THE ROLE OF POLITICS AND POLICY IN TELEVISION REGULATION

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INTRODUCTION

I would like to thank Thomas Hazlett for offering such a thoughtful and complimentary response to my work. Just as he found much with which to agree in my article, I find myself in the same position with respect to his. I will therefore spend most of my time focusing on the implications resulting from considering both of our perspectives together, reserving only a few words for those few areas in which our views diverge.

I. POLITICS VS. POLICY

The first area about which I would like to comment is Dr. Hazlett’s assertion that politics provides a better explanation for the regulatory history of television than do abstract principles of economics.¹ I am quite sympathetic to

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his perspective. In fact, I have employed the tools of public choice theory in my other work, drawing heavily on his research.\(^2\)

Although politics represents an important piece of the puzzle, it is not by any means the only one. While I agree that politics at times may constitute the true motivation underlying the actions of Congress and the Federal Communications Commission (FCC) with respect to television, politicians often cannot openly pursue their selfish best interests without some policy rationale to provide a colorable justification for their actions. That is particularly so with officials charged with acting to serve the "public interest, necessity, and convenience."\(^3\)

In this sense, analyzing the economics underlying television policy is not necessarily inconsistent with acknowledging that politics typically determines much of television policy. On the contrary, a full understanding of both forces is essential for there to be any hope of using the regulatory process to achieve good ends.

A. The Preference for Free Television

My initial article in this exchange concluded that regulatory attempts to promote "free" (i.e., advertising-supported) television over pay television have reduced the quality, quantity, and diversity of television programming.\(^4\) The empirical evidence suggests that individuals are willing to pay several times more for programming than are advertisers. As a result, reliance on advertising support starves programming of resources. This burden is likely to fall most heavily on programming strongly preferred by small segments of the audience. Such minority-taste products are able to survive in most markets by identifying market niches and charging more for satisfying them. Advertising support frustrates this mechanism by giving viewers only one degree of freedom with which to communicate their desires to programmers: purchasing or nonpurchasing. Stated in economic terms, reliance on advertising support


\(^3\) See, e.g., 47 U.S.C. §§ 302(a)(a), 307(c)(1), 309(a) & (k)(k)(A), 310(d), 316(a)(1) (2000).

\(^4\) Christopher S. Yoo, Rethinking the Commitment to Free, Local Television, 52 EMORY L.J. 1579, 1677-82 (2003).
prevents viewers from using prices to signal the intensity of their preferences, which in turn reduces the revenue generated and raises the minimum audience needed for a network to break even. The most recent Emmy nominations provides an eloquent demonstration of this effect. 5 HBO is able to provide high-quality programming despite having a viewer base that is roughly one-fifth the size of the leading over-the-air network.

Not only does advertising provide an inaccurate signal of viewers’ preferences for the underlying programming; allowing advertisers to mediate the relationship between programmers and viewers has the effect of skewing programming toward young adults and other demographics that advertisers find particularly desirable. It also allows advertisers to inject their own preferences into programming decisions. Pay television networks, in contrast, have proven less susceptible to this problem, as demonstrated by Viacom’s recent decision to shift the miniseries “The Reagans” from CBS to Showtime.

The commitment to free television also provides an apt illustration of the interaction between politics and policy. Although policymakers originally conceived of television as an advertising-supported service, by the time the FCC issued its landmark Sixth Report and Order establishing the Table of Allocations that would govern television for the next several decades, 6 it was already apparent that television could also have been supported by direct viewer payments. 7 As I noted in my initial article, 8 the first tests on a subscription television (STV) system that employed scramblers to ensure that every viewer made direct payment for the right to receive programming were conducted in New York in 1950. 9 The FCC opened a rulemaking proceeding on subscription television shortly thereafter in 1955, 10 and the technology was the subject of congressional hearings in 1956. 11

At roughly the same time, economists began to offer a policy justification for advocating advertising-supported television over pay television. Paul

7 See infra note 21.
8 See Yoo, supra note 4, at 1669.
Samuelson published his seminal exposition on public good economics in 1954 and explicitly connected the theory to broadcast television in 1958. Other economists had offered similar suggestions prior to that time. The theory made frequent appearances in the academic literature in the following years, with some commentators endorsing advertising-supported television, others endorsing pay television, and still others calling for a mix of both regimes.

