

REGULATING COMMUNICATIONS

STORIES FROM THE FIRST HUNDRED YEARS

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HIS YEAR WE CELEBRATE a century of electronic communications regulation. Well, maybe "celebrate" isn't the right word. Critics of regulation will say that "lamentations" are the correct sentiment. For now let me finesse the question which of these expressions is the more suitable by saying simply that after a century of regulation it's an appropriate time to take stock by asking some questions about what we have learned. In thinking about how to go about this task my first instinct was to outline a grand tour of the regulatory landscape, looking at each of its many parts. I quickly realized that this was a hopeless task for a lecture. No one outside the United Nations General Assembly would sit still for a lecture of such a length. So I chose a more selective, and suggestive, format based on a few stories from the century of regulation, stories from which one might provide, in President Obama's phrase, "some teachable moments." I chose three such stories.

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The first story is about the construction of regulatory paradigms. More specifically it is about the rise and fall of the natural monopoly model in telecommunications regulation and how it did, and didn't, influence regulatory policy. The second is actually a couple of stories both illustrating a salient if not distinctive characteristic of FCC regulation: its self-defining quality. The story opens with the early evolution of cable television regulation some forty-five years ago, but it finds a more recent replication in the current controversy over regulating Internet broadband providers on the matter of network neutrality. The third story is about symbolism. Symbols don't receive a lot of attention in the scholarly commentary on regulation. Interest group or public choice theories usually leave no room for talking about the role of symbols as a driver of regulation. But communications law is a fertile source of symbols because it is inherently about the way in which ideas - including symbols - are expressed. The particular symbol I want to discuss is one that has dominated all others in the field of mass communications, the idea of localism.

Ι

PARADIGMS

My first story about the rise and fall of the natural monopoly model is the intellectual history portion of a larger story of social and economic change. In the early era of telecommunications, following the expiration of the Bell patents, there was a period of vigorous competition between AT&T and independent carriers, but it did not survive for a number of reasons, including a set of aggressively exclusionary practices by AT&T that handicapped the independent carriers. In the end what proved fatal to competition was less a matter of AT&T's dominance or its exclusionary practices than it was a matter of regulatory policy. One could not say that the Mann-Elkins Act of 1910, which inaugurated federal legislation, was facially hostile to competition. But the advent of regulation at both federal and state levels reflected an emerging view that telecommunications was a "natural monopoly," and that competition was neither sustainable nor efficient.

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The natural monopoly paradigm remained basically unquestioned by regulators until the late 1960s, when intrepid competitors sought entry into private line service and peripheral equipment markets. It was a modest beginning for competition, but it soon proved to be the proverbial camel's nose under AT&T's tent. By the late 1970s competitive entry had been extended into the basic switched long distance service and basic equipment markets. However, no one at that time doubted that there was still some part of the telephone system that was naturally monopolistic. When the Bell System was broken up in 1984 in order to make telephone markets safe for competition, it was the long distance market and the equipment markets that were the target. Divestiture was not intended to disturb the monopoly exercised by local exchange carriers. In the ensuing years the natural monopoly model began to fade as small competitive incursions were made in local markets. Then in 1996 the natural monopoly model was officially retired by Congress with the enactment of the 1996 Telecommunications Act.

To say that the natural monopoly model was retired in 1996 is not to say that monopoly ended. Equipment and specialized service markets were already competitive by 1996 and long distance service markets were becoming so (though long distance as a separate market has all but disappeared since). However, competition in local markets - the foremost innovation of the 1996 Act - has been more painfully gradual than was anticipated by Congress. Indeed, the meltdown of competitive local exchange carriers in 2000-2002 suggested to some that the market-opening provisions of the 1996 Act had created more competition in the market for bankruptcy lawyers than in the market for local telecommunications services. Certainly the slow development of competition in local service markets has suggested that something was amiss with the game plan devised by Congress and the FCC. There are a number of competing explanations for what that something was, but it would require a long detour for me to relate them. It is enough to say that competition in local service markets remains a work in progress. It is progressing, although in ways not fully anticipated by either Congress or the FCC in 1996.

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So far all I have related is factual history. It is interesting, but is it also instructive? There are several lessons one might derive from the story.

The first lesson is embedded in a set of questions about how paradigms find their way into regulatory policies. Today virtually everyone regards the demise of the natural monopoly paradigm in telecommunications as a good thing. There may be doubts about the FCC's initial plans for enabling competition – doubts that arise in part from different views about what constitutes effective competition – but it is generally accepted that competition is the correct paradigm. This shift of paradigms naturally prompts the question, what caused it? Was it a change in the market, a change in technology, a change in the character of economic science, or what? Which is really a way of asking, how did the idea of natural monopoly take hold in the first place?

