A CAPABILITIES APPROACH TO COMMUNICATIONS EQUITY

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INTRODUCTION

The concept of equity is deeply ingrained in American communications policy.[1] The Preamble to the Communications Act of 1934 (the "Act") declares the goal, "to make available, so far as possible, *to all the people of the United States, without discrimination* on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service…."[2] Universal service policies for telephony and ownership diversity initiatives for media go back many decades. And equity continues to be an important goal in the current era. The 1996 rewrite of the Act formally enshrined universal service as legal mandate, specifying that "[q]uality services should be available at just, reasonable, and affordable rates."[3] Since the arrival of

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1. This is also true for its antecedents in public utility regulation and common carriage. Non-discrimination, build-out, and mandatory service provision were widely understood elements of these regulatory regimes well before the introduction of the telephone. *See* BRUCE WYMAN, THE SPECIAL LAW GOVERNING PUBLIC SERVICE CORPORATIONS AND ALL OTHERS ENGAGED IN PUBLIC EMPLOYMENT (1911).

2. Communications Act of 1934, 47 U.S.C. § 151 (2012) (emphasis added).

3. Telecommunications Act of 1996, 47 U.S.C. § 254(b)(1) (2012). *See also* Eli Noam, *Will Universal Service and Common Carriage Survive the Telecommunications Act of 1996?*, 97

broadband, the most prominent policy debate at the Federal Communications Commission (the FCC) has been over network neutrality: whether it is fair to allow some services and customers to enjoy better quality than others.[4] And these are just a handful of examples. Equitable provision of communications services would seem to be a well-understood principle.

Yet equity, for all its importance, remains surprisingly ill-defined. Both the meaning and the value of equity in today's world of multidimensional competition, new aggregations of platform power, digital convergence, and shifting communications usage patterns are far from clear. The FCC, like the rest of the administrative state, has moved in recent decades to privilege economic welfare maximization over vaguely-defined normative considerations. Yet many of its key recent policy initiatives, such as promoting broadband deployment, open internet rules, and spectrum auctions, have a heavy equity component. As we move beyond the initial phase of broadband build-out, now is the ideal time to re-evaluate the first principles of equity in communications policy. We cannot achieve policy objectives without fully understanding what they are.

There is no single metric for fairness or equity. This is partly because of the inherent value judgments involved, but only partly. Optimizing equity along one dimension will usually either not affect it or even reduce it along some other dimension. For example, one could focus on ensuring that any two people, picked at random, are treated roughly the same.[5] When people are part of groups that have different preferences or histories, however, insisting on equal treatment of individuals can reinforce inequality between groups. Affirmative action policies are one example of deliberately aiding one group in order to redress previous discrimination and its lingering effects.[6] Such initiatives, while they may be justified, are inherently controversial. Ignoring differences seems intuitively more defensible to most people.

In 1979, the Indian development economist and later Nobel Laureate Amartya Sen delivered the Tanner Lecture on Human Values at Stanford, entitled "Equality of What?"[7] The question Sen

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COLUM. L. REV. 955 (1997) (considering how universal service would endure in a world of competitive provision of telecommunications).

4. *See, e.g.*, Edward Wyatt, *F.C.C., in a Shift, Backs Fast Lanes for Web Traffic*, N.Y. TIMES (Apr. 23, 2014), https://nyti.ms/2uQpUdz [https://perma.cc/J7VC-92UJ] (framing Chairman Wheeler's original 2014 proposed network neutrality rules as endorsing "fast lanes"); *see also* Tom Huddleston, Jr., *Internet Fast-Lanes Would be Banned Under Planned FCC Proposal*, FORTUNE (Feb. 2, 2015), http://for.tn/1K4EikB [https://perma.cc/6RF4-X3JU] (describing Chairman Wheeler's revised 2015 broadband reclassification approach primarily in terms of prohibiting "fast lanes").

5. This is known as individual fairness.

6. The alternate approach to individual fairness can be labeled group fairness or anti-subordination.

7. Amartya Sen, *Equality of What?*, *in* TANNER LECTURES ON HUMAN VALUES 197 (1980).

famously posed in general terms is quite similar to the specific one facing communications policy-makers today: If the state is to intervene in the interest of social justice, how should it evaluate success? Promoting economic development, wealth, or income seem like obvious yardsticks. Sen disagreed. He argued that capabilities—real opportunities to achieve essential human functionings—were more appropriate goals.[8] The implication of this approach is that what matters is not equality of the subsidies or resources provided, but equality in what people actually do with them. The core normative concern is thus not fairness, but freedom.

In the intervening years, Sen's approach has become extremely influential. Its value is not limited to anti-poverty programs in the developing world. In fact, Sen's conception translates well to the contemporary environment of rapidly changing and developing communications markets.[9]

This Article seeks to clarify the role of equity considerations in communications policy, and offer guidance for policy-makers going forward. Part I examines existing equity measures and their justifications. Three different forms of equity—user, provider, and burden fairness—are usually conflated, which confuses matters. Many of the most significant recent policy controversies at the FCC can be understood in terms of one or more of these equity considerations. Part II introduces Sen's capabilities approach and outlines its implications for communications policy. Understanding communications equity in terms of functionings and capabilities makes intuitive sense, because communications is itself such an important means toward human flourishing.[10] As in the earlier era of voice telephony, the first equity goal of broadband policy was to build out the network widely. While work on that front remains, more of the focus now should shift from enabling the network to what the network enables. A capabilities orientation provides the FCC and other policy-makers with a sounder framework for equity initiatives in the current environment.

I. EQUITY IN COMMUNICATIONS POLICY

The National Digital Inclusion Alliance (NDIA) defines "digital equity" as ensuring that "all individuals and communities have the

8. *See id*. at 218.

9. *See, e.g.*, Leah A. Lievrouw & Sharon E. Farb, *Information and Equity*, 37 ANN. REV. INFO. SCI. & TECH. 499, 501 (2003) ("A growing number of observers . . . argue that the fairness or *equity* of access and use, rather than the more or less equal distribution of information goods, may be a more useful foundation . . . .").

10. *See* Caio M. Silva Pereira Neto, *Development Theory and Foundations of Universal Access Policies*, 2 J. L. & POL'Y FOR INFO. SOC'Y, 365, 395 (2006) ("Access to ICTs in general, and to digital networks in particular, expands the communicative capability of human beings."); *see also* U.N. DEV. PROGRAMME, HUMAN DEV. REPORT 24 (1993) (describing the impact of the information revolution on human development).

information technology capacity needed for full participation in our society, democracy and economy."[11] While this definition sounds reasonable, it begs as many questions as it answers. What is the requisite "information technology capacity"? What constitutes "full participation"? And a question NDIA seems to take for granted: Is equity in the digital age more or less important than in the pre-internet era?

