Netflix Nations

The Geography of Digital Distribution

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What Is Netflix?

In the introduction to their book *YouTube: Online Video and Participatory Culture* (2009), Jean Burgess and Joshua Green make an important point about the challenges of studying emergent digital media. For Burgess and Green, one of the most interesting and difficult things about writing a book on YouTube was the fact that it was still evolving. Late in the last decade, YouTube had a chameleonic character: it was a "distribution platform that can make the products of commercial media widely popular" while at the same time being "a platform for user-created content where challenges to commercial popular culture might emerge" (Burgess and Green 2009, 6). Its creators, investors, and users—not to mention media academics—had yet to agree on what YouTube actually *was*, meaning that there was still much uncertainty over what the platform could be used for, how it should be regulated, and how it could be understood in relation to other media. Burgess and Green argue that

> because there is not yet a shared understanding of YouTube's common culture, each scholarly approach to understanding how YouTube works must make different choices among these interpretations, in effect recreating it as a different object each time—at this early stage of research, each study of YouTube gives us a different understanding of what YouTube actually *is*. (6–7, emphasis in original)

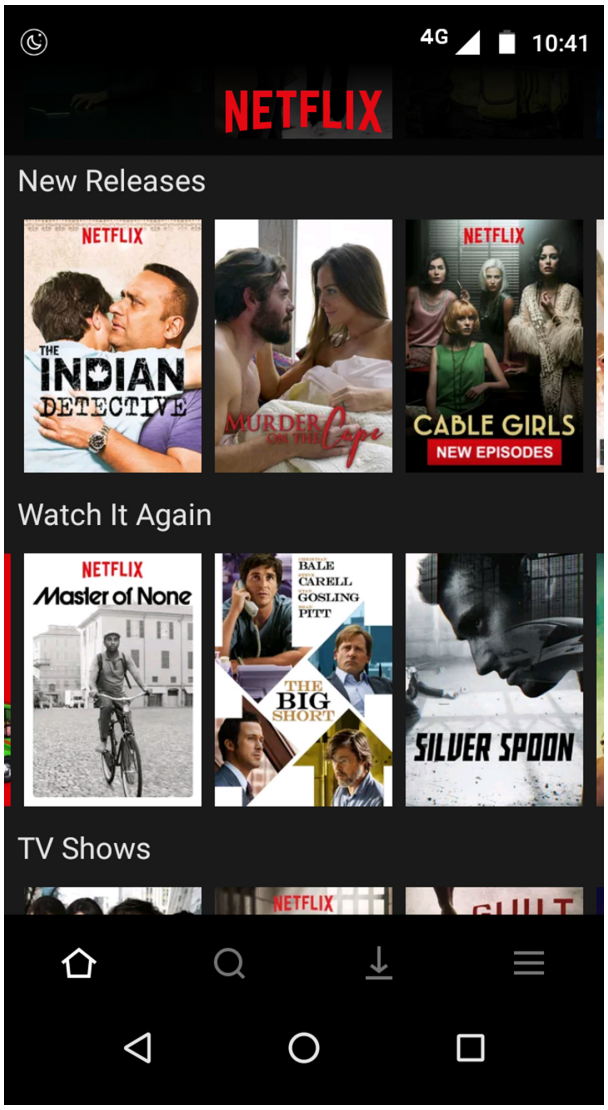

Figure 1.1. Netflix mobile interface, as of January 2018. Screenshot by the author.

This basic ontological problem (what is a digital media service, and how do we interpret and theorize it?) applies to a range of phenomena that exist at the boundaries of television, cinema, and digital media. Scholars studying Netflix must therefore make certain choices about what kind of service it is and what the appropriate frames of analysis should be. These decisions work to re-create the object anew each time by opening up or closing off lines of comparison.

