack of well-defined rights in the spectrum, and may thereby obtain under a "private sector" or a government licensing arrangement -- which it precisely did in the pre-1927 period when radio broadcasters were licensed, but had no right to enforce any exclusive use of "their" frequency allocation.

The interpretation that the "cacophony" was solved only when government selected who could receive well-defined broadcast rights is a fiction of immense legal importance for U.S. regulatory policy. For press licensing has been despised by Americans and their legal system since the founding days of the Republic. "The colonists' rejection of the various British attempts to impose government authority over the press," wrote Ithiel de Sola Pool, "were incorporated into the American Constitution by the First Amendment. This amendment creates a domain of activity -- speech, religion, and press -- in which the activities of private individuals shall be unregulated by government... The unconstitutionality of licensing, which the American courts referred to as previous or prior restraint, was decided as early as 1825" (Pool 1983, p. 16).

The "Why?" as to the peculiar mechanism used by the FCC to auction off licenses is answerable only in the legal context of American free speech tradition: for the federal (or other) government to award the right to speak, over the airwaves or elsewhere, to applicants best suited to government "standards" would be a flagrant constitutional violation under normal circumstances. To license the electronic press, there must be some unique element to radio (and later television) speech to enable the government to grant permission to its selected speakers (i.e., broadcasters) and to, concomitantly, exclude others. That unique element was, as seen in Red Lion, the interference problem caused by the physical scarcity of channel allocations. This was -- is -- the pretext by which government may issue broadcast licenses in "the public interest."

The argument is logically incorrect, as we have seen; there is no necessary connection between interference and speaker-selection. Noting this, the traditional approach taken by economists is to criticize the Congress (in the Radio Act of 1927 and the Communications Act of 1934), the courts (particularly in NBC [1943] and Red Lion [1969] and the FCC, for mistakenly employing a wrong-headed theory of media regulation. Coase, for instance, notes that, "It is difficult to avoid the conclusion that the widespread opposition to the use of the pricing system for the allocation of frequencies can be explained only by the fact that the possibility of using it has never been seriously faced" (1959, p. 24). Similarly, Minasian posits that, "Although it was the desire to control interference that gave rise to the current [broadcast licensing] system, today we find the main function of the FCC to be the determination of the quantity and quality of the service made available to the public" (1969, p. 403). Here, indeed, the writer observes a mystery that, upon subsequent examination, should want for drama. For, it is understood that "unregulated competition has long been opposed, and entry controls favored, aside from serious problems of technical interference, by those who fear that profit maximization must necessarily lead to product deterioration in terms not limited to signal quality" (Levin 1962, p. 53).

Here the puzzle begins to piece together. The "error theory" of federal spectrum allocation would look far more compelling if, firstly, the "error" were apparently a random one and, secondly, it led to remediable action (or, at least, remedial momentum) once the error were "discovered." Instead, it is the proclaimed innocence of the "mistake" which seems to pick up momentum upon inspection of the seventy-five years of U.S. regulation of the broadcast band.

III. The Politics of Government Licensing

When the "chaos" of the "private sector" became intolerable, the Secretary of Commerce, Herbert Hoover, needed but one bit of legal power to resolve the "cacophony": the right to create exclusive rights to spectrum space. The decision to enable a new commission to arbitrarily select licenses was not at all a necessary part of the solution -- and Hoover knew it. He had, in fact, attempted to avoid the period of chaos when, in 1921, he denied license application on the grounds that it would interfere with existing broadcasters. The courts held, however, that the Secretary had no right to refuse a license. Hoover again tried to establish exclusive rights in 1925, when he issued a franchise to the Zenith Radio Company -- but limited it to between 10:00 p.m. and 12:00 p.m. on Thursdays, unless such time and frequency were desired by another Denver licensee, General Electric. When this ruling was overturned by a legal decision holding that licensees could not be confined to particular times, places, or frequencies, electromagnetic bedlam was the result. But, as Coase notes, "Hoover distinguished between two problems: the prevention of interference and the choice of those who would operate the stations." Hoover demonstrated this clearly, in publicly advocating that the federal government need not perform both functions -- as early as 1925:

> ...the ideal situation, as I view it, would be traffic regulation by the Federal Government to the extent of the allotment of wave lengths and control of power and the policing of interference, leaving to each community a large voice in determining who are to occupy the wave lengths assigned to that community (in Coase 1959, p. 8).

The more subtle clue from Hoover is this: even where the separability of rights definition and broadcaster selection are clearly understood and articulated, the option of market allocation is <u>not</u> the policy conclusion. As Mr. Hoover could hardly be proclaimed as hostile to capitalist institutions, it is utlimately revealing to discern the depth of the prejudice that licensees should be selected by public authority. Hoover saw localities as better equipped, perhaps, to judge the "public interest" than Washington, but the idea of respecting First Amendment values by allowing an unregulated market to bid on licenses was nowhere on the agenda, even where it was explicitly conceded that rights-definition and speaker-selection were distinct activities. It was not on Hoover's agenda and not even on that of the constitutional libertarians, to wit, the partisans of the American Civil Liberties Union.

Even while acknowledging that competition for a scarce resource was the allocational issue, the ACLU offered that "if three labor unions own broadcasting stations in a particular district, it might be well that a bank then applying for a station should be given greater consideration than some fourth labor union organization, to the end that various opinions...be broadcast" (Ernst 1926, p. 474). Further, "preference should be given to non-profit-making organizations dedicated for public benefit, such as churches, schools, colleges, and other such institutions" (Ibid.). From a proconsumer perspective this policy is entirely counter-productive: "non-profit" broadcasters are precisely those which consumers find it most difficult to discipline. But this "civil liberties" agenda for press licensing was anything but consumer welfare oriented. Contrarily, it advanced a "public interest" approach to broadcast regulation:

> All records of broadcasting stations should be kept on forms prescribed by the Department [of Commerce] and opened periodically to the public. Such records should include programs which have been broadcast, itemized in accordance with types of broadcasting such as jazz, opera, concert music, songs, sermons, political addresses, dinner speeches, etc... The public and the Department, in possession of such facts, may more wisely come to a determination as to whether or not the particular station should have its license renewed or revoked on the sole basis of public benefit (Ibid.).