A. Understanding Equity

In 2001, newly-appointed Republican FCC Chairman Michael Powell took issue with concerns about a digital divide in internet access. He suggested one could just as easily complain about the "Mercedes divide."[12] If we do not guarantee everyone access to a fancy car, Powell was suggesting, why should we guarantee them access to fancy online services? The remark earned him lasting scorn.[13] Powell's comment, however, was both more and less perceptive than it seemed. The nonsensical example of the Mercedes divide illustrates that equity policies necessarily involve choices about what endowments to support. In some cases (luxury cars), the choice will be easy, while in others it will be quite challenging. We should not assume that a gap always deserves remedial measures. Though, neither should we assume it doesn't.

The important point that Powell's remark misses is that, particularly in communications markets, the value of services changes over time. The subtext of comparing internet access to owning a Mercedes was that both were luxuries. Everyone needs access to a phone and to some means of transportation, but subsidizing Mercedes ownership would be frivolous. In 2001, when just half of Americans had internet access at home,[14] less than 15% of households had always-on broadband connections,[15] and none had

11. NAT'L DIG. INCLUSION ALL., *Definitions*, https://digitalinclusion.org/definitions/ [https://perma.cc/89Z6-SD52] (last visited July 6, 2017).

12. Stephen Labaton, *New F.C.C. Chief Would Curb Agency Reach*, N.Y. TIMES (Feb. 7, 2001), https://nyti.ms/2tStjLw [https://perma.cc/5JJB-M2SQ] ("'I think there is a Mercedes divide,' he said. 'I'd like to have one; I can't afford one. I'm not meaning to be completely flip about this. I think it's an important social issue. But it shouldn't be used to justify the notion of essentially the socialization of the deployment of the infrastructure.'").

13. *See, e.g.*, Larry Irving, *Michael Powell's "Mercedes Divide,"* WASH. POST (June 30, 2001), https://www.washingtonpost.com/archive/opinions/2001/06/30/michael-powells-mercedes-divide/84f97935-ec64-431e-9f90-b8c3f01c380d/?utm_term=.d118e35b9072 [https://perma.cc/8F6L-3QHZ]; *see also* Matthew Lasar, *"There's a Mercedes Divide": Former FCC Chief Now Top Cable Lobbyist*, ARS TECHNICA (Mar. 6, 2011, 7:15 AM), https://arstechnica.com/tech-policy/2011/03/what-did-he-mean-by-that-mercedes-divide-fcc-chief-now-top-cable-lobbyist/ [https://perma.cc/4T2A-WK4G].

14. *See* Andrew Perrin & Maeve Duggan, *Americans' Internet Access: 2000-2015*, PEW RESEARCH CTR. (June 26, 2015), http://www.pewinternet.org/2015/06/26/americans-internet-access-2000-2015/ [https://perma.cc/7ZXB-UB3R].

15. *See* STATISTA, *Number of Fixed Broadband Subscriptions in the United States from 2000 to 2015 (in Millions)*, https://www.statista.com/statistics/183614/us-households-with-

mobile smartphone access,[16] internet services could reasonably be considered similar luxuries. No more. Today, digital connectivity is widely recognized as essential for access to news and information, job opportunities, government services, and more. In fact, as early as 2010, more than three-fourths of respondents to a global survey described internet access as a fundamental human right.[17] Powell might have been justified in his assessment in 2001, but excluding internet access from communications equity conversations would have looked like an increasingly mistaken policy over time.[18]

Powell's quip was particularly shocking because equity-oriented measures have such a robust history in communications policy. The most well-known example is universal service, which began as an AT&T marketing slogan but evolved into a commitment to ubiquitous access to telephony and, more recently, broadband.[19] Universal service is implemented through a variety of explicit and implicit subsidy mechanisms for high-cost providers and low-income customers.[20] The E-rate program, created in 1996, added subsidies to connect schools and libraries to the internet.[21] The Telecommunications Relay Service (TRS) and Video Relay Service (VRS) support communications access for the deaf.[22]

On the broadcasting and media side, there are similar disability access rules in the form of closed captioning mandates for broadcasters. The FCC also oversees a variety of cross-ownership limits, program access rules, and standards promoting localism and diverse ownership in media.[23] While not direct financial subsidies,

broadband-internet-access-since-2009/ [https://perma.cc/U4P3-5ESF] (last visited Oct. 11, 2017).

16. The iPhone was not introduced until six years later. Charles Arthur, *The History of Smartphones: Timeline*, GUARDIAN (Jan. 24, 2012, 3:00 PM), https://www.theguardian.com/technology/2012/jan/24/smartphones-timeline [https://perma.cc/JY7V-DFKR].

17. *Internet Access is "A Fundamental Right,"* BBC NEWS (Mar. 8, 2010, 8:52 AM), http://news.bbc.co.uk/2/hi/technology/8548190.stm [https://perma.cc/K66Q-K8PV].

18. The FCC has subsequently recognized this point. *See* FCC, STRATEGIES AND RECOMMENDATIONS FOR PROMOTING DIGITAL INCLUSION 3 (2017), *available at* https://www.fcc.gov/document/strategies-and-recommendations-promoting-digital-inclusion [https://perma.cc/4HWG-L727] ("[W]hat constitutes robust broadband service, devices that meet the needs of users, sufficient digital literacy training, and quality technical support will change as ICT capabilities evolve. Moreover, as technologies improve, the baseline for what constitutes 'digital inclusion' necessarily increases.").

19. *See generally* MILTON L. MUELLER, JR., UNIVERSAL SERVICE: COMPETITION, INTERCONNECTION, AND MONOPOLY IN THE MAKING OF THE AMERICAN TELEPHONE SYSTEM 167 (1998) (tracing the evolution of the concept of universal service).

20. *See Universal Service*, FCC, https://www.fcc.gov/general/universal-service [https://perma.cc/R7FC-FV4J] (last updated Oct. 5, 2017).

21. *See E-Rate - Schools & Libraries USF Program*, FCC, https://www.fcc.gov/general/e-rate-schools-libraries-usf-program [https://perma.cc/6T8A-T59A] (last updated Aug. 30, 2017).

22. *See Telecommunications Relay Service (TRS)*, FCC, https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs [https://perma.cc/YY7X-LLF6] (last updated Sept. 8, 2017).

23. *See generally* MARA EINSTEIN, MEDIA DIVERSITY: ECONOMICS, OWNERSHIP, AND THE FCC (2004); Antoinette Cook Bush & Marc S. Martin, *The FCC's Minority Ownership Policies from Broadcasting to PCS*, 48 FED. COMM. L.J. 423 (1996).

these mechanisms serve a similar goal in media to the universal service programs in telecommunications. In the wireless world, the FCC has consistently used auction exclusions and spectrum caps to prevent large incumbents from obtaining too large a share of wireless capacity.[24]

The rise of broadband as a central focus of communications policy produced additional equity-oriented measures. The FCC revamped the telephone-focused universal service system around a broadband-oriented Connect America Fund.[25] The Departments of Commerce and Agriculture administered several billion dollars of grants for broadband deployment projects under the American Recovery and Reinvestment Act of 2009.[26] The Obama administration launched the inter-agency ConnectALL initiative to overcome barriers to equitable broadband adoptions.[27] And the government is not the only entity working to promote digital equity. Comcast, while seeking a favorable review of its acquisition of NBC Universal, created the Internet Essentials program to provide low-cost broadband access and digital literacy programs in its service areas.[28]

Traditionally, communications equity programs have been grouped by industry. The economics of traditional telephony and broadcasting are completely different. So is their social significance. It made no sense to consider equity as a generic concept. In today's converged world, however, with wired and wireless broadband connectivity becoming the dominant platforms for all media and communications, the situation has shifted. Instead of thinking in terms of traditional silos, it makes more sense to discuss equity in communications policy in terms of three categories: user fairness, provider fairness, and burden fairness.