A market is said to be naturally monopolistic where it is characterized by economies of scale of such a magnitude that a single firm can supply the entire market more cheaply than multiple firms. In such a case competition is not sustainable. In the heyday of the Bell monopoly this was widely believed to be true of all telephone service markets, but the empirical basis for such a belief was not at once obvious. When Congress established regulation in 1910 competitors collectively had almost as many subscribers as AT&T. If competition was doomed in the long run, it was not yet evident. But even if one could be reasonably certain that this competition was not sustainable, why anticipate the outcome by introducing a regulatory model based on the assumption that competition is futile? Why not allow competition to run its course and allow consumers to benefit from it while it lasts? One common explanation is that if competition isn't sustainable we want to avoid wasted investment in competitive facilities. In the early competitive era in telecommunications there were sometimes duplicate sets of telephone poles and wires on the streets. What a waste, you might think. But is it any more wasteful than having multiple gas stations on a single corner or two grocery stores in the same shopping mall? Yes, duplicate telephone lines are unsightly, but not if you require them to be put

under the ground, which is where they belong anyway. In the end, the embrace of the natural monopoly paradigm as a basis for regulatory policy, even where its conditions prevail, turns out to be much more problematic than has been often assumed.

A second lesson to be derived from the story involves the sometimes awkward fit between the model and the content of the policy that is supposed to be derived from it. Even accepting the common belief of the time that core service markets were naturally monopolistic because of increasing returns from infrastructure investment, there was no factual or theoretical basis for believing that this was true of equipment supply markets. Yet in its heyday Bell's monopoly was allowed to extend over the entire domain of telecommunications, including the supply of network equipment, consumer premises equipment, peripheral devices - even telephone directories. Permitting Bell to dominate the supply of equipment obviously required a theory other than natural monopoly. AT&T's theory was that it was necessary to monopolize all equipment connected to the network in order to ensure service integrity. That theory was even more dubious than the natural monopoly theory. Ensuring service integrity doesn't require monopoly control; it merely requires technical equipment interconnection standards to prevent harm to the network. Yet it took about a half-century to discover that simple solution.

A third lesson from the story is about the ways of regulation. Regulation was initially justified on the assumption that the system was inherently monopolistic. When that assumption was abandoned what happened to regulation? It was not abandoned but repurposed. Regulation designed to protect consumers against the monopolist was repurposed to protect competitors against the monopolist. In theory this newly repurposed regulation should fade away when competition has been effectively achieved in all markets. Students of regulation who attend the school of public choice will not be surprised that this has not yet happened. To be sure there has been significant deregulation of some markets and some services, but regulation overall has not diminished. By every measure – budget, number of regulations, detail of regulations – regulation has increased.

Most of the regulation is different in kind than before, as I said, but the activity continues all the same. You might say regulation became its own paradigm. Which is a kind of segue into my second story.

Π

PARTHENOGENESIS

My second story is about self-defining regulation. I call it regulatory parthenogenesis. *Webster's* defines parthenogenesis as the "reproduction by development of an unfertilized usually female gamete that occurs especially among lower plants and invertebrate animals." It may appear gratuitously insulting to imply that the FCC is a lower plant or invertebrate, but that's not my intent. What I am referring to is the ability of regulation to reproduce itself without outside help. To continue the biology metaphor we might translate "outside help" as meaning without legislative insemination (again with apology for any inappropriate connotations from a too literal interpretation).

It is not unusual to have law without legislation. The common law is parthenogenetic – a self-defining process by which courts create law and change it according to the conditions they confront. Ultimately, of course, the courts derive their creative powers from the legislature, but once the institutional framework is established courts define and redefine their legal responsibilities. Some regulatory agencies are like that. They are given broad and amorphous powers and left to their own devices to find a need and fill it. This is the so-called New Deal model of regulation, of which the 1934 Communications Act is an oft-cited example. In recent years the New Deal model has given way to more specific, more detailed legislation. In communications law the Telecommunications Act of 1996 is a noteworthy example. However, despite these more detailed new legislative directives, the Commission continues to draw heavily on the broad delegation of powers under the 1934 Act.