While Netflix is an established global brand with 20 years of history, there is still very little agreement about what Netflix *is* or how it should be understood by the public, scholars, or media regulators. Netflix—like many disruptive media phenomena before it, including radio and broadcast television—is a boundary object that exists between, and inevitably problematizes, the conceptual categories used to think about media. This definitional tension can be seen in the marketing slogans Netflix uses to describe itself, which reflect evolution in both the company's distribution model and its discursive positioning in relation to other media. Presently, Netflix defines itself as a "global internet TV network," but in the past it has preferred terms such as "the world's largest online DVD rental service" (2002), "the world's largest online movie rental service" (2009), and "the world's leading Internet subscription service for enjoying TV shows and movies" (2011).[1] Others have referred to Netflix as "a renegade player in the television game" (Farr 2016, 164), "a pioneer straddling the intersection where Big Data and entertainment media intersect" (Leonard 2013), a "monster that's eating Hollywood" (Flint and Ramachandran 2017), and even "a company that's trying to take over the world" (FX CEO John Landgraf, cited in Lev-Ram 2016). Other possible responses to the question "what is Netflix?" might include

- a video platform,
- a distributor,
- a television network,
- a global media corporation,
- a technology company,
- a software system,
- a big-data business,
- a cultural gatekeeper,
- a lifestyle brand,
- a mode of spectatorship, or
- a ritual.

Clearly, Netflix means different things to different people. Part of the issue here is that there are a number of incompatible interpretive frames in use. Each frame brings with it a set of assumptions and

invokes a particular history of industrial and technological evolution. As we move through these various descriptors, Netflix's location within industry sectors also seems to shift around—between the television, video, technology, internet, digital media, entertainment, and information industries. The conceptual frameworks we use to understand Netflix are important because they shape the kind of thinking we bring to the analysis. Consequently, these frameworks require some critical reflection.

This chapter traces out two different analytical perspectives that can be applied to Netflix and in so doing critically synthesizes two related fields of scholarly literature. The first of these can be found within television studies, in the form of research on TV's digital and postbroadcast transformations. The second comes from outside television studies, via new media theory, internet studies, and platform studies. As I will argue, it is helpful to move between and across these two ways of knowing so as to avoid the intellectual lock-in effects that result from following one line of thinking too closely. For example, if we study Netflix in terms of its similarities to and differences from television, we can miss its connections to other digital media. Similarly, focusing exclusively on the software dimension obscures Netflix's structural relationships with established screen industries. We need to be aware of the natural pull of particular ways of thinking and what they reveal and obscure when applied to different kinds of media objects.

Television Studies and the Future-of-TV Debate

Today, the academic field of television studies is in a state of flux as it undergoes another round of self-reflection. In recent years, a rich corpus of postconvergence research and theory has emerged to explore how digital technologies of various kinds have variously transformed, extended, and sustained existing television industries. This literature asks questions such as: What is television now? What might it become? Is what we used to call the "idiot box" dead, dormant, or as dominant as ever? In the age of televisual "expansion and overflow" (Gray 2009, 85, citing Brooker 2001), where do the

boundaries around a medium, a distribution system, or an individual text lie?

Questions such as these have been carefully examined by scholars, including William Uricchio, Milly Buonanno, Chuck Tryon, Amanda Lotz, Lynn Spigel, and Graeme Turner, among others. A number of influential anthologies have appeared, including *Television after TV: Essays on a Medium in Transition* (Spigel and Olsson 2004), *Television Studies after TV* (Turner and Tay 2009), *Television as Digital Media* (Bennett and Strange 2011), and *After the Break* (de Valck and Teurlings 2013), as well as numerous monographs and trade books. Television studies journals, including *Television and New Media*, *Flow*, and *View*, have played host to vibrant debates about these issues. A wider body of technical and policy literature also exists, much of it authored by telecommunications experts; for example, Columbia University media economist Eli Noam has been writing about internet-distributed television since the 1990s, before it was of mainstream interest to media scholars.