User fairness is the most obvious form of equity. It means individual subscribers should not be subject to unreasonable discrimination in their ability to access and use the network, as promised in the Act's preamble.[29] User fairness may seem straightforward, but implementing it is not simple. In a well-

24. *See* Peter Cramton et al., *Using Spectrum Auctions to Enhance Competition in Wireless Services*, 54 J.L. & ECON. S167, S171 (2011).

25. *Connect America Fund et al.*, GN Dkt. No. 09-51, Report & Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 17663, 17667 (2011) [hereinafter USF/ICC Transformation Order].

26. American Recovery and Reinvestment Act of 2009, Pub. L. No 111-5, 123 Stat. 115 (codified in scattered sections of the U.S.C.).

27. Office of the Press Secretary, *Fact Sheet: President Obama Announces ConnectALL Initiative*, WHITE HOUSE (Mar. 9, 2016), https://obamawhitehouse.archives.gov/the-press-office/2016/03/09/fact-sheet-president-obama-announces-connectall-initiative [https://perma.cc/E9T4-8LQD].

28. Jeff Baumgartner, *Comcast's 'Internet Essentials' Connects 750,000 Low-Income Families,* MULTICHANNEL NEWS (Aug. 24, 2016, 12:30 PM), http://www.multichannel.com/news/distribution/comcast-s-internet-essentials-connects-750000-low-income-families/407227 [https://perma.cc/G6ZC-7RY7].

29. *See* 47 U.S.C. § 151 (2012).

functioning market, discrimination is not inherently undesirable.[30] Users willing to pay more can reasonably expect to get more, much of the time. And there are certain categories of users, including those engaging in illegal (copyright infringement) or undesirable (spam) conduct, who can appropriately be treated more poorly than others. The question is when a service is a baseline that should be available to everyone, when giving some users a better service is harmful, and when certain behaviors (such as intensive data usage) are appropriately considered undesirable. Another challenge is that people use communications networks for different purposes.

User fairness is not the only dimension of equity in communications policy, because the FCC is not just a consumer-focused agency. It is a sector-specific industry regulator, with a mission to facilitate efficient market competition.[31] One element of a well-functioning market is what can be called provider fairness: equity of opportunities for competitors. The original emphasis of network neutrality—as opposed to the user equity issues around paid prioritization and zero rating—was on how broadband access providers might leverage their position inequitably against other providers.[32] In essence, it was conceived as a requirement to maintain balance between those who offer services, content, and applications on top of the network and those who provide connectivity to the network.[33]

Provider fairness can be viewed as an indirect means to user fairness. Providers, of course, have users. If AT&T unreasonably throttles Netflix, it affects Netflix's business prospects, but it also impacts Netflix's customers. The providers and the customers, however, are not always in complete alignment. Netflix, for example, might cut a deal with AT&T that is less than ideal for its customers. Or it might cut a deal that does well for its customers but harms the customers of smaller streaming services with insufficient resources to negotiate the same terms. Even if the ultimate goal is to promote the interests of users, therefore, equitable treatment of providers must be considered as a distinct policy objective.

The final dimension of communications equity, burden fairness, is even more frequently ignored. If the benefits accruing to

30. *See generally* Hal R. Varian, *Price Discrimination and Social Welfare*, 75 AM. ECON. REV. 870 (1985) (identifying circumstances where price discrimination can improve economic welfare).

31. *See About the FCC*, FCC, https://www.fcc.gov/about/overview [https://perma.cc/6HEG-A87U] (last visited Sept. 10, 2017) ("An independent U.S. government agency overseen by Congress, the Commission is the federal agency responsible for implementing and enforcing America's communications law and regulations.").

32. *See* Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. ON TELECOMM. & HIGH TECH. L. 141, 142 (2003) ("The promotion of network neutrality is no different than the challenge of promoting fair evolutionary competition in any privately owned environment . . . .").

33. Wireless equity initiatives, such as spectrum caps, generally fit in this category as well.

communications providers are subject to equitable evaluation (provider fairness), the same is true for obligations placed on them. The Communications Act states that "[a]ll providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service."[34] Deciding on whom to impose obligations, how, and at what level is a frequent source of controversy for the FCC. Beyond universal service funding, the move to impose broadband privacy obligations on broadband access providers stoked controversy on equity grounds.[35] The broadband companies argue that they are being saddled with excessive restrictions, while their competitors in the digital advertising market, such as Google and Facebook, are not.[36]

Burden fairness is a common element of FCC regulatory regimes.[37] Small rural telephone companies are subject to rate-of-return regulation as opposed to the price caps applicable to major carriers.[38] Low-power radio and TV broadcasters have more limited obligations than their high-power competitors.[39] The Open Internet rules included exemptions to transparency mandates for small broadband access providers.[40] Ironically, open internet policies themselves can be seen as equity-enhancing measures, meaning both the rules and an exemption from them had the same goal.

B. Evolving Equity Concerns

At a high level, economic welfare maximization has become the dominant paradigm in American regulatory policy, including at the

34. 47 U.S.C. § 254(b)(4) (2012).

35. *See Protecting the Privacy of Broadband and Other Telecommunications Services,* WC Dkt. No. 16-106, Report & Order, 31 FCC Rcd. 13,911 (2016). In 2017, Congress repealed these rules through the Congressional Review Act. *See* Cecilia Kang, *Congress Moves to Strike Internet Privacy Rules From Obama Era*, N.Y. TIMES (Mar. 23, 2017), https://www.nytimes.com/2017/03/23/technology/congress-moves-to-strike-internet-privacy-rules-from-obama-era.html [https://perma.cc/H76X-2UFY].

36. *See* Brian Fung & Craig Timberg, *The FCC Just Passed Sweeping New Rules to Protect Your Online Privacy*, WASH. POST (Oct. 27, 2016), https://www.washingtonpost.com/news/the-switch/wp/2016/10/27/the-fcc-just-passed-sweeping-new-rules-to-protect-your-online-privacy/ [https://perma.cc/WS4J-67KL].

37. *See* Scott Wallsten, *The Universal Service Fund, What Do High-Cost Subsidies Subsidize?*, TECH. POL'Y INST. (Feb. 2011), https://techpolicyinstitute.org/wp-content/uploads/2011/02/the-universal-service-fund-wha-2007461.pdf [https://perma.cc/5J8F-ZGKV].

38. Gregory J. Vogt, *Cap-Sized: How the Promise of the Price Cap Voyage to Competition Was Lost in a Sea of Good Intentions,* 51 FED. COMM. L.J. 349, 362 n.34 (1999).