Yet to say that the FCC draws on a broad delegation of powers is misleading insofar as it suggests that the agency acts within the scope of a discernible if broad mandate. In reality the agency some-

times creates its mandate out of thin air. The seminal illustration is its creation in the 1960s and 1970s of an elaborate regime for regulating cable television without any guidance from Congress. In fact Congress would not stir itself to address the issue of cable television until 1984, by which time the FCC had been regulating it for 20 years. How did the agency manage to pull this off? The 1934 Act did delegate to the agency a broad discretion to make law (regulations) with respect to the subjects defined by the legislation. However, at that time there were only two substantive regulatory programs in the Act: the regulation of communications common carriers under Title II and the regulation of radio stations under Title III. Cable television fit neither program. Cable systems were not then thought to be common carriers, and even if they had been the FCC had no desire or intent to subject them to traditional common carrier regulation. (Note that if they were common carriers jurisdiction would have had to be shared with state regulators, which was not part of the FCC's original game plan.) And since cable systems did not transmit (over the air) radio signals they did not fit within the licensing regime of Title III. In effect cable fell into a kind of regulatory vacuum. Aristotle believed that nature hates a vacuum. The FCC hates it too. Undeterred by the absence of any clear legislative mandate on the subject the FCC proceeded to develop an ingenious theory of "ancillary jurisdiction" to fill the gap. The theory was grounded in language from Title I of the statute, which, among other things, gives the FCC general jurisdiction over "interstate and foreign commerce in communication by wire or radio" and empowers the FCC to make "such rules and regulations . . . as may be necessary in the execution of its functions."

Cable communications is inarguably "communications by wire or radio" within the meaning of Title I of the Act, but what about the second part, making "rules necessary in the execution of its functions?" What particular functions made it necessary to regulate cable? The FCC's reliance on the "necessary-functions" language here was in fact rather ironic. The cable regulations were originally designed solely to protect licensed broadcast stations. But why protect broadcasting? In fact the protection rationale was a little ironic.

The traditional rationale for the FCC's licensing broadcast stations was that they used a scarce spectrum resource. Since cable systems use shielded conduit they are not only not part of the scarce spectrum problem, they might even have been regarded as a technological fix to that problem so far as delivery of television programming was concerned. To an open-minded regulator the message might have been: The task you were assigned to perform – manage the use of the spectrum – is no longer necessary; collect your pension and retire to Sun City.

That's not the message the FCC heard. For the Commission cable wasn't the solution to the old scarcity problem, it was a new problem. More precisely it was three problems. One, cable television threatened the economic livelihood of local broadcasters. That was thought to be bad because the FCC was ideologically invested in the idea of locally oriented television. Two, cable television charged consumers a subscription fee. That was deemed bad because the FCC was ideologically invested in free television (i.e., advertiser supported television). Three, cable television at that time retransmitted broadcast programs without paying broadcasters for the privilege. That was bad because it was considered to be unfair competition (even though the signals were not at that time protected by the copyright law). Whether or not these really were "bads" is debatable, but I won't pause to engage in that debate because it is irrelevant to the point I am making about ancillary jurisdiction. Whatever one thinks of the FCC's reasons for regulating cable, none of them can claim any direct relationship to the central functions or purposes identified in the Act. The FCC was not established to rectify all the "bads" that might arise from interstate communication by wire or radio.

In the event the Supreme Court did approve the Commission's novel ancillary jurisdiction theory for regulating cable television, but both it and the lower courts later cautioned that ancillary jurisdiction was not an open-ended grant of power but must be limited to those functions that the Commission has been given some direct authority to perform. The FCC has not taken this limitation seriously, as is evident from its recent assertion of jurisdiction to impose so-called "network neutrality" rules on broadband Internet service providers.

Network neutrality is one of the most hotly debated issues in communications regulatory history. The core idea of neutrality is deceptively simple: prohibit broadband providers from discriminating among different content, applications or services. However, defining what constitutes "discrimination" is anything but simple. The FCC has recently proposed to define it in a manner that goes well beyond conventional legal or economic principles.

The FCC initially took a mostly hands-off position on network neutrality. It announced a set of very general principles that admonished Internet services providers not to discriminate among different content providers but adopted no specific rules. In 2008, however, a complaint filed against Comcast for secretly interfering with its customers' use of Bit Torrent to exchange high-volume files prompted the FCC to take regulatory action. The Commission ordered Comcast to disclose its network management practices and to submit a plan of compliance with the FCC's non-discrimination principles. More recently it initiated a rulemaking with a view towards codifying the principles it applied in Comcast, plus a couple of new principles, together with an extension of those principles to wireless broadband.