Indeed, the agenda that government should control the allocation of licenses to broadcasters meeting a governmentally-prescribed standard was one -- not shockingly -- that won the hearts and minds of government policymakers. In the Republican bill of 1927 as in the Democratic bill of 1934, a government commission was empowered to issue broadcast licenses not randomly, by lottery, via first-come-first-serve, or by dollar auction, but selectively, in accord with the commission's judgment as to the "public interest, convenience or necessity." The federal frequency allocation scheme was well-understood to be an auction, one in which money was not to be bid, but rather commitments to the "public interest" -- as subjectively defined by the regulators. Importantly, this was an auction made all the more intensely competitive by the government's refusal to charge a fee for its valuable grants.[6]

This power to deny speech to those distrusted by the licensing authority was known to tread the line of censorship early on. The First Amendment was clearly seen as relevant: David Sarnoff, of the Radio Corporation of America, warned that "the same principles that apply to the freedom of the press should be made to apply" to radio (in Pool, p. 120, and see Sarnoff 1924). Nonetheless, the Left demanded safeguards against private monopoly, poor programming, and allowing stations to become an "organ of orthodoxy," which led to calls for blatant regulation of subject matter, while the Right lobbied for more traditional forms of censorship, such as protecting children from naughtiness, and even pushed a ban on broadcasting discussion of the theory of evolution, which was voted down in Congress (see Pool 1983, pp. 117-120). As early as 1924, a California station airing a speech by an advocate of private ownership rights to water was threatened with loss of license by government regulators responding to disgruntled public water ownership enthusiasts. Licensing in the "public interest" would be the polite fiction by which the interference problem would be "solved" -- and the blunt instrument with which the first amendment would be circumvented.

The FCC has secured its censorship role partly by treading softly, in deference to American values, tradition and law. Professor Kalven has argued that, "The greatest obstacle to the development of a vigorous tradition of freedom of speech in broadcasting may well have been the placidity and decency of the FCC." (Kalven 1968, p. 18.) Yet principles are surely compromised, for instance, foreign nationals have never been allowed broadcast licenses (47

U.S.C. §310 [b][1976]), and offensive speech, lotteries, "harmful" medical advice and gambling information have been directly banned (Note 1971, pp. 112-3). And the FCC has historically enjoyed the opportunity to pursue its subjective agenda as to what the broadcast market should look like. In licensing and renewals, "the Commission compares a television station's programming with 'guidelines' about the percentage of news, public affairs, and other nonentertainment programs a station should carry" (Fowler and Brenner 1982, p. 218), and allows license-seekers and -holders to understand that special weight will be given to broadcasters who subsidize "local live programming... programs devoted to discussion of public issues" and stations which limit advertising time (Ibid., p. 215).

Licensing of the press has an old and rich history, and the U.S. Congress of the 1920's was not the first body to consider the political benefit from influencing, if not controlling, society's flow of news, information, and entertainment services. A policy to protect the free entry into, and sale of, broadcast licenses would surely allow consumers to regulate licensees with their listening and viewing choices (given the constraints of nature and technology); the motivation of profit-maximization would discipline broadcasters to present fare enlisting the greatest numbers of consumers. Whatever bias developed from such unbridled profit-seeking, would predictably result from the base tastes of the public rather than any personal prejudices of the license-capitalists.[7] Hence, the intriguing ACLU suggestion that non-profits be preferred license holders is revealed as a motivation to supplant consumer selection with enlightened press licensing.

This desire to control press content in violation of "free press" limitations on government has also bared itself in the initial and latter stages of federal radio-TV regulation. Early on, before the NBC Supreme Court decision (1943) introduced the physical scarcity doctrine, the Federal Radio Commission had no qualms about revoking a Los Angeles preacher's radio license in 1930 because his attacks on public officials and competing clerics "were sensational rather than instructive" (in Powe 1987, p. 16). It did not run afoul of the First Amendment in this, for, as its 1928 Annual Report had noted, "The Commission is unable to see that the guarantee of freedom of speech has anything to do with entertainment programs as such" (Ibid., p. 23).

On the premise that entertainment was not constitutionally-protected speech, motion pictures had also been censored. In three 1915 decisions, the Supreme Court found that, in Lucas Powe's words: "entertainment is not part of the First Amendment; motion pictures are entertainment, therefore, motion pictures are not entitled to First Amendment protection" (Ibid., p. 28). While entertainment--including topless dancing--later came to enjoy such freedom, it is illuminating to see that federal regulation of radio clearly preceded the physical scarcity rationale.

On the far chronological side of that rationale, the courts have approved FCC censorship without resort to the scarcity rationale. The 1977 Pacifica case dealt with the issue of whether a radio station could legally--under its First Amendment standing broadcast comedian George Carlin's routine on the "seven dirty words." In upholding Commission censorship, "the Supreme Court did not state that because broadcasting was scarce it was improper to waste the eleven minutes necessary to hear Carlin's monologue; instead, the Court stated that radio was an 'intruder' into the home, 'uniquely pervasive,' and 'uniquely accessible to children'" (Ibid., p. 209).

Similarly, cable television was suppressed by the FCC throughout the 1960s and early '70s despite its distinctly non-scarce ("physically" speaking) nature. Cable, which does not utilize spectrum space, was legally regulated by the Commission's mandate to oversee services that were "reasonably ancillary" to broadcast television. Since cable was a competitive threat to broadcasters, it qualified as fair game. Interestingly, this rationale [out of the Supreme Court's 1968 Southwestern Cable decision], condoned regulation of cable for more pervasive then that allowed of broadcast TV or radio. Being "reasonably ancillary" to a "physically scarce" medium of expression apparently created more of a problem than being "physically scarce" itself.