Broadly, this literature maps an ongoing but uneven set of transitions in the history of television that are collectively working to transform it from a mass medium to a niche one through technological and institutional developments that "fragment the previously mass audience of television into a series of personalized choices" (Bennett 2011, 2). Kelsey (2010, 231) writes that, "We don't just watch TV, we send and receive it, gather and organize it on our personal touch screens, meanwhile interacting with sites to produce, wittingly or not, the consumer feedback that helps broadcasters determine a season's programming (if TV still even thinks in terms of seasons)." Tryon (2013, 14) argues that "contemporary media platforms actively solicit an individualized, fragmented, and empowered media consumer, one who has greater control over when, where, and how she watches movies and television shows," warning that "this offer of liberation from the viewing schedule is often accompanied by increased surveillance." In response to these shifts, alternative periodizations of television technology are also emerging. Some experts now refer to TVI (broadcast only), TVII (cable era), and TVIII (digital distribution), terms that draw our attention to the

successive waves of transformation that have swept through television technology and the television industry (Todreas 1999; Pearson 2011; Johnson 2007).

The work of U.S. television scholar Amanda Lotz offers a richly textured account of these transformations. Across a number of books —especially the second edition of *The Television Will Be Revolutionized* (2014), *Portals: A Treatise on Internet-Distributed Television* (2017a), and *We Now Disrupt This Broadcast* (2017b)—Lotz provides a forensic examination of the changes in the underlying economic models of television when it moves online, and how these models shape programming, production, and circulation. Lotz begins by explaining how the fundamental logic of television has been predicated on linearity: "Almost all the conventions of television—a flow of content, program length, expectations of weekly episodes—derive from practices developed to cope with the necessity of the linear schedule" (Lotz 2017a, 15). In contrast, the on-demand character of internet-distributed television, and its precedents in earlier on-demand services (such as pay-per-view movies delivered by cable), presents a different mode of distribution that has more in common with the record store, bookstore, or library. In this way, internet-distributed television "allow[s] behaviors that were peripheral in an age of analog, physical media such as time shifting, self-curation, and à la carte access to become central and industrialized practices" (17).

Lotz sees Netflix as a central part of this story, not only because the company "disrupted the long acculturated sense that television content should be viewed on a television set" (Lotz 2014, 71) but also because it introduced new kinds of filtering, aggregation, and recommendation systems that have since become widespread. She points to the Netflix Queue (now called a List) as a key site through which users negotiated the shift to nonlinear television, noting that "the queuing that Netflix introduced provided its subscribers with a different paradigm for thinking about and organizing viewing behavior, and one that substantially challenges the long dominant, linear, 'what's on' proposition" (74). In other words, Lotz regards the online distribution of content as highly significant because it marks a transformation in the underlying structure and business models of

television by freeing content from a linear schedule and by introducing new pricing models (including all-you-can-stream subscription packages) and audience expectations about the content, novelty, and value of TV services. As she writes, "The affordance of internet protocol technologies to deliver personally-selected content from an industrially curated library is the central difference introduced by this new distribution mechanism" (Lotz 2017a, 4).

Within the various contributions to the future-of-TV debate, we can see different degrees of emphasis on change as opposed to continuity. Lotz foregrounds the transformative dimensions of internet distribution in her work, while other scholars focus on the continuities. In this second category, we often find the work of media historians, who are—by training and temperament—ambivalent about diagnoses of radical change. William Uricchio, for example, stresses that notions of personal TV and interactive TV go back much further than the internet era and can be traced right through the history of the medium, with precursor concepts to be found throughout the twentieth century:

> Television offers a striking case where both the technological platform and its deployment protocols have shifted radically and more or less continually since the late 19th Century. We've seen the project of the televisual ally itself with platforms such as the telephone, radio, film, and networked computer; and we've seen its protocols include person-to-person communication, entertainment and news, surveillance, telepresence and so on (not to mention legal and regulatory rule sets). (Uricchio, forthcoming, 11)