The *Comcast* case and the rulemaking proceeding were both grounded on the same ancillary jurisdiction theory that the FCC first used to regulate cable television, though the former application is arguably broader than the latter. In the case of cable the Commission claimed that regulation was ancillary to specific mandates it had under Title III of the Act. One may question whether Title III contains a mandate to protect local broadcasters from unregulated competition, but at least it is possible to identify in Title III a coherent mandate of some kind. In the case of Internet broadband service the assertion of general jurisdiction under Title I of the Act finds no such substantive mandate in any other part of the Act. In its *Comcast* decision the FCC rummaged among various statutory flotsam and found seven different provisions to support its intervention in Internet traffic management. I will forgo a detailed examination of the

various provisions. It's enough to say that the rag-bag collection of unconnected provisions illustrates the lack of any coherent approach to statutory construction. One provision in particular bears special notice on that account. The FCC relied heavily on Section 230(b), which states it to be national policy to promote: "the continued development of the Internet . . . preserve the vibrant and competitive free market that presently exists for the Internet . . . encourage the development of technologies which maximize user control over what information is received by individuals. . . ." This is all pretty atmospheric and standing by itself seems hardly enough to constitute a regulatory mandate. Indeed, the absence of such a mandate is corroborated by another part of section 230(b), not emphasized by the FCC, which articulates this policy objective: "to preserve the vibrant and free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation" (my emphasis).

Perhaps mindful of Congress's admonition about regulatory fetters, the FCC in its recent rulemaking proceeding declared that its proposals are "not intended to regulate the Internet itself." But exactly what is the "Internet itself"? The FCC seems to regard the Internet "itself" as some disembodied essence that is separate from the physical networks and infrastructure that sustains it - rather in the manner of graphic depictions of the Internet as an amorphous cloud in which information flows in some undefined manner. One is reminded of Alice's encounter with the grinning Cheshire Cat who slowly disappears, leaving only its grin behind. Said Alice: "Well, I have often seen a cat without a grin, but a grin without a cat! It's the most curious thing I ever saw in my life." But then Alice never encountered the FCC. There might be some cognitive dissonance here as well: Congress and the FCC itself have said that the Internet should not be fettered by regulation; therefore, the FCC tells itself that what it proposes to regulate cannot be the Internet.

The example of ancillary jurisdiction to regulate Internet broadband service may now be moot. In April 2010 the court of appeals rejected the FCC's claim of ancillary jurisdiction in this case. At press time it is unknown whether the court's decision will be reviewed by the Supreme Court – or how the lower court's decision will affect the FCC's ambition to adopt net neutrality rules. But whatever the ultimate outcome of these proceedings they exemplify the agency's conception of its parthenogenetic powers.

III

Symbols

My last story is about symbolism; specifically it is about one of the key ideological commitments of mass media regulation – localism. I noted earlier that localism has had a pervasive influence in mass media policies, but I will limit my narrative to one example which has influenced all others, the role of localism in shaping spectrum allocation policies.

The FCC's 1952 table of television allotments was constructed according to two basic priorities, providing services to all households and providing local stations to as many communities as possible. The effect of the second priority was to place significant limits on the first. Thus the number of services available to households in all but the largest metropolitan areas like New York was limited in order to allot channels to towns as small as, for example, Farmville, Virginia (population in 2000 of 6,800). The intent behind this constraint, of course, was to enable local services in as many communities as feasible, but since many of the channels ended up in towns too small to support any local station at all (let alone support locally produced programs), the effect was simply waste. A further effect of this localism design was to place a constraint on the number of national networks and, in turn, the number of viewing choices available to the public.

The initial sacrifice of television viewing choices in order to promote local service is more or less a thing of the past now that we have multi-channel broadband media. However, the emergence of those media has exposed a new and larger form of spectrum waste. The question today is not whether we are wasting spectrum by allotting channels to small towns or suburbs but whether we are wasting spectrum by allocating it to television broadcasting in gen-

eral. Today, for the vast majority of Americans local broadcasting has become simply a means of delivering program content to the head-end of a multi-channel distribution medium. Recent estimates put the number of TV households dependent on over-the-air broadcasting at 10 percent or fewer, and the number continues to decline. If we were to switch all distribution to cable or satellite or other broadband distribution via local telephone companies, we could recapture nearly 300 MHz of spectrum that is now devoted to serving this small, declining number of households. That would go a long way towards meeting the need for spectrum created by the exponential growth in demand for wireless broadband service. However, any suggestion that we might reallocate this spectrum to broadband wireless is quickly met with two objections: it would deprive the remaining households of free television and also undermine localism.

The first of these reasons, preserving "free television," is untenable, particularly now that the overwhelming percentage of households pay for cable or satellite service. By what logic do we insist on preserving free television for the declining percentage of households who choose not to subscribe to multi-channel media? No evidence exists that those who still depend on free television are on average poorer than those who pay for it. In all events a public policy of providing free television is difficult to explain in a society where we do not provide free electric power or indoor plumbing.