What these non-scarcity rationales for regulation demonstrate is that there exists no scarcity of rationales for regulation. The demand to regulate is strongly held; the imagination in justifying regulation is abundant. While the "physical scarcity" doctrine has had legal staying power, it does not emerge as a unique exception to the class of activities protected by the First Amendment which, reluctantly, government regulators have been forced to respond to in the interests of the public. Physical scarcity was not logically sufficient to justify governmental control of radio licensees' speech; history has also seen that neither has it been legally necessary.

IV. A Random Error Seen `Round the World

The precision of this "error" in public policy can be gleaned from the regularity with which broadcast licenses are governmentally regulated across countries. For readily apparent purposes of state, governments everywhere attempt to suppress alien perspectives on life or liberty via control of the airwaves. It would be, of course, ludicrous to see a serious totalitarian regime with an unregulated, uncensored broadcast industry. But equally compelling is the alacrity with which states with relatively liberal press (i.e., newspaper) policies shift into the oppressive mode at the hint of a broadcast frequency. The South African government, while allowing (until the June 1986 state of emergency) a fairly wide range of editorial views in a private newspaper market, has entirely monopolized television and radio for state purposes. No television broadcasting was allowed until 1977, and now the parastatal South African Broadcasting Corporation runs channels for the English-speakers, Afrikaners, and blacks tuned strictly to programming thought socially useful, particularly conscious that "Access to the state-controlled television can make or break political movements" (Adam and Moodley 1986, p. 45).

This regulatory asymmetry between the print and the electronic press carries over into the traditional Western democracies as well. In Table 3 we observe the regularity with which liberal states have sought to suppress private use of the airwaves; England, W. Germany and France have stifled private broadcasting (as did Italy until a state-run T.V. triopoly was broken down by the courts in the 1970's).[8] In deed, the government model encapsulated in the BBC appears particularly un-American to Americans. Not only do "British radio officials give the public what they think the country needs to hear, whereas American radio officials give the country what they think it wants to hear," causing the British system to tend "toward dullness" (High 1934, p. 23), but the idea of censorship was, and is, anathema. It was simply not a plausible First Amendment policy alternative to entirely monopolize the airwaves for a select body of enlightened communicators who would strive to reduce "political controversy and political education on the air to an absolute minimum...[with] a strong ambition to seek neutrality and colorlessness" (in Pool 1983, p. 112) when radio programming was developing in the 1920's and 1930's.

It is equally telling that Europeans harbor small desire to emulate American broadcasting. Allowing program quality to sink to commercial American standards is regarded as disastrous public policy. The recent "Peacock Committee" report on the BBC produced by the Thatcher government was interested to find, in its international survey of broadcast regulators, that "senior officials were deeply envious of the British 'duopoly' and advised us" not to endanger the present structure (Home Office 1986, p. 36), while "in our deliberations [the U.S. model] has been cited countless times by organizations and individuals as an example of how broadcasting should not be run" (Ibid, p. 31).

What is not well understood, however, is that the United States and its European friends have opted for similar restrictionist policies, carried out under seemingly dissimilar mechanisms. The private broadcasters in the American market are controlled by monopoly entry barriers and licensing regulations quite as pointed--if not as pervasive--as nationalization itself. In truth, both policy regimes treat the spectrum as government property; the difference is in the rental arrangement. In Europe the state leases the spectrum to speakers only on an hourly basis (and without resale rights), while five and seven year rental contracts now prevail in America. But a landlord-tenant relation is constant. As Pool summarizes:

> It was in the 1920s...that communications policy lost its way. Without adequate thought, a structure was introduced for radio which had neither the libertarian features of the common carrier system nor those of the free market. The assumption of the new system was that spectrum was extremely limited and had to be allotted to chosen users. In Europe the chosen user was generally the government itself; in America it was private licensees. Since only a few would be privileged to broadcast, government felt it must influence the character of what they broadcast. The broadcasting organizations, unlike common carriers, selected and produced programs, but unlike print publishers, who also select what appears, there was no free entry for challengers. So government stepped in to regulate the radio forum and shape the broadcasters' choices (1983, pp. 232-233).[9]

V. A Mistake Better Left Uncorrected

Nor has the "error" in allocation been "corrected" since the mistake was publicly exposed. At least since Leo Herzel's insightful 1951 article in the *University of Chicago Law Review*, it has been explicitly clear that channel allocation "is essentially an economic decision, not a policing decision" (Herzel 1951, p. 802). Coase's discussion in his seminal 1959 article in the *Journal of Law and Economics*, and numerous policy discussions to follow, have failed to eliminate the licensing "error"--or to even be cited in the U.S. Supreme Court's 1969 *Red Lion* verdict endorsing government press regulation in the "public interest." Indeed, the Court offered to enshrine the error by premising their decision on physical scarcity of the spectrum and the interference problem, as seen quite vividly above.

Revealingly, the interference problem is no longer taken seriously as a justification for FCC licensing, outside of Supreme Court precedent. Yet licensing is openly advanced on alternative grounds having none of the uniqueness associated (by the Court) with physical scarcity. As Levin notes in discussing various proposals to auction spectrum space: "To date such economic incentives have nowhere been introduced among users of spectrum... The failure to make progress appears mainly due to several (debatable) assumptions widely held by influential regulatory and industrial groups." His list of four anti-market arguments: auctioning would (1) price small business out; (2) discourage new investment; (3) diminish the scope of "public interest" regulation by the FCC; (4) lower "public interest" programming and lead to quality deterioration (Levin 1980, p. 107). Outside of federal courtrooms, FCC licensing is today advocated openly and honestly for its regulatory virtues, without even a paean to the interference rationale.