Uricchio reminds us that if we wish to understand the future of television we do not have to start with the internet. Instead, we can look back to early video game technologies, the introduction of cable and satellite systems, the VCR and TiVo, and even the remote control —all of which have contributed in different ways to television's personalized, postbroadcast present by variously expanding the range of content available, increasing viewer control over the flow of images, and introducing elements of interactivity (Wasser 2002; Boddy 2004; Uricchio 2004; Thomas 2008). Following Uricchio, we

can look back even further, to a range of visionary early twentieth-century experimental television technologies that prefigured "what in today's terms might be understood as Skype, surveillance video, large screen public display, and domestic news and entertainment" (Uricchio 2004, 7–8). This is why many scholars who use terms such as postbroadcast and postnetwork are careful to emphasize that they signify not epochal change (from X to Y) but rather the sedimented layering of different technologies, systems, institutions, and viewing cultures, such that cable, satellite, internet, and mobile technologies coexist with and are structurally integrated into broadcast television (Turner and Tay 2009; Parks 2004; Lotz 2014).

A second lesson from this literature is that we should not write off the institutional power of television just yet. Toby Miller lucidly argues that television as an industry sector is far from dead—and anyone who claims otherwise is likely to be proven wrong by history. Miller is highly critical of the death-of-TV discourse and mocks the assumption that "the grand organizer of daily life over half a century has lost its pride of place in the physical layout of the home and the daily order of drama and data" (Miller 2010, 11). Instead, he emphasizes the industrial continuities (especially in production and advertising) that persist into the internet age. Miller offers a series of counterarguments in response, noting that a lot of internet media is basically television; that television institutions are still structurally central to digital media markets; that broadcast television is still strong and important globally; that there are more TV stations opening up worldwide than ever before, especially in emerging economies; and that audience ratings suggest we are actually watching more television content than ever before (it is just distributed differently).

This is indicative of one response to the future-of-TV debates, which is to affirm the centrality and vitality of television institutions in the face of their digital dethronement. As Tim Wu (2015) reminds us, "Overestimating change in the television industry is a rookie mistake." A different formulation of the argument can be found in media business commentator Michael Wolff's book *Television Is the New Television* (2015). Setting out to destroy what he sees as the

Silicon Valley myth of television's disruption at the hands of the digital, Wolff argues that the recent history of media is better understood the other way around—that television has ultimately tamed and absorbed digital media. For Wolff, Netflix is a classic example of this reverse engineering of the digital. The service is much more television-like than internet-like, Wolff argues, because it shuns many of the interactive affordances of internet media in favor of established narrative structures, aesthetics, and experiences. In Wolff's account, as Netflix morphed from a DVD rental company to a digital studio, it actually moved closer to television by "bringing television programming and values and behavior—like passive watching—to heretofore interactive and computing-related screens" (Wolff 2015, 91). He adds:

> Other than being delivered via IP, Netflix had almost nothing to do with the conventions of digital media—in a sense it rejected them. It is not user generated, it is not social, it is not bite size, it is not free. It is in every way, except for its route into people's homes—and the differences here would soon get blurry—the same as television. It was old-fashioned, passive, narrative entertainment. (93–94)

In this argument, we can see a variation on the future-of-TV arguments: the idea that television has already shaped the future of digital media in its own image and will continue to exert influence on audience expectations and industrial norms. In Wolff's view, internet television services—while introducing all manner of new innovations—are likely to succeed only to the extent that they offer television-like experiences and a corresponding value proposition. In this sense, television is fated to live on both as a resilient industry sector and as an experiential gold standard that will shape audience expectations regarding content, no matter what transformations take place at the point of distribution.

For industry analysts, there is much at stake in predictions of industry change. For media scholars, the key issues are somewhat different and also require consideration of the agency of particular arguments about what television was, is, and might become. If we

follow Uricchio in thinking that television has never been ontologically or technologically stable but can only be *stabilized* to a greater or lesser degree, then the critical question for media scholarship becomes identifying the ways in which particular discourses of change and continuity operate to lend a "conceptual coherence" to a medium or technology at particular points in time (Uricchio, forthcoming, 7–8; Uricchio 2004). In other words, while we cannot predict the future of television in the internet age, we can try to understand how particular ways of thinking about that future might help to shape the way such a future—or range of futures—will play out.