The uncertainty about the proper resolution of the underlying policy issues provided cover for policymakers to reach the outcome favored by the underlying politics. The FCC took note of these debates and for the most part relied upon the underlying disagreement to justify continuing to regulate in a manner that promoted advertising-supported television at the expense of pay television. It subsequently led to a protracted delay in deploying STV that

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14 See William Baumol, *Welfare Economics and the Theory of the State* 21 (1952) (contending that public goods should be either produced or subsidized by the government and provided to the public at no charge).
19 As stated in my initial article, I envisioned that the market will be comprised of a mix of pay-only networks, advertising-only networks, and networks supported by both direct viewer payments and advertising. Although any degree of reliance on advertising support threatens to give rise to the dangers I have identified, the fact that advertising support should remain a relatively small percentage of television network revenues should limit any distortionary effects. Yoo, *supra* note 4, at 1682. Dr. Hazlett correctly points out that the statistics I cite regarding the cable industry's reliance on advertising revenue refer only to cable operators and notes that the advertising revenue generated by cable programmers is substantially greater. Hazlett, *supra* note 1, at 247-48 n.35. Upon further reflection, it seems to me that it would be most appropriate to consider both cable operators and cable channels when assessing the relative importance of advertising revenue. When both levels are taken into account, it appears that advertising constitutes only twenty percent of total industry revenue, with the remaining eighty percent coming from subscription fees. See Harold L. Vogel, *Entertainment Industry Economics* 209 (5th ed. 2001).
subsequent commentators believe to have been motivated by a deliberate attempt to protect free television as long as possible.\textsuperscript{21}

It is thus possible to acknowledge the primacy of politics in FCC decisionmaking while simultaneously adhering to a belief in the importance of economic analysis. Even if the FCC’s positions were determined by the underlying politics, they needed at least a veneer of intellectual respectability in order to justify the preferred political outcome.

Indeed, misplaced support for advertising-supported television continues to distort current debates over television policy. Even such noted commentators as Cass Sunstein and C. Edwin Baker, who appreciate the problems associated with public good economics and advertising support, continue to take the commitment to free television as given and instead propose second-order corrective measures to address the resulting distortions.\textsuperscript{22} I would prefer to take the more straightforward route of eliminating those distortions in the first instance by dropping the commitment to free television from the list of core policy commitments.

\textsuperscript{20} Yoo, supra note 4, at 1669-71.

\textsuperscript{21} Noll et al., supra note 18, at 126. Radio followed a parallel history. In the early days of radio, exclusion was impossible. The only exception was an ingenious scheme in which WAAT of New Jersey broadcast coded horse racing results that were decipherable only if listeners subscribed to a special “scratch sheet.” The FCC soon shut down this mode of operation. See Bremer Broad. Co., 2 F.C.C. 79, 83 (1935), discussed in Howard A. Shelanski, The Bending Line Between Conventional “Broadcast” and Wireless “Carriage,” 97 Colum. L. Rev. 1048, 1056 (1997). This changed in 1941, when the FCC authorized Muzak Corp. to begin offering subscription radio service on an experimental basis. Yoo, supra note 4, at 1669 n.282 (citing Muzak Corp., 8 F.C.C. 581, 582 (1941)).

B. The Preference for Local Programming

The preference for locally oriented content over nationally oriented content has followed a similar path. Although commentators have long criticized the economic coherence of the FCC’s commitment to localism, it has nonetheless remained firmly ensconced as a cornerstone of U.S. media policy. The actions taken by the FCC in the aftermath of the recent decision to relax the ownership restrictions applicable to radio and television reaffirm its continuing importance: the agency’s reaction to the political criticism sparked by this decision was to launch a new initiative on localism in broadcasting.

As Dr. Hazlett correctly observes, the original justification for regulating television in the intrusive manner historically exhibited is the supposed scarcity of the electromagnetic spectrum. I have detailed the analytical, doctrinal, and technological flaws with the scarcity doctrine in my prior work (informd, again, in no small part by Dr. Hazlett’s prior writings) and will not repeat that critique here.

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24 As one noted commentator and former FCC Commissioner has colorfully noted, “Localism is the most sacred cow of communications policy. More sacrifices have been laid at the altar of this beast than at that of any other in the history of communications regulation.” Glen O. Robinson, The Electronic First Amendment: An Essay for the New Age, 47 DUKE L.J. 899, 938 (1998).
26 Hazlett, supra note 1, at 233.

Dr. Hazlett has offered a forceful argument that Congress knew full well that market allocation was feasible at the time they established the broadcast licensing regime and invoked the scarcity doctrine in order to ensure they retained the ability to control the rent-seeking process. Hazlett, Rationality, supra note 2, at 143-47, 151-63. While there is much that I find convincing in Dr. Hazlett’s careful and insightful exposition of the events that took place during the 1920s when the broadcast regulatory regime was born, I reserved judgment as to whether policymakers fully appreciated the possibility of market allocation of spectrum. Although the FCC might have been expected to greet Coase’s proposal with derision, it was also rejected at first blush by the group of University of Chicago economists who would eventually become the most ardent champions of Coase’s work. See Yoo, supra note 2, at 268-69, 348-49. I remain open to being convinced. In any event, even if the endorsement of the scarcity doctrine might have been justified then, it is now beyond
Although it has occasionally been suggested that scarcity only served to justify structural regulation and not the regulation of program content, the vast panoply of negative content restrictions and affirmative programming obligations that has characterized broadcast regulation were initially based in the scarcity doctrine. This presents something of a constitutional puzzle, in that regulation on the basis of the content of speech is generally regarded as a paradigmatic First Amendment violation. As Justice Brandeis noted in his classic exposition of the principle, when confronted with bad speech, “the remedy to be applied is more speech, not enforced silence.”