Moreover, numerous attempts to regulate other communications media have been attempted. A large campaign to allow government-enforced "access" to the newsprint press was waged by various academics in the U.S. prior to the Miami Herald (1974) decision (see below).[10] There, the argument was that profit-making enterprises were becoming too socially powerful, and that public regulation was called for to counter the influence of communications' capitalists. The premise for intruding on the First Amendment rights of said owners, was the ever-present "natural monopoly" problem--but hoisted upon new ground: "The media resemble natural monopolies not because they have grown large nor because ownership is concentrated in a few lands, but because they alone are effective instruments of communications in a mass urban society" (Lange 1973, p. 25). The complaint that achieving "special properties which are not available elsewhere" (Ibid.) is a distinct (i.e., non-monopolistic) rationale for regulation reduces, evidently, to the assertion that a communications service successful enough to have no perfect substitutes is inherently suspicious.

VI. Restricting Entry to Ameliorate Scarcity

Perhaps the clearest evidence of the government's actual intent in the "cacophony error" is to trace precisely what measures have been taken to alleviate this physical scarcity problem. That policy is inexplicable if the "error" theory is juxtaposed with the First Amendment. What has happened under federal spectrum allocation is that available channel capacity for radio and television have been widely restricted, as a deliberate policy to achieve the government's objectives in broadcast regulation. That is, because the spectrum is physically limited, the government has the right to license entrants to the broadcasting market without violating "free speech and press" rights. To do an effective job at that (i.e., to provide "fairness" and programming in the "public interest"), the state then further restricts the number of licensees to far less than the number technically possible.

This is a policy which circles itself. It is the mutant hybrid which has flowered when the seeds of traditional state control are pollinated by legal contingencies in a country governed by constitutional guarantees to an unregulated press. The result is that the FCC licenses just a fraction of the television and radio frequencies available for broadcast in the country -- without fear of interference -- so as to create a greater degree of leverage (in the form of monopoly rents) over license recipients.[11] The size of this leverage is impressive (as seen again in Table 1). The right to bequeath five or ten billion dollars in monopoly privilege will assure influence. And federal regulators are not ignorant as to the cause of these rents, nor as to the result.

Robert Crandall (1978) asserts that in less than 15 percent of U.S. television markets can viewers receive better than four off-air channels on their 82-channel sets; "Sometimes they must wonder why" (p. 31). While Crandall notes that the technical interference problem is the "reasonable" explanation that is widely believed by the public, and pushed by the FCC, "The real reason has little if anything to do with electronic phenomena -- with either a shortage of channels or, as some would have it, the inherent inferiority of UHF" (Ibid.) Indeed, the FCC's allocation scheme has restricted entry into available noninterfering television frequencies because of the federal government's view that "greater competition would be contrary to the public interest because it would reduce discretionary revenues used to subsidize merit programming. Thus, in fact, the policy is one of offering the quid pro quo: a limit to competition among broadcasters offering entertainment in return for a commitment to offer presumably unprofitable programs that are deemed to be of greater social value" (Ibid. 33; see also Crandall 1974).

In Table 4 we follow the logic of the regulatory exchange: government licensing restrictions award broadcasters fantastic rates of return (95 percent before the local programming "FCC tax") which the licensees are more than willing to split with regulators, paying in the form of subsidized services not worth their opportunity cost to consumers (i.e., consumers would prefer to watch other programming of equal production cost). Hence, the flow of logic:

(1) "Physical scarcity" mandates federal broadcast licensing;

(2) Regulators thereby are allowed to use their licensing power to promote certain social values as fairness, diversity, and local programming;

(3) The values in (2) can be more effectively pursued the greater the state's leverage from (1);

(4) Hence, political restriction of broadcast licenses is legally accepted as a furtherance of "First Amendment objectives."

VII. Scarcity-Creation as Public Policy

So we arrive at the ironic policy conclusion that, to deal effectively with scarcity, we must restrict entry to broadcasting. This reduces, however, to simply the postulate that government regulators are better equipped to devise programming choices than is open competition in the marketplace. This, however, is grounded not on any monopoly exploitation dictated by "technical" scarcity, but is a finely crafted effect of a public policy which imposes entry barriers to <u>increase</u> market power. Whereas the legal justification of spectrum licensing derived from "physical scarcity" (as in the Radio Act of 1927), and later regulatory attempts over licensees were upheld as publicly-interested mechanisms to deal with such scarcity (as in <u>Red Lion</u>), it is apparent that dissatisfaction with the fruits of competition to satisfy consumer demand is the motive in modern broadcast regulation. In order to create a rent seeking competition in which potential broadcasters satisfy the demands of regulators, via balanced programming, limited controversy, fairness, and "good character", the scarcity of nature had to be <u>intensified</u> by regulatory licensing restrictions. That such a subversion of First Amendment rights could survive challenge is testimony to just how weak are libertarian arguments in a market where "crass commercialism" (i.e., competition for consumers) is condemned so uniformly by influential elites.

But the punchline to the broadcast regulation riddle has been delivered by technology -- and it is an old punch line, at that.

> The time has come to bury the cliché that spectrum is a scarce resource. It is an abundant resource, but a squandered and misused one...

> The Court in Red Lion was wrong. It looked forward to the day when technology would solve the problem. It did not understand that technology had done so already. What is lacking is a legal and economic structure to create incentives to use extant technologies in ways that would provide broadcasting in abundance...
>
> But the failure to create institutions that allow the public to acquire channels up to the point where they choose to stop paying for them is a policy failure, not a technical one (Pool 1983, pp. 151-152).