39. *See Creation of Low Power Radio Service*, MM Dkt. No. 99-25, Report & Order, 15 FCC Rcd. 2205 (2000); *An Inquiry into the Future Role of Low Power Television Broadcasting and Television Translators in the National Telecommunications System*, BC Dkt. No. 78-253, Report & Order, 47 Fed. Reg. 21,468 (1982).

40. *See* John Eggerton, *FCC Extends, Expands Small ISP Enhanced Transparency Waiver*, BROAD. & CABLE (Feb. 23, 2017, 12:07 PM), http://www.broadcastingcable.com/news/washington/fcc-extends-expands-small-isp-enhanced-transparency-waiver/163559 [https://perma.cc/3ZYH-YN7V].

FCC.[41] In such an environment, equity concerns are often seen as separate from the core mission of facilitating competition. Markets tend to separate people into different groups based on their preferences, so that each can pay the amount and receive the benefits it is willing to support.[42] The fact that some people have broadband offering download speeds of 150 megabits per second, while others have services offering only ten, does not *per se* mean that there is improper discrimination or an inequitable market structure. The essence of capitalism is that those who pay more, get more.

One might think that as telephony, internet access, and now broadband become more ubiquitous, equity would diminish as a focus of communications policy. Yet this has not been the case. The general shift away from a more expansive regulatory approach toward the competition-focused deregulatory agenda of the past four decades has taken its toll on FCC initiatives that can be seen as equity-focused. For example, the Fairness Doctrine, which sought to ensure balance in broadcast news, was eliminated during the Reagan administration.[43] In other cases, equity programs were ended because they proved problematic, such as the Designated Entity rules that set aside spectrum licenses for small and women- or minority-owned businesses.[44] The level of controversy surrounding these issues was significant. Stepping back, however, what is more surprising is their rarity.

Equity is, if anything, becoming more prominent in communications policy today. The overhaul of universal service mechanisms to focus on broadband rather than telephony is perhaps the most prominent example. Instead of declaring victory and scaling back these programs, the FCC chose to reinvigorate and expand them into a new area.[45] And in recent years, there has been growing discussion in the larger policy world about the harmful effects of growing inequality.[46] In the technology sector, small, startup, internet-based companies, such as Google and Facebook, grew into massively powerful information platforms,[47] and concerns about

41. *See generally* W. KIP VISCUSI ET AL., ECONOMICS OF REGULATION AND ANTITRUST 855 (4th ed. 2005) (describing the economic approach to regulation).

42. *See* Varian, *supra* note 30.

43. *Complaint of Syracuse Peace Council against TV Station WTVH Syracuse, N.Y.*, Memorandum Opinion & Order, 2 FCC Rcd. 5043 (1987), *recon. denied*, 3 FCC Rcd. 2035 (1988), *aff'd sub nom.*, Syracuse Peace Council v. FCC, 867 F.2d 654 (D.C. Cir. 1989), *cert. denied*, 493 U.S. 1019 (1990).

44. *See Lessons from the United States Spectrum Auctions, Before the S. Budget Comm.*, 107th Cong. 3–4 (2000) (Statement of Peter Cramton Professor of Economics, University of Maryland).

45. *See* USF/ICC Transformation Order, *supra* note 25.

46. *See generally* THOMAS PIKETTY, CAPITAL IN THE TWENTY-FIRST CENTURY (2014) (raising concerns about rising inequality).

47. *See* Julie Cohen, *The Regulatory State in the Information Age*, 17 THEORETICAL INQUIRIES L. 369, 375–82 (2016).

equity and discrimination in the emerging data world garnered growing attention.[48]

The shift toward a greater equity focus in communications is most evident in the way the debate over network neutrality evolved over the decade and a half between its conception and today. When FCC Chairman Powell first embraced the fundamental principles (if not the need for binding rules) around network neutrality in 2004, he described the concept in terms of user freedoms to enjoy the benefits of the internet without restrictions.[49] The primary concern was that broadband providers would block content, services, and devices.[50] By the time the FCC, under the Obama administration, adopted network neutrality requirements in 2010, it shifted the focus to the openness of the internet as a platform for innovation.[51] The key topic was now unreasonable discrimination, in the form of slowing or throttling data traffic.[52]

During and after the adoption of the FCC's second Open Internet Order, however, the focus of controversy shifted again to paid prioritization and zero rating.[53] Blocking and unreasonable discrimination were banned, but these steps were largely accepted by the broadband providers.[54] The focal point of debate was not that some applications would be blocked or degraded, but that certain providers might be better off than others.[55] Paid prioritization, which was not even part of the original FCC network neutrality rules in 2010, became a centerpiece of the 2015 rules.[56] The tremendous level of popular anger over "fast lanes," which became the signature framing of the issue, illustrated the shift toward an equity orientation for network neutrality.[57]

Perhaps this shift is not surprising. Even in the current environment where economics dominates the discourse in administrative law, there are several good reasons for measures that encourage widespread and fair access and adoption of services. These go above and beyond general notions of fairness and social

48. *See generally* CATHY O'NEIL, WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY (2016).

49. *See* Michael K. Powell, *Preserving Internet Freedom: Guiding Principles for the Industry*, 3 J. ON TELECOMM. & HIGH TECH. L. 5, 11–12 (2004).

50. *Id.*

51. *Preserving the Open Internet; Broadband Industry Practices*, GN Dkt. No. 09-191, Report & Order, 25 FCC Rcd. 17905 (2010).

52. *Id.*

53. *Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28, Report & Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd. 5601 (2015) [hereinafter 2015 Open Internet Order].

54. *See, e.g.*, Craig Silliman, *Net Neutrality: A Path Forward*, VERIZON POL'Y BLOG (Mar. 21, 2016), http://www.verizon.com/about/news/net-neutrality-path-forward [https://perma.cc/MP4P-FRB5] (endorsing limits on blocking, throttling, paid prioritization, and unreasonable conduct that harms users).

55. *See* Wyatt, *supra* note 4.

56. *See* 2015 Open Internet Order, *supra* note 53, at paras. 18–19.

57. *See* Huddleston, *supra* note 4.

justice, or the hortatory language in the Act. First, communications services are essential to full participation in society, through education, work, access to public services, and democratic engagement.[58] Second, excessively inequitable allocation of communications services produces inferior performance.[59] In the extreme cases, monopolies restrict output, kill off innovators, and price at levels that limit demand. Third, because communications networks are platforms for other applications and services, inequitable distributions of connectivity will shift the balance of power and influence other markets.

Whatever happens, therefore, equity will remain an important focus of communications policy. As the network neutrality fight illustrates though, non-discrimination policies are inherently controversial. Universal service policies are also contentious, with large financial implications and significant potential for market distortions. As Chairman Powell's "Mercedes divide" comment illustrates, all such initiatives require a high-level judgment about what to support through subsidies and other regulatory interventions. While universal internet access seems like a good thing, what exactly does that mean? And what is it worth trading off to get it?