Scarcity circumvents this time-honored principle by turning broadcast speech into a zero-sum game. When allowing one person to speak necessarily prevents someone else from speaking, the distinction between enabling speech and restricting speech collapses. Permitting one speaker to engage in “more speech” becomes analytically indistinguishable from the governmental prohibition of speech.

To the extent that it was valid, scarcity thus rendered some degree of governmental control over the content of speech inevitable, because licensing one person simultaneously constituted a negative speech restriction. This presented policymakers with something of a conundrum. On the one hand, the First Amendment forbids any government entity from acting as a censor, sitting in judgment of which speech shall be permitted and which shall not. Indeed, Congress underscored this fact by writing into the statute itself a provision forbidding the FCC and its predecessor agency, the Federal Radio Commission (FRC), from exercising “the power of censorship” or from “interfer[ing] with the right of free speech by means of radio communications.” On the other hand, the public interest standard clearly envisioned that the agency would select the best applicant. It was far from

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dispute that it is no longer justified today. Id. at 269 & n.120 (noting how even proponents of the broadcast model of regulation have abandoned reliance on the scarcity doctrine).


See Yoo, supra note 2, at 260-66.

Whitney v. California, 274 U.S. 357, 377 (1927) (Brandeis, J., concurring). For more recent statements of the same principle, see Republican Party of Minnesota v. White, 536 U.S. 765, 795 (2002) (Kennedy, J., concurring) (“If Minnesota believes that certain sorts of candidate speech disclose flaws in the candidate’s credentials, democracy and free speech are their own correctives.”), and id. at 797 (Stevens, J., dissenting) (“If the solution to harmful speech must be more speech, so be it.”).

clear how the FRC would make that determination without having a direct effect on the content of the programming to be transmitted.

Somewhat understandably, the FRC’s initial response was confusion. Calling licensing an “appalling responsibility,” the FRC’s First Annual Report quotes Commissioner Henry Bellows as noting that even though “[t]he law tells us that we shall have no right of censorship over radio programs, . . . the physical facts of radio transmission compel what is, in effect, a censorship of the most extraordinary kind.” That is because the public interest standard required the FRC “to determine who shall and who shall not broadcast and how such broadcasting shall be carried on, simply in accordance with our conception of public interest, convenience, or necessity.” Commissioner Bellows did not know how such a determination could be made, asking rhetorically, “How shall we measure the conflicting claims of grand opera and religious services, of market reports and direct advertising, of jazz orchestras and lectures on the diseases of hogs?”

This confusion did not last long. The following year, in its Second Annual Report, the FRC flatly declared that the scarcity of available channels justified the incorporation of content-based criteria into its licensing decisions. In the words of the FRC:

Since there are only a limited number of channels and since an excessive number of stations desire to broadcast over these channels, the commission believes it is entitled to consider the program service rendered by the various applicants, to compare them, and to favor those which render the best service.

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32 This confusion was no doubt heightened by the organizational turmoil that disrupted the FRC’s first full year of operation. Although the FRC had a full complement of Commissioners at the beginning of the fiscal year, a series of untimely deaths and resignations left it with but a single confirmed member for a period of over five months. The new Commissioners were not confirmed until only three months remained in the fiscal year. The Congress that authorized the FRC, moreover, adjourned without appropriating it any funding. See Erik Barnouw, A Tower in Babel 211, 214 (1966); L. A. Powe, Jr., American Broadcasting and the First Amendment 63 (1987); Laurence F. Schmeckebier, The Federal Radio Commission 22 (1932).


34 Id.

35 Id.

36 Federal Radio Commission, Second Annual Report 161 (1928); see also id. at 170 (“Since the number of channels is limited and the number of persons desiring to broadcast is far greater than can be accommodated, the commission must determine from among the applicants before it which of them will, if licensed, best serve the public.”).
The Third Annual Report drew largely the same conclusion, reiterating that "[t]he radio act specifies that the commission shall exercise no censorship over programs. Nevertheless, the kind of service rendered by a station must be a means of appraising its relative standing and must be considered by the commission in making assignments."\textsuperscript{37} The courts soon lent their imprimatur to this reasoning.\textsuperscript{38}

In this way, the scarcity doctrine not only justified governmental allocation of frequencies; it also necessarily entailed a degree of governmental control over the content of speech. What it did not provide is any basis for determining what type of content should be preferred.

As I discuss in some detail in my initial article,\textsuperscript{39} the FCC has long resolved this question in part by imposing a wide range of substantive, procedural, and structural requirements designed to foster locally oriented programming. The FCC has based its localism policy on the statutory obligation imposed by 47 U.S.C. § 307(b)\textsuperscript{40} that it "make such distribution of licenses . . . among the several States and communities as to provide a fair, efficient, and equitable distribution of . . . service to each of the same."\textsuperscript{41} The FCC has interpreted § 307(b) as requiring it to allocate frequencies so that as many communities as possible had their own television station.\textsuperscript{42} The Supreme Court eventually relied on the same conclusion in upholding various portions of the television regulatory regime.\textsuperscript{43}

\textsuperscript{37} Federal Radio Commission, Third Annual Report 3 (1929).