The most appropriate way to fashion our scarcity-creating broadcast policy is not as the product of either madmen or sadly mistaken men, but as the logical outcome of a utility-maximizing political process. Regulators obtain benefits, in this world (as in our own), by achieving personal gains in the form of money, political support, and on-the-job consumption (including any internalizing of ideological conquest). Now, if channel capacity may be released for private license by regulators, there exists a demand curve for those broadcast rights; presumably, this demand function slopes downward (see Panel [a] of Figure 1). The regulator would be tempted to issue a politically optimal number of channels to license, g^r. Note that $g^r \geqslant 1$; no leverage is obtained without some entry, but it is possible (indeed, likely, given the evidence) that restriction to the minimum (i.e., just one broadcaster) is not a political optimum. More importantly, it is entirely possible (again, given the evidence, likely) that $q^r < q^*$, the "physically available" number of channels (here we accept the fictional premise of physical scarcity). In selecting to issue q^r licenses, the regulator maximizes his utility function by auction, although legal institutions mandate that potential broadcasters bid for licenses by indirect expenditures, such as commitments to programming favored by Commissioners, etc. The amount that such bidders can expend on obtaining a license, however, is bounded by the quasi-rents associated with license procurement. Such a "rent hill" is shown in Panel (b).

It is clear, from the formulation given, that a regulator will be tempted to select that "spectrum scarcity" which maximizes quasi-rents of licensees; this maximizes regulator "leverage". Further, we see that it is entirely plausible that obtaining such leverage over broadcasters is exactly what the licensing program is all about; Crandall's "distributed rent" estimates in Table 4 show an obvious partition of monopoly profits in which license holders, regulators, and pressure groups influential with such regulators, share. But even more compelling is the fact that spectrum use is distributed without charge (rather suspiciously after all the legal briefs decrying extreme scarcity) when enormous rents are (Tables 1 and 4) being earned. It is clear in Panel (b), though, that any dollar payment would cause a parametric shift downward in the "rent hill", thusly lowering regulators' leverage over licensees on a dollar-for-dollar basis. If a market auction were held, in fact, L^r would be bid (in present value terms) for a license, and regulators' leverage would vanish entirely. The mystery of "free scarcity space" is solved. Spectrum awards are not unexplained gifts to fortuitous licensees, but quid regulators trade for the regulatory quo.

Importantly, this is not a unique American phenomenon. As the Peacock Report found in its several nation foreign survey, "no attempt has been made to make those who receive licenses to transmit pay for the privilege in some manner" (Home Office 1986, p. 36). Yet government selection of licensees by fiat is exceedingly expensive, political, bureaucratic, and time consuming. In a study of the expense involved in issuing band rights for cellular telephones, the FCC found "that auctions would roughly cost only 15 percent of either hearings or lotteries" (Kwerel and Felker 1985, p. 27; see Table 5). There is a large revenue cost to government associated with its "error." Any payment from licensees in the form of cash would represent a diminution of regulator leverage and, hence, of regulator utility (except as regulators internalize general taxpayer benefits), and this is what broadcast regulation apparently aims to maximize.

Conversely, any strategy to maximize consumer welfare would seek to expand viewer choice such that the output restriction, up to the point of technical satiation (assumed here at q^*), would be minimized. Any arbitrary quantity restriction would be seen as resulting in the traditional dead-weight loss from monopolistic restriction of output. Pool suggests above, in fact, that the technical limits have been removed by technical factors themselves,[12] and that a move to a world of TV and radio broadcast abundance--a bliss point--is within the grasp of policymakers. But no such move is forthcoming, and the momentum of regulator welfare maximization mitigates against it. Their goal is to maximize what they conceive to be in the "public interest" -- which entails the imposition of monopolistic entry barriers to facilitate what might be deemed "benevolent consumer exploitation".

Seen in light of this public choice analysis of the behavior of regulatory authority, agency action becomes readily explicable. Without such a perspective, regulatory behavior remains clouded in mystery. Fowler and Brenner, in their recent landmark analysis of FCC policy (1982), declare a "myth" in pondering the FCC's non-market "trusteeship" approach to spectrum licensing--but entirely overlook the self-interest that the "myth" so faithfully serves:

> The grandest myth of the trusteeship concept is the belief that the value of licenses has remained unchanged since their granting. The Commission has ignored the fact that tremendous wealth attaches to the most desirable licenses, whose value far exceeds the tangible assets of the stations holding them. Instead of adopting regulations that would reflect the actual value of these licenses, the Commission has buried its head deeper into the regulation books and considered additional behavioral rules. Such efforts have merely produced more obligations for these special public stewards who, in turn, are usually willing to comply with whatever the Commission asks, as long as the cost of compliance is slight. (Fowler and Brenner 1982, p. 221, footnote omitted).

VIII. Beyond the First Amendment, and Back Again

The most astonishing twist to U.S. policy, perhaps, is a legal quirk of momentous impact: the newspaper market is absolutely unregulated and unregulatable, while as we have seen, broadcast radio and television are federally licensed in the "public interest." For any particular community, this must be wondrous: the major local daily will routinely occupy center stage (natural monopoly?) in a newspaper market far more heavily concentrated and "scarce" than any of several rival TV (or dozens of radio) outlets. Table 6, for instance, reveals newspaper and television penetration ratios in the Miami, Florida metropolitan area. While the *Miami Herald* reaches 36 percent of the households in the area, and captures more than two of every three local paper sales, it operates under as pristine a *laissez-faire* policy as currently exists in any industry in America. The Miami television stations, however, battling in a market of better than one dozen, and led by a network affiliate which snags about one TV customer in four and but 15 percent of all households, are beholden to federal regulators, who demand that extensive "public interest" requirements be met and thoroughly documented by voluminous files of community group letters of endorsement (see, generally, Kalven 1966) for continued license privilege. Shouldn't this curious media regulatory regime--free markets for the newspaper "monopolists" licensing with content regulation in the polypolistic TV and radio markets -- be squared with national policy objectives under the First Amendment? Yes it should, and very strangely, it has.