II. FOCUSING ON CAPABILITIES

All three forms of communications equity are important. Significant policy initiatives will likely impact more than one. Only user fairness, however, directly targets individuals. Provider and burden fairness focuses, in the first instance, on corporate actors. Equity along these dimensions primarily influences competition and innovation. Unfair treatment of providers and allocation of burdens warp the market. Unfair treatment of people, on the other hand, raises ethical concerns about autonomy and freedom. *Amartya Sen's Capabilities Approach* helps to illuminate the moral significance of user fairness issues in communications policy. It also provides guidance for transforming the historic concept of universal service for a broadband world.[60]

A central question for all equity programs in communications is how to distinguish means from ends. Universal service, the paradigmatic equity program, is based on subsidies to providers in

58. *See* FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 5 (2010), https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf [https://perma.cc/KC25-XKHY] [hereinafter NATIONAL BROADBAND PLAN] ("Now, broadband is essential to opportunity and citizenship.").

59. *Cf.* Nicholas Economides & Benjamin E. Hermalin, *The Economics of Network Neutrality*, 43 RAND J. ECON. 602 (2012) (describing economic welfare losses from broadband discrimination in the absence of network neutrality rules).

60. *Sen's Capability Approach*, INTERNET ENCYCLOPEDIA OF PHILOSOPHY, http://www.iep.utm.edu/sen-cap/ [https://perma.cc/TP79-537U] (last visited Nov. 11, 2017).

high-cost areas, where infrastructure might not otherwise be deployed.[61] Having networks reach more of the country is not, however, a public policy objective in its own right. More ubiquitous network coverage is a means to the end of more ubiquitous network services adoption. And even that is an intermediate goal to the end of users employing those networks for socially desirable activities—finding or performing a job, obtaining critical news and information, or interacting with government services. If people are not taking advantage of networks, or are using them purely for purposes such as entertainment, the rationale for wealth transfers through subsidy mechanisms diminishes greatly.

The shift in focus of universal service from telephony to broadband accentuates this challenge. A phone provides access to a single service—voice telephony. It can be used for many purposes, but the feature set is the same. Broadband, on the other hand, is merely a gateway. What users experience are the applications delivered over broadband pipes, whether in the form of web pages, video, voice, messaging, or other functionality. Focusing purely on whether networks exist, or even on whether users subscribe to them, may say little about the benefits users actually enjoy.

A. The Capabilities Approach to Development

The essence of *Sen's Capabilities Approach* is that policy initiatives targeting justice or equity should be measured in terms of real opportunities to achieve important human functionings, rather than resources such as wealth.[62] "Functionings" for Sen include desirable beings (status attributes such as being educated or well-nourished) and doings (activities such as voting or working at a job).[63] For Sen, capabilities are a form of freedom. Whereas liberal theorists such as John Rawls emphasize a just allocation of "primary goods" such as money, Sen's framework focuses on the ends to which those goods might be used.[64] The ultimate moral imperative, in the capabilities

61. *See generally* USF/ICC Transformation Order, *supra* note 25 (describing and restructuring the federal universal service programs).

62. *See* Sen, *supra* note 7; AMARTYA SEN, DEVELOPMENT AS FREEDOM (1999); AMARTYA SEN & JAMES E. FOSTER, ON ECONOMIC INEQUALITY 206 (1997); AMARTYA SEN, INEQUALITY RE-EXAMINED (1992).

63. *See* SEN, INEQUALITY RE-EXAMINED, *supra* note 62. Capabilities represent real opportunities to achieve functionings. If someone has every opportunity to do something, but chooses not to, they are entitled to make that choice. Therefore, public policy should target capabilities and leave the rest to the individual. Critically, though, capabilities must offer a true choice. If someone can't afford housing, the fact that fast broadband or powerful smartphones are available in their local area is meaningless. The fact that someone expresses a preference against subscribing to broadband in order to pay their rent doesn't mean broadband isn't an essential service. That person lacked the real opportunity to choose it.

64. Nicholas Garnham, *Amartya Sen's "Capabilities" Approach to the Evaluation of Welfare: Its Application to Communications*, 4 JAVNOST — THE PUBLIC 25–34 (1997) (The desired level of achieved functionings "cannot be justified simply in terms of . . . what people actually buy . . . .").

framework, is to give people real freedom to achieve well-being.[65] Human agency is thus "itself a valued functioning."[66] Giving people an unencumbered opportunity to express their preferences should itself be a policy goal.

Another way to describe the *Capabilities Approach* is that it emphasizes ends over means.[67] Money is no one's ultimate desire—people seek the things that money allows them to buy. Providing means is insufficient because people will vary in their ability to convert means to ends, a phenomenon Sen refers to as the conversion factor.[68] To take a simple example, running shoes are of little value to someone in a wheelchair. Because of human diversity as well as limitations on the ability to make use of resources, equality of resources is not equivalent to equality of capabilities.[69]

As the philosopher Martha Nussbaum, one of the leading exponents of the *Capabilities Approach*, notes, this orientation necessarily creates an expectation that people be able to achieve the functionings they have reason to value: "[i]t ascribes an urgent *task to government and public policy*—namely, to improve the quality of life for all people, as defined by their capabilities."[70] If achieving capabilities is a moral imperative, it behooves policy-makers to eliminate barriers between groups within society.

A final component of the *Capabilities Approach* is the notion of basic capabilities. Sen defines these as, "the ability to satisfy certain elementary and crucially important functionings up to certain levels."[71] In other words, basic capabilities are a minimum threshold

65. To Sen, therefore, economic development is not ultimately a process of creating wealth, but a means of promoting freedom. *See* SEN, DEVELOPMENT AS FREEDOM, *supra* note 62.

66. Garnham, *supra* note 64, at 117.

67. *See The Capability Approach*, Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/capability-approach/ [https://perma.cc/5HWX-U8LK] (last updated Oct. 3, 2016) ("The approach stresses that we should always be clear, when valuing something, whether we value it as an end in itself, or as a means to a valuable end.").

68. *See* SEN, INEQUALITY RE-EXAMINED, *supra* note 62, at 19–21.

69. A nice illustration of this principle is a widely-distributed illustration of three kids of varying height attempting to look over an outfield fence to watch a baseball game. On one side (usually though not always labeled "equality"), each is standing on an identical box. The shortest child still can't see over the fence, while the tallest child would have done so even without the boost. On the right side (usually labeled "equity," the kids have boxes stacked in inverse order to their height. All of their heads wind up at the same level. *See* Craig Frohle, *The Evolution of an Accidental Meme*, MEDIUM (Apr. 14, 2016), https://medium.com/@CRA1G/the-evolution-of-an-accidental-meme-ddc4e139e0e4#.ny61uzckd [https://perma.cc/F25C-JLCU].