\textsuperscript{38} See FRC v. Nelson Bros. Bond & Mortgage, 289 U.S. 266, 271, 272 (1933) (upholding the FRC's decision to license a station whose programs were "musical, educational and instructive in their nature and [stressed] loyalty to the community and the Nation" instead of stations that are either commercial or religious); KFKB Broad. Ass'n v. FRC, 47 F.2d 670, 671-72 (D.C. Cir. 1931) (ruling that "because the number of available broadcasting frequencies is limited, the commission is necessarily called upon to consider the character and quality of the service to be rendered"); Great Lakes Broad. Co. v. FRC, 37 F.2d 993, 994, 995 (D.C. Cir. 1930) (favoring a station that targeted "meritorious programs for public instruction" toward large audiences over a station that served a particular religious denomination).

\textsuperscript{39} See Yoo, supra note 4, at 1640-57.

\textsuperscript{40} This provision was modeled on a similar requirement in the Radio Act of 1927, ch. 169, § 9, 44 Stat. 1162, 1166.

\textsuperscript{41} 47 U.S.C. § 307(b) (2000).


\textsuperscript{43} United States v. Southwestern Cable Co., 392 U.S. 157, 174 (1968) ("The Commission has concluded, and Congress has agreed, that these obligations require for their satisfaction the creation of a system of local broadcasting stations, such that 'all communities of appreciable size [will] have at least one television station as an outlet for local self-expression.'" (alteration in original); see also Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 663 (1994) (citing Southwestern Cable, 392 U.S. at 173-74, 177).
Both the FCC and the Supreme Court have thus appeared to regard this particular interpretation of § 307(b) as the foundation for the FCC’s localism policy. The problem with this conclusion is that it is not the only possible interpretation of § 307(b). To say that all parts of the country should receive an equitable distribution of service is not to say that each part of the country should receive an equitable distribution of stations. Section 307(b) could instead be read as requiring that all parts of the country receive a fair distribution of programming, even if national in content, not that each part of the country receive programming originating in or tailored to the interests of each local community. 44

In fact, the FCC relied on this alternative interpretation of § 307(b) when deploying direct broadcast satellites (DBS), the most spectrum-efficient broadcast television technology devised to date. 45 By its nature, DBS’s footprint is continental in scope. As a result, DBS is quite effective at providing multi-channel television service to the entire nation, including locations that conventional broadcasting and cable have historically been unable to reach. It is not, however, well-suited to allow for local origination or to provide local content.

In allocating spectrum to DBS, the FCC accepted the argument that § 307(b) “mandates only a fair, efficient, and equitable distribution of service and does not require a local distribution of facilities,” 46 and concluded that nothing in § 307(b) “directs the Commission to license broadcast stations to particular individual cities or communities.” 47 Indeed, as the FCC pointed out, the words “local” and “localism” do not appear anywhere in the statute. 48 The FCC’s historic commitment to localism “was established by Commission choice, not by statutory command.” 49 As a result, § 307(b) does not foreclose distributing programming through nationally oriented means whenever it finds

45 See Shelanski, supra note 21, at 1062-65.
47 Id. at 737 ¶ 46.
48 Id.
49 Id. at 737 ¶ 47.
that doing so would be in the public interest.\textsuperscript{50} The D.C. Circuit agreed. Dismissing arguments to the contrary as "shortsighted" and "luddite," the court ruled that "[t]he ultimate touchstone for the FCC is . . . the distribution of service, rather than of licenses or of stations; the constituency to be served is people, not municipalities."\textsuperscript{51}

Thus, the FCC's own precedent recognizes that its policy of favoring locally oriented programming is based upon a contestable reading of § 307(b). As was the case with respect to the preference for free television, this ambiguity has allowed policymakers to manipulate the regulatory regime for political purposes. Specifically, the localism policy provided federal lawmakers with the justification for ensuring that no station's service area was larger than the size of a congressional district. In so doing, it ensured that candidates could buy advertising time without paying for audiences who were not voters.\textsuperscript{52} The FCC supplemented this with a wide array of other regulations that had the effect of benefiting members of Congress.\textsuperscript{53}

As Dr. Hazlett suggests, this pattern represents a classic form of rent-seeking behavior.\textsuperscript{54} The government creates monopoly rents by protecting incumbents from competition by new entrants and new technologies. In return, they jointly use the regulatory process to redirect a portion of those benefits


\textsuperscript{51} Nat'l Ass'n of Broad. v. FCC, 740 F.2d 1190, 1197-98 (D.C. Cir. 1984). The court was careful to note that the case did not pose a mutually exclusive choice between local and national programming, observing that the regime envisioned by the FCC included both types. It reserved the question of how it would decide if the FCC eliminated its localism policy altogether and decided to favor national programming. Id. at 1198.