In two modern Supreme Court cases, the rights of government regulators to tamper with media markets was heard and both were unanimously decided. In Red Lion (1969), with which we are already familiar, the FCC's right to force a small Pennsylvania radio station to air a rebuttal by a print journalist whose book (and person) had been attacked in a political speech broadcast in 1964 was upheld. The physical scarcity of the airwaves was seen as providing a governmental rationale, under the Constitution, for regulating broadcast licensees with such measures as the "fairness doctrine" and a mandated "right of reply."

Yet in 1974, an amazingly similar issue was heard in Tornillo v. Miami Herald. There, Pat Tornillo, a candidate for city council, had demanded an "equal time" response to two Herald editorials denouncing him and his campaign. The request was made under a 1913 Florida statute enforcing that newspapers, as public forums, were obligated to extend a "right of reply." Under Florida law Tornillo sued and won, but the decision was reversed by the U.S. Supreme Court. The Court heard impressive scholarly evidence as to the declining level of competition in the newspaper business, persuasive as to the point that the modern media was no longer the press of Jefferson's time:

> Newspapers have become big business and there are far fewer of them national newspapers, national wire and news services, and one-newspaper towns, are the dominant features of a press that has

> become noncompetitive and enormously powerful and influential in its capacity to manipulate popular opinion and change the course of events (Miami Herald Publishing Co. v. Tornillo, 418 US 255, 41 L Ed 2d 730, 94 S Ct 2831).

But however much the Court was impressed, it was not swayed. Permitting local authorities to institute "access" rules was regulation of the press, an area where the Constitution was clear and to the point: "Congress shall make no law..." That, the Court reasoned, was the one thing that hadn't changed since 1791. Whatever the problems in a concentrated news market, and however well-intentioned the regulators' spirits, a "governmental coercion...at once brings about a confrontation with the express provisions of the First Amendment..." (Ibid., 418 US 254). It was, as Justice Blackmun had opined during oral argument, a confirmation of the fact that, "for better or for worse we have opted in this country for a free press, not a fair debate" (in Friendly 1976, p. 194).

The Court addressed the Red Lion precedent, handed down just five years previous, in the only manner it could have: it ignored it. Fred Friendly, journalism professor and former president of CBS News, has addressed this "stunning contradiction" thusly:

> The focal point of the contradiction between the two cases is the scarcity argument. Aside from this theoretical distinction, squaring Red Lion and Tornillo is difficult. The Justices based their reasoning on the premise that because of frequency limitations, radio and television can only operate with government approval, whereas print is open to all.
>
> Unfortunately, this philosophic rationale collides with reality. For example, there are far more television and radio stations available in the Red Lion-York market than there are newspapers in Miami. In fact, the Miami Herald dominates southern Florida like a colossus, while WGCB [the licensee defendant in Red Lion] is a weak daytime signal which even in its primary Pennsylvania market is but one of a multitude of voices.

> The real difference is that the Miami Herald, part of the Knight Empire, won its virtual monopoly by economic survival...while WBCB has an exclusive place on the dial by order of the FCC (1976, pp. 195-196).

This is the quirk that rules U.S. regulation of the press. When the federal government was called upon to establish property rights in a newly discovered economic resource, the electromagnetic spectrum, it did the alert speculative thing, and held onto its "real estate" in search of long-term capital gain. That subtle and constitutionally defiant nationalization of the airwaves enabled regulators to tread where no legal rationale would have allowed them to step before, and has enlisted three generations of "public interest" intervention to over-rule consumer welfare.

In a powerful analysis of the long American experience with licensing of the electronic media, University of Texas law professor Lucas Powe, Jr. has recently characterized that policy as abusive of the very protection the constitutional restraints on regulation of the press were intended to afford. His central thesis is worth noting:

> This book suggests that licensing has had precisely the effects that might have been postulated by a student of the English experience: The privilege to broadcast has been granted to friends of the government and withheld from its foes; efforts at censoring have been employed to back the political agenda of the party in power; and abuses have occurred with unfortunate frequency...
>
> Consistent with the English experience, abuses of licensing are an inevitable by-product of the decision to license and to supervise the licensees. It is naive to assume that the safeguards presumed to be built into the system or some uniqueness in the American Character could spare us from the political abuses of licensing a part of the press (1987, pp. 6-7).

Well after economists and other policy analysts fully understood the strain of logic which made this regime lawful, the effects of long-standing policy precedents gave hope to those in search of regulatory immortality. And once the landmark of government licensing of the press had been established, regulators reached out to control new media where not even the implausible "physical scarcity" doctrine could apply: cable television, e.g., was first federally suppressed, then locally franchised and regulated (see Besen 1974, Lee 1983, Shapiro et al., 1983, Hazlett 1986, and especially Chapter 12 -- "To Repeat the Past: Cable" -- in Powe 1987). Bad policy rested nakedly upon prior bad policy. As ever more remarkable technologies come on-line in the days to come, we have good cause to hold great respect for bad precedent. Pool gloomily offers that, "As new technologies have acquired the functions of the press, they have not acquired the rights of the press" (1983, p. 250). The seventy-five year history of American broadcast regulation suggests that the advance into new technology may call, most profitably, for a retreat to first principles.

FOOTNOTES

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[1]As we plunge into the 21st century, of course, the transmission of news, information, and entertainment becomes more electric and less paper. Telegraph, telephone, and broadcast communication--radio and television--began this trend late in the last century, and microwaves, satellites, computers, and fiber optics are exciting it today. A vast wave is forming: "It appears likely that digital electronic networks may, in the twenty-first century, carry the bulk of what is today delivered as printed paper. The output may still often end up as words on paper, but the paper is likely to be spewed out at a terminal to which the information has flowed electronically. The old totally separated system of print publishing, in which hard copy is produced by the mechanical pressing of ink on paper and copy is delivered by physical carriage, is being challenged by electronic technologies" (Pool 1983, p. 41).

[2]This was not a unique political response. In China, the Northern Warlords monopolized all radio communications in the 1912-1927 epoch as, "They considered radio to be military equipment" (Guo 1986, p. 381).