70. MARTHA C. NUSSBAUM, CREATING CAPABILITIES: THE HUMAN DEVELOPMENT APPROACH 19 (2011).

71. SEN, INEQUALITY RE-EXAMINED, *supra* note 62, at 45 n.19. In developing this concept, Sen refers to Adam Smith's concept of "necessaries," which Smith describes as, "whatever the custom of the country renders it indecent for creditable people, even the lowest order, to be without." *See also* AMARTYA SEN, POVERTY AND FAMINES: AN ESSAY ON ENTITLEMENT AND DEPRIVATION 18 (1981) (quoting ADAM SMITH, THE WEALTH OF NATIONS (1776)).

society is morally obligated to provide.[72] Put another way, basic capabilities are needed to achieve some reasonable level of freedom or agency to make further choices. Above and beyond this level, different societies may choose different weightings of desired functionalities, and therefore of desired capabilities. The desired capabilities for someone in 1717 will be different from someone in 2017, and the desired capabilities today will different among individuals in the United States, Japan, and Kenya. Ideally, according to Sen, there will be some sort of reasoned consensus in a society to determine the preferred menu and weighting of various functionalities.[73]

The *Capabilities Approach* is most widely known as an influential paradigm for development assistance programs, and as a philosophical theory of social justice. However, it is not limited to these contexts. While it is rooted in philosophical concepts of human flourishing tracing its roots to Aristotle, the *Capabilities Approach* is very much a practical framework to guide real-world policy-making. This much should be evident from its adoption in economic development circles, through initiatives such as the United Nations Human Development Index.[74] Moreover, the approach is not limited to humanitarian development assistance programs in poor countries. It applies anywhere there is an inequitable allocation of capabilities, including communications.[75]

B. From Access to Adoption to Functionings

A few authors have attempted to apply the Capabilities Approach to communications policy, or more broadly to the information, communications, and technology (ICT) sector.[76] As a starting point, the ability to communicate effectively with others across distances is itself a significant function in modern society.[77]

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72. This is not to say that there may not be a moral obligation to provide something more.

73. SEN, ON ECONOMIC INEQUALITY, *supra* note 62, at 206. *See also* Garnham, *supra* note 64, at 120 ("Sen thus argues that it is possible to arrive at an objective description of such necessary subsistence in a given society at a given time . . . .").

74. *See Human Development Index (HDI)*, U.N. DEV. PROGRAMME, http://hdr.undp.org/en/content/human-development-index-hdi [https://perma.cc/X8N4-RVUE] (last visited Sept. 26, 2017) ("The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone.").

75. *See* Garnham, *supra* note 64, at 121 ("Just as Sen argues that people have different capacities to translate a given food bundle into nutrition and also have different nutritional requirements to reach the same level of functioning, so, too, in the field of communication it is the real availability of opportunities and the real achievement of functionings that matters.").

76. *See* Pereira Neto, *supra* note 10; Joseph Weiss, et al., *Affordable Broadband: Bridging the Global Digital Divide, A Social Justice Approach*, 49TH HAWAII INTERNAT'L CONF. ON SYSTEM SCIS. 3848 (2016); Garnham, *supra* note 64; Lievrouw & Farb, *supra* note 9.

77. *See* Pereira Neto, *supra* note 10, at 395 ("Human beings are inherently communicative creatures who express themselves and establish relations with others

While not in the same category as food and shelter, access to communications networks has become a basic capability for all but the most isolated individuals in America today.[78] Communications networks are thus an end in themselves, but they are also a means. Many important functionings—access to local and national news, engagement with government agencies, doing schoolwork, looking for and performing a job, etc.—are either much easier to achieve, or only possible to achieve today through broadband connectivity.[79]

When the concept of universal service as a policy goal was developed in the first half of the twentieth century, it was aspirational—a substantial percentage of homes, and significant majorities outside of urban and suburban areas, had no telephone service.[80] As of 2016, less than three percent of American households report that they lack a telephone,[81] and the real number is probably smaller due to widespread adoption of mobile phones. However, ten percent of homes lacked broadband service,[82] which the FCC currently defines as at least 25 megabits per second downstream and three megabits per second upstream.[83] The universal service challenge is thus increasingly one of equity—what level of capabilities should be provided to everyone? In *Capabilities Approach* terms, this doesn't mean what services, speeds, or price points should be available.[84] Service availability is a means, not an end.

Because people do not convert opportunities into functionings at the same rate, focusing too much on service availability may paint a misleading picture. As Nicholas Garnham writes, when considering goals of communications policy "what the capability approach highlights is that access is not enough."[85] There has already been, in recent years, a significant reorientation toward broadband adoption

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through utterances that are transmitted and stored in different media. . . . This ability itself can be considered an important functioning. . . .").

78. *See id.* at 402 ("[D]eprivation of access to these [ICT] technologies may generate substantial inequality in the freedom that individuals enjoy to lead their lives, deepening what Sen calls 'capability poverty.'").

79. *See id.* at 397 ("[B]eyond the impact on basic capabilities, access to ICTs enhances some core instrumental capabilities identified by Sen.").

80. *See* MUELLER, *supra* note 19, at 146 (noting that in 1920, only thirty percent of households had telephones).

81. *See Universal Service Monitoring Report*, CC Dkt. No. 96-45, WC Dkt. Nos. 02-6, 02-60, 06-122, 10-90, 11-42, 13-184, 14-58 (2016), *available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-343025A1.pdf [https://perma.cc/8GUA-LPEN].

82. *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Dkt. No. 15-191, 2016 Broadband Progress Report, 31 FCC Rcd. 699 (2016).

83. *See* Kurtis Lee, *FCC Votes to Define Broadband as 25 Megabits Per Second or Higher*, L.A. TIMES (Jan. 29, 2015, 11:06 AM), http://www.latimes.com/business/technology/la-fi-tn-fcc-broadband-definition-internet-service-20150129-story.html [https://perma.cc/X9YV-XAK7].

84. *See* Lievrouw & Farb, *supra* note 9, at 514 ("Information resources are valuable only insofar as they are meaningful or useful to the people who have access to them.").

85. *See* Garnham, *supra* note 64, at 121.

programs and removal of other barriers beyond cost and availability of services.[86] That should continue. Research suggests that nearly half of those who do not subscribe to broadband fail to do so for reasons other than price.[87] Some users will not subscribe to broadband even if it is available at highly subsidized rates.[88] Digital literacy programs and other adoption initiatives seek to close this gap.[89]

One way the *Capabilities Approach* helps in such situations is that it indicates users choosing not to subscribe to broadband does not mean it is not useful. The question is not just, in traditional economic terms, how people show their preferences through their purchasing decisions. It is whether those preferences in fact reflect a real freedom to achieve desired functionings. Are people not subscribing to broadband because they truly do not want the things broadband might allow them to be and do? Are they not subscribing because they are not aware of those opportunities? Or because they feel they must use the money to achieve other more important functionings? If broadband is increasingly a basic capability in American society, a forced choice between it and other essential functionings is not a legitimate choice.

Yet even adoption is only a means. The ultimate question is not whether people subscribe to broadband, but what they do with it. In some cases, those subscribing to lower-speed services, or even no broadband at all, might achieve similar functionings in some areas. An avid print newspaper reader may be a more informed citizen than someone who subscribes to gigabit broadband but uses it only to stream movies and shop. A good local doctor may offer better care for many ailments than a fancy telemedicine system. A local bowling league may provide richer communal connections, and associated networking and self-esteem benefits, than a cutting-edge social networking application. This is not to say that broadband is useless to achieve such functionings. It is one way to achieve them, which may be more or less effective.