\textsuperscript{52} See Matthew Spitzer, Dean Krattenmaker's Road Not Taken: The Political Economy of Broadcasting in the Telecommunications Act of 1996, 29 CONN. L. REV. 353, 358 (1996); see also Thomas G. Krattenmaker & L.A. Poe Jr., Converging First Amendment Principles for Converging Communications Media, 104 YALE L.J. 1719, 1736 (1995) (noting that the 1952 Table of Allocations "gave great weight to factors such as placing at least one transmitter in as many communities (and, therefore, congressional districts) as possible").

\textsuperscript{53} For example, after the Supreme Court held that candidates for federal office did not have a constitutional right to purchase political advertising time, see CBS, Inc. v. Democratic Nat'l Comm., 412 U.S. 94 (1973), Congress enacted legislation guaranteeing themselves "reasonable access" to the airwaves. 47 U.S.C. § 312(a)(7) (2000). In addition, after the FCC ruled that coverage of news events involving incumbents provided their opponents' right to equal time under 47 U.S.C. § 315(a), see CBS, Inc., 26 F.C.C. 715, 742 (1959), Congress quickly revised the law to exempt bona fide news events. Act of Sept. 14, 1959, Pub. L. No. 86-274, § 1, 73 Stat. 557, 557 (codified at 47 U.S.C. § 315(a)(1)-(4)). For years, the FCC also employed "political editorial" and "personal attack" rules that gave politicians the right to respond to negative commentary in the press. After years of FCC temporizing, these rules were finally abolished by judicial fiat. Radio-Television News Dir. Ass'n v. FCC, 229 F.3d 269 (D.C. Cir. 2000).

\textsuperscript{54} Hazlett, supra note 1, at 234-35.
toward the policymakers’ political objectives. The loser in all of this is the public, defeated by the diffuseness of its interest.\textsuperscript{55}

Regulators and industry cannot collude in this manner without some policy justification to provide cover for their machinations. Thus, notwithstanding the fact that politics may provide a better positive account for regulatory behavior, I remain convinced (and I am sure that Dr. Hazlett would agree) that exposing the flaws underlying the proffered rationalizations plays a critical role in promoting good policy outcomes. In an ideal world, searching analysis of both the underlying politics and policy go hand in hand.

II. PRODUCT VARIETY VS. TOTAL SURPLUS AS DETERMINANTS OF ECONOMIC WELFARE

Dr. Hazlett and I also seem to find significant room for agreement in the economics underlying television programming. We both agree about the fundamental pricing problem underlying the provision of television programming. Indeed, Dr. Hazlett helpfully points out that transaction costs should be taken into consideration,\textsuperscript{56} an insight that I did not take into account but acknowledge should be incorporated into my model.

One area where we do disagree is with respect to the welfare implications of my proposal. Dr. Hazlett suggests that in the absence of market imperfections, the equilibrium I describe creates no social benefits.\textsuperscript{57} He contends that perfect price discrimination dictates that no buyer pays less than the maximum price that they were willing to pay. Therefore, no consumer surplus is generated. In addition, all of the surplus captured by sellers is exactly offset by fixed costs. As a result, unless there is some degree of market concentration or other source of market failure, total surplus will equal zero and no economic benefits result.\textsuperscript{58}

\textsuperscript{55} For the classic statement of this dynamic, see MANCUT OLSON, JR., THE LOGIC OF COLLECTIVE ACTION (1965). For an application to television, see NOLL ET AL., supra note 18, at 120-26.

\textsuperscript{56} Hazlett, supra note 1, at 247.

\textsuperscript{57} Id. at 239-40. Dr. Hazlett discusses the issues in terms of “consumer welfare,” which he defines as the sum of consumer surplus and producer surplus. Id. at 240. The concept is the same as the one to which I refer as “total surplus.”

\textsuperscript{58} This is not quite true. The model laid out in my initial article argued that, although entry will cause the demand curve facing each firm to flatten, imperfections in substitutability prevent any demand curve from becoming completely horizontal. Yoo, supra note 4, at 1609, 1626. In addition, price discrimination by television networks will necessarily be somewhat imperfect. Id. at 1622-25. As a result, some surplus always remains. That said, these caveats represent mere quibbles that do not go to the heart of Dr. Hazlett’s main
On this point, I am afraid that Dr. Hazlett and I part company. Total surplus is an appropriate measure of welfare only when the goods in question compete solely in terms of price. As I noted in my initial article, a second dimension of welfare emerges when products are differentiated and compete in terms of product characteristics in addition to price. When that is the case, a simple comparison of actual prices to reservation prices no longer captures all of the relevant aspects of economic welfare. Welfare also depends on how closely the product consumed matches the buyer’s ideal set of product characteristics.

This effect can best be seen by viewing them through the spatial competition models built on the pioneering work of Harold Hotelling. The simplest of these models, an example of which is depicted in Figure 1, posits that products can be perceived as being located along a spectrum of product characteristics. To use the example Hotelling offered, particular types of cider range from sweet to sour. Consumers’ ideal preferences are assumed to be evenly distributed across the characteristic space, with the utility of the consumers occupying any particular location being represented along the vertical axis.