[3]Of course the right to transfer a license is a limited one; the FCC must approve sales and can deny license renewal. This implies that ownership rights are traded for prices lower than what would obtain under fee simple.

[4]The degree of "amissedness" may be observed by analogy: Your brother-in-law claims that a house belonging to the family is "too valuable to sell," and will be retained not by having family members live in it, nor by renting it for what the market will bear, but by putting up various friends of said brother-in-law on an ongoing basis--at no charge to the boarding party.

[5]More easily, in fact, as seen discussed anon.

[6]In this context, Professor Kalven's reference to Coase's property rights auction approach as "An insight more fundamental than we can use" (1968, p. 30), takes on special significance. If was an insight that had not been missed--but had been integrated and exploited by maximizing political agents, as seen below.

[7]Some analysts are disturbed by the fact that over-the-air T.V. and radio in the United States is advertiser supported and, hence, fails to fully communicate consumer demands to program suppliers; in particular, the intensely-held specialty demand. While many (non-TV) markets may arguably suffer from an inability to record inframarginal demands, a crude "raw numbers" maximization rule in advertiser supported television does, at least, provide a direct link between consumers' utility functions and that of the broadcast programmer. It, additionally, provides a rather democratic income distribution rule: viewers' votes are not (generally) weighted by income. Indeed, to the extent that the cost of "free" TV is the time consumed viewing commercials, the payment mechanism is entirely "progressive."

[8]There does not exist a linear relationship between a liberal broadcasting policy and the number of private stations. Expanding the number of stations beyond some level prevents large, regional stations from

broadcasting, and reduces the selection available to the average viewer, a policy known as "localism". It appears safe to say, however, that the liberal "maximum" is achieved somewhere past 0, 2, or 3 private stations--the relevant numbers herein.

It is also important to note that these private vs. public numbers are in some flux. France has recently sold its largest television network to private hands (a developer, in fact), bringing four of six channels into the private sector. "In little more than a year the French state's ownership of television has shrunk from total monopoly to smallholding" (The Economist 303 [April 11, 1988], p. 44).

[9]It is now well understood that federal regulation has been pervasive and harmful--even of the values it has been designed to achieve. As the Federal Communications Commission noted in its recent study of the Fairness Doctrine: "While the fairness doctrine has the laudatory purpose of encouraging the presentation of diverse viewpoints, we fear that in operation it may have the paradoxical effect of actually inhibiting the expression [over] of a wide spectrum of opinion on controversial issues of public importance. In this regard, our concern is that the administration of the fairness doctrine has unintentionally resulted in stifling viewpoints which may be unorthodox, unpopular or unestablished" (FCC 1984, p. 188). Also see Fowler and Brenner (1982), Spitzer (1985), and Powe (1987).

[10]"Protection of the public's interest has mandated that the press be granted immunity from government regulation. This grant of immunity has been vigorously contested by those who view newspaper owners as holders of a public trust" (Stroud 1971, p. 596).

[11]Crandall (1974) establishes the case for a viable fourth commercial TV network by simply rearranging <u>existing</u> licenses. Similarly, Fowler and Brenner note of the network TV triopoly, "As Commission studies have found, this "three to a market" approach of the Sixth Report assures the dominant position of the commercial television networks. At the very least, one can hardly explain the availability of only the three VHF television outlets carrying the three commercial networks as a force of nature caused by a limited spectrum. It should serve instead as a basis for authorizing more outlets, not for regulating those that already exist." (1982, p. 224; footnotes omitted.)

[12]It is hoped that speaking of economic scarcity in "technical" terms will be excused for purposes of discussion.

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TABLE 1

Estimated "Lost Rents" from Zero-Priced Television Spectrum Alloction (1975)

	No. of Stations	1975 License Rents (Dec. 1985 $)	Capital Value of Rents (1985 $) @ 7.5% (real discount rate+risk premium)
VHF	492	846,731,500	11,289,754,000
VHF	177	11,170,000	148,935,000

Source: Levin 1980, pp. 114-5 and Economic Report of the President (February 1987), p. 315.

TABLE 2

SPECTRUM REGULATION MATRIX

Ownership Rule	Assignment Rule	
	Political licensing	Market Auction
Common Resource Rights	Chaos (U.S. policy 1912 - 1927)	Chaos ($0 bids; no property to auction)
Excludable Private Rights	Interference solved (broadcasters compete for government "demanders")	Interference solved (broadcasters compete for consumers)

TABLE 3

International Television Licensing Regimes

Country	Public Stations (no. of channels)	Private Stations (no. of channels)
Australia	2	50
France	3	3
Italy	3	300
W. Germany	3	Under Discussion
United Kingdom	2	2
United States	N/A	922

Source: Home Department, Report of the Committee on Financing the BBC, pp. 36, 174.

TABLE 4

TV License Rents in the Regulatory Quid Pro Quo

Return on Assets:	Mean ROA (%)	Total Rents ($ millions)
With FCC licensing but w/o merit programming "Quo"	95	655.3
With FCC licensing and net of merit program. Costs (i.e. actual pre-tax ROA)	54.1	271.9
Without FCC licensing (or by monetary auction)	25	0

Source: 1972-73 data for randomly selected 35 station sample in Crandall 1978, pp. 38-9.

TABLE 5

Costs of Alternative Spectrum Assignment Rules:
The Hypothetical Case of Cellular Radio Space

Costs	Compartive Hearings	Lotteries	Auction
Private Application Costs	$520,000	$595,000	80,000
Delay Costs	91,205	62,304	16,162
FCC Costs	20,000	5,000	1,000
Total Costs	631,205	662,304	97,162
Lost Gov't Revenue	0	0	561,142

Source: Kwerel and Felker 1985, p. 17.

Note: These are estimated costs for alternative assignment rules in a "typical" 91-120 market.