Rather than defining a desired set of services or technical parameters—access to broadband at over a certain speed threshold,

86. *See* NAT'L TELECOMMS. AND INFO. ADMIN., BROADBAND OPPORTUNITY COUNCIL REPORT AND RECOMMENDATIONS (Sept. 21, 2015), https://www.ntia.doc.gov/files/ntia/publications/broadband_opportunity_council_report_final.pdf [https://perma.cc/U6KZ-NP29] (describing a variety of existing and potential initiatives by various federal agencies to promote broadband adoption).

87. *See* John B. Horrigan & Maeve Duggan, *Home Broadband 2015*, PEW RESEARCH CTR. (Dec. 21, 2015), http://www.pewinternet.org/2015/12/21/home-broadband-2015 [https://perma.cc/ZX4V-QTB8] (finding that only 33% of those without broadband surveyed identified cost as the primary reason for not subscribing); *FCC 2016 Lifeline Modernization Order*, WC Dkt. Nos. 11-42, 09-197, 10-90, Third Report & Order, 31 FCC Rcd., para 380 (2016) ("We nonetheless recognize . . . that there are multiple barriers to digital inclusion among low-income consumers. Notably, lack of digital literacy and perceived relevance are significant non-price barriers.").

88. *See* Horrigan & Duggan, *supra* note 87.

89. *See* NATIONAL BROADBAND PLAN, *supra* note 58, at 169–70.

for example—a capabilities-oriented policy would start with a desired set of beings and doings. What exactly is broadband *for*?[90] The FCC engaged in something roughly along these lines in the National Broadband Plan, under the heading of "National Purposes."[91] The National Digital Inclusion Alliance's definition of digital equity, cited earlier, is consistent with this approach. It frames the issue in terms of "capacity needed for full participation in our society, democracy and economy," rather than ubiquity of access or a particular service threshold.[92] The FCC Office of Consumer and Governmental Affairs adopted this definition in its January 2017 digital inclusion report.[93]

Clearly, broadband is a tool for achieving significant human functionings.[94] But what specific capabilities are important as a matter of public policy? For Sen, these should be determined through a process of social consensus. The FCC could, for example, engage in a consultative process, including both administrative rulemaking and direct engagement with local communities, to identify the essential functionings. This would help address another problem: some non-subscribers today simply do not see the benefits of broadband service.[95] Shifting the focus from broadband as an abstract concept or technology to something that addresses concrete needs in daily life should raise awareness of its benefits.

Nussbaum's list of "central capabilities" offers a starting point.[96] Her framework is a general one, but many of her ten elements can be mapped to communications-related functionings. These include bodily health (access to healthcare resources), thought and practical reason (access to public information resources and an education), and political engagement.[97] Similarly, the National Broadband Plan identifies seven "national purposes" to be achieved through broadband: health care, education, energy and the environment, economic opportunity, government performance, civic engagement, and public safety.[98] These provide an excellent starting point, although several of these are less relevant or different when considered from the individual perspective, versus as government

90. *Cf.* Susan P. Crawford, *The Internet and the Project of Communications Law*, 55 UCLA L. REV. 359, 386 n. 125 (2007) (referencing Sen's work).

91. *See* NATIONAL BROADBAND PLAN, *supra* note 58, at 191–94.

92. *See* NAT'L DIG. INCLUSION ALL., *supra* note 11. Other authors describe information equity in similar terms. *See, e.g.*, Lievrouw & Farb, *supra* note 9, at 503 (defining "information equity" as ensuring, "people have the opportunity to achieve whatever is important or meaningful to them in their lives").

93. Strategies and Recommendations for Promoting Digital Inclusion, *supra* note 18, at 4.

94. *See* Weiss et al., *supra* note 76, at 3849 (referring to "primary goods," which Sen in his later work re-labeled in terms of basic capabilities).

95. *See* Horrigan & Duggan, *supra* note 87.

96. *See* NUSSBAUM, *supra* note 70, at 33–34.

97. *See id.*

98. *See* NATIONAL BROADBAND PLAN, *supra* note 58, at 197–330.

policy goals. Pruning and reorganizing the list, a conception of baseline capabilities that a communications equity approach could support might include the following five areas:

1. Healthcare. Communications policy should be designed to give every American the information needed to make informed healthcare decisions. Beyond that, Americans should have access to the services required for health insurance policies under the Affordable Care Act (ACA). Where the appropriate healthcare providers are not readily available, or the individuals do not have insurance coverage, the goal should be to offer online services (e.g. telemedicine, remote consultations, health analytics systems) that provide the closest possible level of care.
2. Education. Broadband connectivity is increasingly important for children in school, either for completion of assignments or for access to supplemental resources such as Khan Academy. For adults, it can be used for lifelong learning, job training, and online degree-granting education.
3. Work. The internet is increasingly important as a tool to find and apply for job opportunities, as well as to perform paying work. The increasing prominence of gig economy firms such as Uber, Lyft, and TaskRabbit, for which a smartphone is the essential tool for workers, reinforces the significance of broadband to economic opportunity.
4. Public services. All Americans should be able to interact online with local, state, and federal government agencies. These interactions should in particular include public assistance programs for those who qualify.
5. Informed citizenship. All citizens should be able to read, listen to, and view a variety of high-quality news resources, receive public information (such as emergency weather alerts), and participate effectively in civic activities such as voting.

These are just starting points, but they suggest how a new focus on broadband-derived capabilities could be constructed. One of the benefits of the Capabilities Approach is that it reorients measurement—which drives decision-making—away from metrics that may be easier to track but are less useful for achieving the desired goals. For example, the UN Human Development Index combines life expectancy, years of schooling, and a logarithmic scale of income per capita[99] in order to create a rough measure of human

99. The log scale reflects the fact that the value of incremental income decreases as income increases. Ten dollars might be the difference between starvation and a viable life for someone desperately poor, but an additional thousand dollars would have no effect on

development.[100] Aid programs and other initiatives are pegged to this index. In the U.S. broadband context, availability and adoption of service are the only measures widely used by policy-makers. Constructing an index reflecting the five baseline capabilities described above might not be easy, but the effort alone would focus energy on important problems. As a true broadband development index is developed and refined, it could guide future decision-making by both government and the private sector.

C. User Control

A second important implication of a *Capabilities Approach* to communications policy is significantly greater emphasis on user control. What providers offer is important—customers cannot choose what they have no ability to access—but it is not the only thing that matters. Recall, the philosophical grounding of Sen's approach is not fairness or justice, as with liberal political theorists such as John Rawls, but freedom.[101] The more power individuals have to shape their own lives, and to achieve the goals they choose, the better off they are. In communications policy, such an orientation suggests a redoubling of focus on user fairness.[102] Provider and burden fairness are still important, but they are best understood as elements of FCC innovation and competition policy, rather than digital equity policy.