For this reason, it is necessary for certain branches of media scholarship to become more self-reflexive about their own investment in the object of television as a discrete medium and in television studies as a discrete field of inquiry. As Lotz writes in *The Television Will Be Revolutionized*, "In many ways, HBO and Netflix are more alike because they are non-advertiser-supported subscription services than different because one comes in through cable and the other over broadband—a distinction I suspect will be technologically nebulous the next time I revisit this book" (Lotz 2014, xii). From the point of view of media studies, this raises questions about whether a platform such as Netflix *should* be studied as television and what is gained or lost in doing so. After all, most users of streaming services are still likely to think of professionally produced scripted content as television content, but they do not always watch it *on* the TV and perhaps do not care about whether it comes over the top, via cable, or over the airwaves. Nor may they be concerned about whether the analytical integrity of television-as-industry or television-as-medium has been compromised.

In a much-cited essay published more than a decade ago, Lynn Spigel asked, "What is to be gained from studying TV under the rubric of new media?" (Spigel 2005, 84). This question is still important, and largely unresolved, because it prompts us to think about what is revealed and obscured as one moves between ontological frameworks. One of the questions we need to think about is not whether the future of television is going to look more like the

internet or more like cable but rather whether emergent media forms should be understood in terms of their similarities to past media or through entirely new paradigms. The trick may be to build productively on past knowledge without letting existing frames of reference overdetermine objects of analysis. Academic disciplines are slow; they rely on the incremental accumulation of knowledge. In the case of television studies, it is neither useful nor desirable to throw out all this knowledge and deep thinking behind it every time a new distribution technology appears on the horizon (as has already happened with video, Tivo, mobile devices, and so on). But, at the same time, there are some risks in trying to assimilate a wide array of convergent and new phenomena into an existing paradigm, just as there are risks in taking the reflex position that we have seen it all before and that it is all still television. Even though we can trace many paths between past and present, we also need to acknowledge the differences and find ways to come to terms with them analytically. This need is especially acute when the everyday terminology may remain unchanged ("watching TV") but might refer to quite a different set of practices that are ontologically distinct from what that terminology referred to in the past.

In grappling with the conceptual problem of internet television, then, we need to be alert to diverse and sometimes contradictory effects. On the one hand, it is quite possible that nonlinear internet distribution will come to function primarily as simply another distribution channel for existing content or new content that still looks and feels like TV as we know it. Seen from this perspective, internet distribution can reasonably be understood as something that is easily assimilated into existing business models. But there are longer-range effects at work here, too, and not all of them can be predicted in advance. Over time, the nonlinear affordance of internet distribution is likely to lead to further specialization and expansion in content production, such that new texts may increasingly be designed for the experiential specificities of internet rather than broadcast or cable distribution. We can already start to see this with the kinds of quality dramas made explicitly for binge viewing, and in the proliferation of short-form web comedies that would not fit well into

a traditional schedule, not to mention the vast pool of amateur content on YouTube. This suggests that changes in distribution can have longer-term effects in other areas of the system, including production and reception. While we may still watch TV in familiar ways, in familiar spaces and formats, transformations are taking place that slowly recalibrate the whole system.

The question "is it still TV?" is problematic precisely because its framing invites a reductive "yes" or "no" answer that works to solidify a category (television) that may instead be better deconstructed, or at least reformulated. Cunningham and Silver (2013) argue that instead of asking whether new media has changed old media, and thus lapsing into familiar binaries of technological crisis versus continuity, we should focus instead on how to account for the *rate* of change, and the particular combinations of change and stasis that exist at any one time in the history of a medium. They reject both the "everything has changed" and "nothing has changed" positions as inadequate responses to the question of media industry transformation. Following this lead, we could also ask what other intellectual resources are available to us for thinking about the relationship between, rather than merely the "impact of," internet distribution vis-à-vis television.