Each firm produces a single product, and each product competes by choosing a location along the spectrum of product characteristics rather than by choosing prices. The product captures all of the customers whose preferences coincide with its location. It also captures nearby customers, with the utility derived by those customers declining as the distance between the product offered and the customer’s ideal preferences increases. Assume further that each product is able to engage in perfect price discrimination and thus is able to capture all of the utility generated by its product. This allows the utility captured by each product to be represented by a triangle.

point. Indeed, as I suggested earlier, as long as the number of entrants is relatively large, any such surplus should be minimal. See id. at 1609.

59 See id. at 1616-18.

60 See Harold Hotelling, Stability in Competition, 34 Econ. J. 41 (1929). A substantial literature has emerged using these models to analyze the television industry. See Yoo, supra note 4, at 1602 n.50 (collecting sources). For a more complete exposition of spatial competition models, see Christopher S. Yoo, Copyright and Product Differentiation, 79 N.Y.U. L. Rev. (forthcoming 2004).

61 Hotelling, supra note 60, at 54; see also Nicholas Kaldor, Market Imperfection and Excess Capacity, 2 Economica 33, 37 (1935); Samuelson, supra note 13, at 336.
Eventually, the distance between the product’s location and the potential customer’s ideal preferences becomes so great that the customer no longer derives sufficient utility to justify paying the asking price, at which point she decides not to purchase the product. The assumption that all firms are in equal competition with one another\(^\text{62}\) is retained by assuming that firms can shift locations without cost. This suggests that firms respond to entry by shifting location until they are equidistant from one another. Thus entry by a new product does not just impact its near neighbors; the impact is distributed among all of the incumbent products.

For an equilibrium to be stable, each product must be able to cover its costs, otherwise the firm offering that product exits the market. A particular

\(^{62}\) See Yoo, supra note 4, at 1606-07.
product breaks even as long as the revenue it generates equals or exceeds its costs, which in the case of television programming consist primarily of fixed costs. The basic efficiency criterion advanced in my initial article dictates that a product be produced whenever the utility it would generate exceeds the fixed costs needed to produce it.\textsuperscript{63}

If the revenue captured by a particular product exceeds fixed cost, it is possible that that product might earn economic profits in the short run, which for the purposes of this example we will assume occurs in the left-hand graph of Figure 1. In other words, the area under the triangles, which represents the total utility captured by the particular product, exceeds the size of the fixed costs needed to create the product. The presence of such supra-competitive profits attracts entry by new firms, represented by the dark gray pentagon-shaped area in the right-hand graph of Figure 1. This firm captures those customers who were previously purchasing products from one of the incumbents, but whose ideal preferences lie closer to its location. Entry by new firms divides up the available utility into increasingly smaller fractions until no supra-competitive profits remain, which occurs when the revenue captured by any one firm equals the fixed costs of production. At this point, no further entry occurs. Because the revenue now equals fixed costs, firms are no longer earning supra-competitive profits.\textsuperscript{64}

The fact that the revenues captured by each product now equal the product’s costs dictates that firms no longer generate producer surplus. In addition, the assumption that perfect price discrimination allows each firm to extract the entirety of each customer’s utility dictates that those who purchase the product no longer generate consumer surplus. Does this mean that entry by a new product does not cause welfare to increase? Spatial competition models demonstrate why the answer is “no.” Even if the introduction of a new product does not cause total surplus to increase, consumers nonetheless derive additional utility from being able to purchase products that lie closer to their

\textsuperscript{63} See id. at 1610-12.

\textsuperscript{64} There is, however, a well-known exception to Chamberlin’s zero-profit result. It has long been recognized that the indivisibility of fixed costs may create a situation in which \( n \) products might earn small profits while \( n+1 \) products would run losses. This so-called “integer problem” allows for an equilibrium in which \( n \) products each earn sustainable profits. See B. Curtis Eaton & Richard G. Lipsey, Product Differentiation, in 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 723, 749-50 (Richard Schmalensee & Robert D. Willig eds., 1989); Kaldor, supra note 61, at 42-43 (offering the first statement of this effect). In large economies (i.e., when \( n \) is relatively large), such profits will be negligible. Eaton & Lipsey, supra, at 761; B. Curtis Eaton & Myma Holtz Wooders, Sophisticated Entry in a Model of Spatial Competition, 16 RAND J. ECON. 282, 290, 290-92 (1985).
ideal set of product characteristics. This is why the modern commentary on monopolistic competition refuses to limit economic welfare to considerations of deadweight loss, excess capacity, and total surplus. They instead recognize that, in the case of differentiated products, welfare has a dimension that falls outside the price-quantity space that dominates neoclassical economics.

Spatial competition models necessarily have their own limitations as well. Just as monopolistic competition models portray total surplus directly and product differentiation indirectly, spatial competition models have the converse problem: they model product differentiation directly and model total surplus indirectly. Thus most spatial competition models treat firms as price-takers and assume that price is determined exogenously. Models exist that attempt to bridge this gap by employing spatial competition models that allow price to be determined endogenously. Allowing for price competition does give the equilibrium somewhat different qualities. It does nothing to gainsay the fact that product differentiation makes a contribution to welfare that is independent of total surplus.