The FCC's 2015 Open Internet Order illustrates the distinction. The Order prohibited broadband access providers from engaging in certain business practices, including blocking, discriminating, or throttling traffic and engaging in paid prioritization.[103] However, it also included measures based on user empowerment. It stated that "practices that favor end-user control and empower meaningful consumer choice are more likely to satisfy the no-unreasonable interference/disadvantage standard than those that do not."[104] It also included enhanced transparency requirements so that users or intermediaries can ascertain more accurately what broadband providers are offering and how they manage their networks.[105]

Perhaps most significantly, the order stated that zero-rating (exempting certain traffic from data caps or other limits) would be evaluated case-by-case and not banned preemptively like paid prioritization.[106] Zero-rating programs do not differentiate among content providers based on performance, unlike paid prioritization or

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the lifestyle of a middle-class American. This adjustment is consistent with the Capabilities Approach focus on outcomes (here, human flourishing), rather than means.

100. *See Human Development Index*, *supra* note 74.
101. *See supra* text accompanying note 65.
102. *See supra* Part II.A.
103. *See* 2015 Open Internet Order, *supra* note 53, at paras. 14–19.
104. *See id.* at para. 139.
105. *See id.* at paras. 23–24
106. *See id.* at para. 152.

discriminatory throttling. However, they create a potential price difference between content providers if users are concerned about exceeding their data cap.[107] Yet, then-FCC Chairman Tom Wheeler's initial reaction to Binge On was that the program was "pro-competition" and "pro-innovation."[108] A key reason for the distinction is the issue of user control. When T-Mobile announced Binge On, a zero-rating offering for mobile video services, one important aspect was that users could opt out of the system.[109] In other words, those who considered high-resolution video streaming more important than a larger data cap for their desired capabilities could make that tradeoff.[110]

One of the arguments for allowing broader use of zero-rating is that it can make broadband connectivity more affordable for those who do not currently subscribe. In particular, companies such as Facebook and Google offer free internet services in the developing world that provide access only to a limited set of content sources.[111] These offerings are controversial—Facebook's Free Basics service has been blocked in India by the telecom regulator over network neutrality concerns.[112] Arguably, services that give users more connectivity options should be allowed as a means of enhancing capabilities, even if those services impose significant limitations.[113]

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107. *See* Susan Crawford, *Less Than Zero*, WIRED (Jan. 7, 2015, 12:00 AM), https://www.wired.com/2015/01/less-than-zero/#.4s3vpsbno [https://perma.cc/6ZU4-5Z8P].

108. *See* Jon Brodkin, *T-Mobile's Data Cap Exemption for Video Gets FCC Chairman's Approval*, ARS TECHNICA (Nov. 19, 2015, 12:28 PM), https://arstechnica.com/?post_type=post&p=782083 [https://perma.cc/K5E5-A9MM]. The FCC did launch investigations of other zero-rating programs under Wheeler, and suggested they might be problematic under the Open Internet rules. Those investigations were closed down by new Chairman Ajit Pai following the 2016 election of a Republican Administration. *See* Aaron Pressman, *Trump's FCC Moving to Kill Probes of Zero Rating by AT&T and Verizon*, FORTUNE (Feb. 3, 2017), http://for.tn/2l0Y1hQ [https://perma.cc/H8BX-ZQ6S].

109. Cherlynn Low, *How to Turn Off T-Mobile's Binge On and Why You'd Want To*, TOM'S GUIDE (May 17, 2016, 11:07 AM), https://www.tomsguide.com/us/how-to-turn-off-bingeon,review-3330.html [https://perma.cc/F6JC-BFN4]. Furthermore, T-Mobile stated that any online content provider could participate in Binge On, with no extra fees, so long as it adhered to certain technical requirements. This alleviated concerns about provider equity, based on T-Mobile's ability to pick and choose whose content was delivered through Binge On.

110. In its original configuration, Binge On limited video streaming to Standard Definition quality.

111. *See* Kevin Fitchard, *Report: Google Following Facebook Down the Zero-Rate Rabbit Hole*, GIGAOM (Feb. 13, 2015, 12:38 PM), https://gigaom.com/2015/02/13/report-google-following-facebook-down-the-zero-rate-rabbit-hole/ [https://perma.cc/E2WD-5F9F].

112. *See* Jessi Hempel, *India Bans Facebook's Basics App to Support Net Neutrality*, WIRED (Feb. 8, 2016, 12:52 PM), https://www.wired.com/2016/02/facebooks-free-basics-app-is-now-banned-in-india/ [https://perma.cc/57YH-M7MT].

113. *See* BJ Ard, *Beyond Neutrality: How Zero Rating Can (Sometimes) Advance User Choice, Innovation, and Democratic Participation*, 75 MD. L. REV. 984, 985 (2016) (arguing that zero-rating could help to enhance capabilities); Darrell M. West, *Digital Divide: Improving Internet Access in the Developing World Through Affordable Services and Diverse Content*, CTR. FOR TECH. INNOVATION (Feb. 2015), https://www.brookings.edu/wp-content/uploads/2016/06/West_Internet-Access.pdf [https://perma.cc/5Q25-QTQA]. *But see* Pedro Henrique Soares Ramos, *Towards a Developmental Framework for Net Neutrality: The Rise of Sponsored Data Plans in Developing Countries*, 2014 TPRC CONF. PAPER (claiming that zero-rating in the developing world would have negative impacts on development).

However, a critical aspect of the *Capabilities Approach* is that people must have real freedom to achieve the functionings they have reason to desire. If zero-rating services merely give certain users "something rather than nothing," but deprive them of meaningful opportunities to obtain the full-fledged connectivity that mainstream users take for granted, they would actually run counter to the goals of a capabilities-focused orientation. This assessment will be contextual, based on the desired functionings and resources of the affected population. The zero-rating service itself might offer sufficient opportunities. Facebook's offering, for example, was open to any content service meeting certain technical requirements, although there were concerns raised about the limitations it imposed. In other cases, there might be alternative paid services available.

Thus, a capabilities approach to communications equity would not reject zero-rating (or other approaches such as paid prioritization and specialized services) out of hand. Yet neither would it automatically accept them. The question would be whether the ability to access the full array of internet content and services, without limitations, is necessary to achieve a socially desired level of functionings. And under a capabilities orientation, market forces alone would not be a sufficient justification for contested practices.

CONCLUSION

A capabilities approach to communications equity would help give direction to an important area of FCC policy-making that currently suffers from confusion about its mission and success criteria. Michael Powell's "Mercedes gap" haunts communications policy to this day. Powell's phrasing may have been impolitic, but he was right to focus attention on the "why" and "what" of digital divide responses, not just the "how." If we are to, as Powell himself endorsed, "eliminate barriers in every segment of the population and its geography,"[114] that effort should be rooted in desired human functionings. The good news is that, as technology pushes costs down and performance up, ubiquitous access to networked connectivity becomes increasingly feasible. The bad news is that the importance of networked connectivity increases at the same time. A vision of universal and equitable provision of communications services has long been a touchstone for the FCC. A capabilities orientation could help to update it for the current era.

114. *See* Labaton, *supra* note 12.