The very label "free television" is misleading. Viewers may not pay for it, but the public in general does by forgoing other uses to which the spectrum could be put. There is a huge opportunity cost in allocating this spectrum to broadcasting as opposed to other uses. A recent economic study prepared for the Consumer Electronics Association concludes that reallocating the TV broadcast spectrum to mobile wireless would yield net financial benefits of between \$48 billion and \$51 billion after calculating the value of the loss of "free" television to those households that still rely on it. These numbers just reflect the direct benefits that could be realized from such a transfer. A more complete measure of the social value of the spectrum in this alternative use is the value derived by consumers of

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wireless services beyond what they would pay wireless providers. According to this same CEA study, the value of this "consumers' surplus" is between \$500 billion and \$1.2 trillion.

As to the second reason for retaining spectrum-based television, preserving localism, this reason presupposes that local program service requires over-the-air broadcasting. It does not. One could easily deliver local programming by cable, satellite or local telephone (broadband) lines. If it is thought that broadcast stations are uniquely able to produce local programming (or decide what programming is suitable to particular communities), it would be a simple matter to have them fulfill that function but avoid unnecessary consumption of spectrum by delivering the programming direct to facilities of broadband providers by means of microwave or wire instead of broadcasting it willy-nilly into the air.

To its credit the FCC recognized the high cost of the current television allocations system in its recent report to Congress of a comprehensive plan for promoting broadband services. As part of that plan the FCC proposes, *inter alia*, that Congress authorize "incentive auctions" that would allow incumbent television licensees to surrender their assigned channels to be reallocated to wireless broadband and be compensated out of revenues received from auctioning the spectrum to wireless providers. This is an eminently sensible proposal. However, it remains to be seen how allowing local broadcasters to "cash in" their spectrum will be reconciled with the historic commitment to localism and local broadcasting, a commitment the FCC reiterates in its report.

The FCC's new broadband plan outlines some other sensible strategies for recovering at least part of the broadcast spectrum for mobile wireless use. However, to review them here would be a tangent, for my story is not about regulatory means; it's about regulatory ideology. How does it happen that this idea of localism, combined with the idea of "free" television has gained such a powerful hold on regulatory imagination? Interest group theorists may be inclined to respond that it is because of the political influence of local broadcasters. Without question they are a formidable interest group, but there are potent interest groups on the other side, so

one needs a theory that explains how one powerful interest group triumphs over a competitor. I am not aware of such a theory. In all events no interest group theory can be fully convincing without taking account of the power of ideological, which is to say symbolic, commitments.

Economists can quantify the cost of localism (i.e., localism embedded in a system of local over-the-air television broadcasting) as we have seen. The benefits of localism lie largely beyond economic measurement. However, one may get some purchase on the measure of benefits by asking a simple question: Suppose the government were considering a tax-funded scheme to support local program production; how much should it appropriate to create a permanent fund for that purpose - \$50 billion, \$500 billion, \$1.2 trillion? This hypothetical question segues naturally into two others: How much local programming do we actually receive, and how can the FCC force stations to provide an amount (and a quality?) that would match the cost of forgone alternative uses of the spectrum? The Commission itself has answered the first in part by opening up a new rulemaking proceeding on the subject of localism, the central premise of which is that local broadcast stations are not providing enough of it. (The objective of the rulemaking, incidentally, seems rather at odds with the aforementioned proposal to allow local broadcasters to cash in their channels for the benefit of reallocating the spectrum to mobile wireless.) The answer to the second question is not one the FCC would give but one that can be derived from the history of past regulatory failures: There is little the FCC can do to induce more local programming. It is possible the FCC knows the futility of this kind of effort but persists simply in order to signal its political overseers that it is on the job. However, again one should not discount the possibility of cognitive dissonance at work. Having invested so heavily in this ideal of localism the FCC cannot bring itself to admit that the investment has been a waste of time and effort, so it keeps digging around hoping to retrieve something of value. There must be a pony in there somewhere.

CONCLUSION

The lessons derived from these three stories are mostly negative in tone. No doubt there are other stories one can tell from this century of regulation from which one could derive positive lessons. In the spirit of balance I offer one such lesson – a "meta lesson" if you will. Notwithstanding the current complaints about our lackluster performance in deploying high-speed broadband services, the United States has for one hundred years led the world in the quality of electronic communications services enjoyed by the public. That might suggest that in the big scheme of things our regulatory policies have done well. Before you rush to that conclusion, though, you might want to consider Otto von Bismarck's reputed quip that "God has a special providence for fools, drunks, and the United States of America," which suggests not that regulation has done well, but that with God's help we don't need the FCC's.