The simple model described above also contains a number of restrictive assumptions that limit its generality. That is not to say that spatial competition models are incapable of capturing more complex economic interactions. Some models relax the assumption that consumers are evenly distributed across the characteristics space. Other models relax the assumption that utility falls off linearly with distance from the ideal product characteristics. Another set of

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65 See Yoo, supra note 4, at 1616-18 (collecting sources).
66 See, e.g., B. Curtis Eaton, Free Entry in One-Dimensional Models: Pure Profits and Multiple Equilibria, 16 J. REGIONAL SCI. 21, 22 (1976); B. Curtis Eaton & Richard G. Lipsey, Freedom of Entry and the Existence of Pure Profit, 88 ECON. J. 455, 461 (1978); W.J. Lane, Product Differentiation in a Market with Endogenous Sequential Entry, 11 BELL J. ECON. 237, 239 (1980); William Novshek, Equilibrium in Simple Spatial (or Differentiated Product) Models, 22 J. ECON. THEORY 313, 315 (1980). The oddities resulting from refusing to allow for price competition are well recognized. For example, it necessarily suggests that effective competition only exists with respect to consumers located equidistantly from two works. See F.M. Scherer & David Ross, Industrial Market Structure and Economic Performance 502-03 (3d ed. 1990). It also leads to unrealistic conjectures by entering firms, who should assume that prices should drop in response to the increase in the level of competition. See Eaton & Lipsey, supra note 64, at 749.
67 See Jeffrey Church & Roger Ware, Industrial Organization 395-404 (2000); Eaton & Wooders, supra note 64; Steven Salop, Monopolistic Competition with Outside Goods, 10 BELL J. ECON. 141, 143-45 (1979).
69 See C. d’Aspremont et al., On “Hotelling’s Stability in Competition,” 476 ECONOMETRICA 1145 (1979); Eaton & Wooders, supra note 64, at 284.
models allows for the possibility of sunk costs in location, which in turn makes possible strategic decisions of sequential entry.\textsuperscript{70} Still other models allow for the possibility of firms occupying multiple locations by offering multiple products.\textsuperscript{71}

All of these refinements add to the analytical power of spatial competition as a modeling tool. Needless to say, the incorporation of different aspects also changes the nature of the underlying equilibria. That said, such nuances are not central to the point I am trying to make in this reply. They do not change the fact that increases in product variety can cause total welfare to increase even when total surplus does not.

### III. Geographic Communities vs. Communities of Interest

Dr. Hazlett and I find more room for common ground in our criticism of the fact that localization privileges geographic communities over other types of communities of interest.\textsuperscript{72} The term "communities of interest" has been employed in a wide variety of legal contexts. For example, it has emerged as an important concept in legislative reapportionment, in which the historic emphasis on geographic compactness has given way to the possibility of districts drawn to reflect nongeographic commonalities.\textsuperscript{73}

\textsuperscript{70} See Giacomo Bonanno, Location Choice, Product Proliferation and Entry Deterrence, 54 REV. ECON. STUD. 37 (1987); B. Curtis Eaton & Richard G. Lipsey, Exit Barriers Are Entry Barriers: The Durability of Capital as a Barrier to Entry, 11 BELL J. ECON. 721 (1980); D.A. Hay, Sequential Entry and Entry-Deterring Strategies in Spatial Competition, 28 OXFORD ECON. PAPERS 240 (1976); Lane, supra note 66; Damien J. Neven, Endogenous Sequential Entry in a Spatial Model, 5 INT'L J. INDUS. ORG. 49 (1987); Edward C. Prescott & Michael Visscher, Sequential Location Among Firms with Foresight, 8 BELL J. ECON. 378 (1977).


\textsuperscript{72} Hazlett, supra note 1, at 248. Dr. Hazlett is commenting on the observation I offered in my initial article. See Yoo, supra note 4, at 1668.

\textsuperscript{73} See Miller v. Georgia, 515 U.S. 900, 919-20 (1995); Shaw v. Reno, 509 U.S. 630, 646 (1993). See generally Lisa A. Kelly, Race and Place: Geographic and Transcendent Community in the Post-Shaw Era, 49 VAND. L. REV. 227 (1996). For examples in other areas of the law distinguishing between geographic communities and nongeographic communities of interest, see Sean T. McAllister, The Confluence of a River and a Community: An Experiment with Community-Based Watershed Management in Southwestern Colorado, 3 U. DENV. WATER L. REV. 287, 307 n.164 (2000) (noting the distinction between geographic communities and communities of interest in water law), and Stephen J. Malone, Note, Recognizing Communities of Interest in a Legislative Apportionment Plan, 83 VA. L. REV. 461, 464-65 (1997) (observing that "community of interest" has been used to examine the shared interests in a class action lawsuit, as a bargaining unit in labor law, as a consideration when a city seeks to annex unincorporated territory, and as a requirement of a group
This is a role that electronic media are particularly well situated to play. It appears most clearly in the Internet, which has the natural effect of enabling us to move beyond geographically defined communities and to knit together geographically dispersed people united by common interests. Indeed, as Mark Lemley has noted, the tendency to discuss the Internet in terms associated with physical space obscures what makes electronic communications distinctive: the fact that it allows connections that are no longer constrained by geography. Indeed, Eben Moglen and Pamela Karlan fuse these two concepts by imagining a day when legislative districts are defined in terms of virtual communities united by the Internet rather than geographic communities.