An excellent model is provided by Thomas Elsaesser and Malte Hagener, who have worked through this problem in a different context. In their chapter "Digital Cinema and Film Theory—The Body Digital," they extrapolate Lev Manovich's idea of the *inside-out* to advance the argument that digitization can create simultaneous stasis and change, leading to their apparently paradoxical conclusion that, "With digital cinema everything remains the same and everything has changed" (Elsaesser and Hagener 2015, 202). What Elsaesser and Hagener mean by this is that there has been great change within the boundaries of an existing category such that the referent of the category itself is transformed and we are no longer talking about the same thing we thought we were talking about. Hence it is not so much a matter of tracing lines of continuity and change around a fixed axis but rather grappling with the "inside-out" ontological transformation of a medium.

Consider how Elsaesser and Hagener work through this paradox in relation to cinema. Their account insists that the social experience of cinema-going remains popular, durable, and powerful ("stars and genres are still the bait, concessions and merchandise provide additional or even core revenue for the exhibitor, and the audience is still offered a social experience along with a consumerist fantasy," 202). However, they also claim that the textual form of digitally shot cinema has been reorganized through digital production, such that the relationship between image and representation is now completely recast. Digital cinema now *produces the effect* of cinematic representation as just one of its potential applications. Hence there is not only a combination of stasis and change but also a series of internal changes that produce the same external appearance. This is change from the "inside out," such as when a parasite takes over its host, "leaving outer appearances intact but, in the meantime, hollowing out the foundations—technological as well as ontological—on which a certain medium or mode of representation was based" (204–205).

This is a compelling theory of technological change, a reminder that change and stasis not only coexist but can also envelop each other. Elsaesser and Hagener are referring to production techniques in the main. However, there is some parallel to distribution. The inside-out transformation of internet television allows the TV experience (the reception technology, domestic space, textual formats, and so on) to remain consistent with established norms while unfurling a substantive change on the inside—specifically, the inherent *nonlinearity* and *interactivity* of the digital video platform. Viewers pick and choose individual items from a database rather than watch what is "on" at any given time. There is no scheduled flow of programming (even though much of the licensed content offered on SVOD services was produced for such a schedule); there are only individual pieces of content within a database of offerings that can be consumed in any order, at any time, and that will often continue to play automatically thanks to the Netflix Post-Play feature (which automatically cues the next episode). Depending on how we evaluate such structural changes in distribution, this aspect of internet

television may indeed embody the same inside-out quality that Elsaesser and Hagener identify in digital cinema production.

As we can see from these various arguments, there are benefits and risks to seeing Netflix through the lens of television. Such a perspective opens our eyes to important continuities in the experience, production norms, and domestic context of moving-image entertainment, but it can also produce some analytical traps. This is why it is helpful to take a *both/and* approach, so we can approach our object from multiple perspectives simultaneously. As we have seen, Netflix may still feel like TV to viewers, and it relies on this familiar pleasure for its success, but its distributional logic is markedly different—technologically, economically, and structurally. It is too early to tell, of course, but we should at least entertain the possibility that the affordance of internet protocol distribution may well prove to be the parasite inside the host—the agent of change that ends up quietly overtaking the organism from the inside out—while still retaining its outward features.

Digital Media Studies and the Platform Perspective

Let us consider a second analytical approach and what it might bring to an understanding of Netflix. This second approach would consider Netflix as a *digital media service*—a computational, software-based system that can produce a television-like experience as just one of its potential applications. Following this line of thought—which in fact aligns with the historical origins of the company and the way it presents itself to investors and regulators, if not to users—we can start to see how Netflix fits in with a quite different set of debates that have been playing out in fields such as new media studies, internet studies, and platform studies. In this section, I explore some of the arguments relevant to Netflix that have emerged from these debates. This will push our analysis of Netflix in a direction different from where television studies might take us.