TABLE 6

Market Shares of Newspapers and TV Stations in Miami, Florida (1986)

Newspaper	Daily Circulation*	% Penetration (HH)
Miami Herald-News	426,442	36.3
Ft. Lauderdale News	158,764	13.5
Diario Las Americas	49,176	4.2
Hollywood Sun-Tattler	32,270	2.8
S. Dade News Leader	10,710	0.9
Key West Citizen	6,441	0.5

Television Station			Rating[F] (as % of TV HH's)
NBC (WSVN, Ch. 7)			15.3
ABC (WPLG, Ch. 10)			13.7
CBS (WTVJ, Ch. 4)			10.2
Public TV	(WPBT, Ch. 2)		
	(WLRN-TV, Ch. 17)	All PTV	2.5
Independents	(WCIX, Ch. 6)		
	(WTKW, Ch. 16)		
	(WQHJ, Ch. 22)		
	(WLTV, Ch. 23)		
	(WBFS-TV, Ch. 33)		
	(WDZL, Ch. 39)		
	(WHFT, Ch. 45)		
	(WSCV, Ch. 51)		
	(WDEM, Ch. 69)	All Ind	14.5

Note: Market area is defined as three-county region (Dade, Broward and Monroe) encompassing the Miami ADI (area of dominant influence) used by rating and advertising services. This understates the market position of the Miami Herald, which has a 46% penetration in Dade County, significantly.

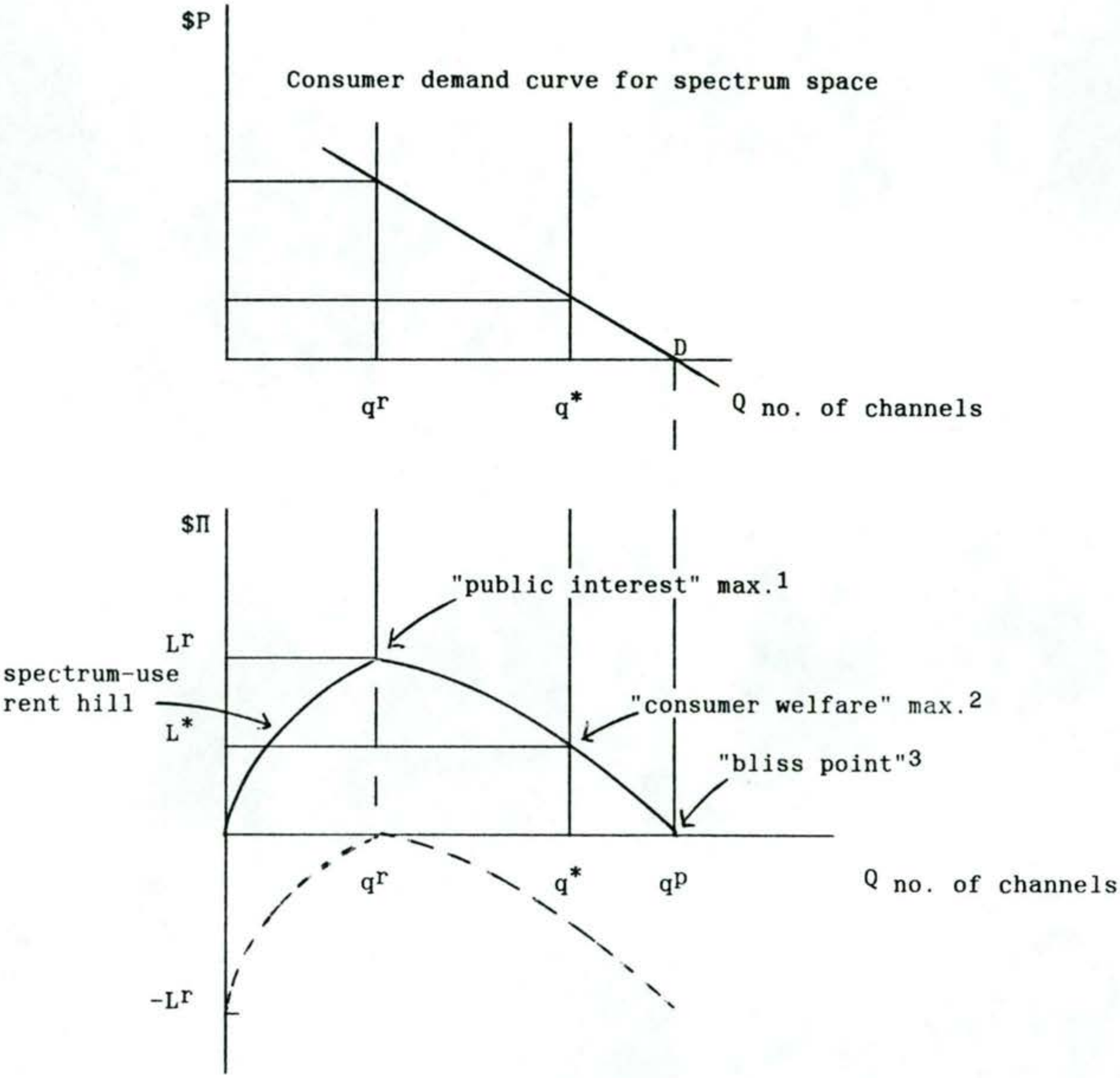
Source: SRDS Newspaper Circulation Analysis 68 (1986/87), Sec. III, pp. 50, 52; Arbitron Ratings: Television (May 1986), p. 750.

*Monday-Saturday

[F]Monday-Saturday, 8-11 p.m. and Sunday 7-11 p.m. average viewing audience.

FIGURE 1

Utility-Maximization by Broadcast Regulators



1) broadcast output where regulators maximize leverage to pursue the "public interest"

2) broadcast output where consumer welfare would be maximized subject to a "physical" channel capacity constraint = q^*.

3) broadcast output for consumer maximization given Pool's (1983) spectrum abundance "constraint"