Television promises to play a similar role. That said, it would be easy to make too much of this. Some empirical studies suggest that the Internet does not in fact bring together nongeographic communities of interest. Instead, cyberspace simply reinforces connections already established in physical space. In addition, the proper way to constitute a political community is an empirical question. To the extent that geographically localized interests dominate issues that affect the entire nation, a policy of localism might well make sense.

The tension between local, geographically defined communities and national communities of interest underscores the deep inconsistency underlying the arguments advanced by revisionist defenders of the ancien régime of television regulation. They have embraced the broadcast model as a way to use television to create a common space in which the nation can come


together to deliberate.\textsuperscript{79} I have offered an extended critique of these ideas elsewhere.\textsuperscript{80} For the purposes of this exchange, it suffices to note that they embrace the broadcast model as a way to promote national discourse with virtually no recognition of the extent to which the broadcast regime was fashioned with an eye toward localism. Before embracing the broadcast model, these theorists should investigate its localist roots to make sure that it is in fact suitable for the purposes that they seek.

IV. REGULATORY REFORM VS. CONVERGENCE

So where does this leave localism as a value? It must be acknowledged that localism has deep roots in American political ideology and cannot be easily disregarded.\textsuperscript{81} Do the underlying economics require that we abandon it?

Not necessarily. One solution was brought to mind by Dr. Hazlett’s discussion of Digital Audio Radio Service (DARS),\textsuperscript{82} which fell outside my initial article’s focus on television. I agree with Dr. Hazlett that DARS appears to be a policy windfall and that the world would be better if the FCC would free it from the regulatory shackles it has imposed.\textsuperscript{83}

That said, I find myself musing about a still different world even further into the future. In this world, all communications are delivered via a database, packet-switched architecture available through a variety of modes of transmission. In this world, coaxial cables, twisted-pair networks originally configured for voice, advanced spectrum-based systems, satellite transmission systems, and other communications media that I cannot yet envisage are engaged in platform competition. The fact that all of these different messages


\textsuperscript{80} See Yoo, supra note 2, at 306-46.

\textsuperscript{81} See Robinson, supra note 24, at 943.

\textsuperscript{82} Hazlett, supra note 1, at 246, 248-51.

\textsuperscript{83} I agree that we should permit DARS to offer advertising-only service, and I would lift the prohibition on conveying local content. As noted in my initial article, my position is not that we should force any technology in any particular direction, but rather that we should free the market of any bias in either direction and allow each medium to find its own way. Yoo, supra note 4, at 1666, 1682. That said, the underlying economics suggest that nationally oriented content will likely find it beneficial to migrate toward DARS. This would free terrestrial radio to focus on local content still further. See Shelanski, supra note 21, at 1076-77 (offering a similar argument regarding the relationship between television provided via direct broadcast satellites and terrestrial television broadcasting).
would now be functionally the same would cause the regulatory distinctions between all media to collapse. Indeed, we are already seeing this happen somewhat in the parallel proceedings regarding the regulation of broadband systems provided via cable modems and digital subscriber lines (DSL).

Consider the impact that such a transformation would have on radio. In this world, all cars would come equipped with packet-switched receivers ready to receive streaming audio, global positioning satellite information, weather and traffic updates, and voice communications. Terrestrial stations dedicated to radio broadcasting and other single-function media would be replaced by a flexible network architecture capable of adapting seamlessly to changing needs.

In this world, the increasing fungibility of transmission technologies would promote welfare not by increasing the competition within a particular platform, the approach that has failed so spectacularly with respect to local wireline telephony under the Telecommunications Act of 1996, but rather by heightening competition across communications platforms. This would have the additional effect of weakening the impact of the high fixed costs that have tended to push each platform toward natural monopoly when each is regarded as a universe unto itself. It is even possible to foresee a day when different media act not as substitutes, but rather as complements, with different packets comprising a single communication simultaneously conveyed via different media depending on the level of congestion and the underlying technical characteristics.

This vision only serves to underscore the price of adhering to the commitment to free, local television, as it is the commitment of spectrum to both analog and digital television broadcasting that remains the primary obstacle to the deployment of wireless broadband networks needed for such a vision to become reality. As I noted in the article that launched this exchange, there is nothing free about “free” television. It continues to exact a tremendous cost in the here and now and imposes untold future costs by obstructing the development of new technological solutions. I hope that the analysis I have offered can play some role in underscoring the truth of this insight and in

providing a foundation for freeing communications technology to fulfill this vision or realize whatever technological solution the future has in store.