This second way of thinking is less concerned with understanding Netflix *in relation to* television, cinema, or any other form of screen media, however one defines it. In contrast, it sees Netflix as a

complex sociotechnical software system. It is more interested in looking sideways to other digital media, rather than backward to television, to assess similarities and differences. There is, then, a fundamental difference between a television studies approach and a digital media approach. The former is inherently historicizing; it sees its object in relation to a particular media technology (television) and its evolution. In contrast, the latter implicitly frames its object as a set of computational technologies tied together into a common user interface while also understanding each digital media service as a kind of communication system in its own right—with unique design, affordances, and limitations. This allows us to think about Netflix alongside a much wider range of *digital media*, including not only video platforms (YouTube, Youku, Hulu) but also e-commerce and social media networks (Facebook, Twitter, Ebay, Amazon, Weibo) as well as other software artifacts, such as electronic program guides (EPGs), gaming consoles, or desktop operating systems.

The term "platform" requires some explanation. In new media and internet studies, platforms are commonly defined as large-scale online systems premised on user interaction and user-generated content—including Facebook, Twitter, Medium, Snapchat, YouTube, Flickr, Grindr, and others. Platform studies, as it has become known, is a field of critical, empirical, and theoretical research concerned with these new institutions of the internet age and the specific ways in which they have been able to harness user communication and labor. It seeks to understand how platforms mediate and organize our daily interactions, asking what this means for communication practices, economies, and identities. Of course, Netflix is not a platform in the same way as social media services like Facebook or Twitter are. Netflix is not open, social, or collaborative. One cannot upload content to Netflix or design software applications to run within it. In this sense, it is fundamentally different from video sites containing both user-uploaded and professionally managed content (YouTube, Youku, etc.). Unlike these sites, Netflix does not (at this stage) have an advertising business model; nor does it have the character of a multisided marketplace like Amazon or Ebay, which host a more complicated ecology of commercial activity. Netflix is

closed, library-like, professional; a portal rather than a platform; a walled garden rather than an open marketplace. This said, we can still learn a lot *about* Netflix through platform studies perspectives.

Platform studies has evolved along two main lines. The first of these comes out of the work of Nick Montfort and Ian Bogost. In their book *Racing the Beam: The Atari Video Computer System* and related working papers—which are widely read in games studies, though less so in television studies—Montfort and Bogost outline a specific understanding of platforms and how they can be studied. They define a platform as the "hardware and software framework that supports other programs" (Bogost and Montfort 2009a, 1) and as "a computing system of any sort upon which further computing development can be done" (Bogost and Montfort 2009b, 2). They note that a "platform in its purest form is an abstraction, simply a standard or specification" (Bogost and Montfort 2009a, 1). Consequently, their vision of platform studies involves "investigating the relationships between the hardware and software design of standardized computing systems and the creative works produced on those platforms" (ibid.). Montfort and Bogost insist that researchers pay close attention to the materiality of the platform, including its design, construction, and even wiring, as well as to the platform's user-facing and symbolic dimensions. Their approach is better suited to gaming systems such as Atari and PlayStation than to online services like YouTube, Steam, or Netflix—though the material dimensions of the latter are also amenable to research and critique, as we will see in Chapter 3.

A second strand of thinking about platforms comes out of critical communications and internet research. The work of Tarleton Gillespie in particular draws our attention to the expanding range of everyday communication and consumption practices that take place within online platforms, especially social media networks. Gillespie defines platforms as "sites and services that host, organize, and circulate users' shared content" (Gillespie 2017, 254). His essay "The Politics of 'Platforms' " (Gillespie 2010) was an early critique of the way online services such as Facebook and YouTube strategically defined themselves as neutral intermediaries—as technology companies

rather than media companies—thus obscuring their power as mediators of communication, identity, and politics.[2]

A key theme in Gillespie's work is the agency of the platform itself. Far from being neutral, platforms shape the communications, interactions, and consumption that they facilitate—through interface design, moderation policies, terms of service, algorithmic recommendation, and so on. Consider the Facebook "Like" button and how it subtly institutes a norm of extroverted positivity as the default practice for online communications—there is no "Dislike" or "Don't Care" button—while at the same time generating valuable commercial data for Facebook by turning "personal data into … public connections" (van Dijck 2013, 49; Gerlitz and Helmond 2013). We should not, then, make the mistake of seeing a platform as a "neutral" distributor of content, because the nature, design, and business model of the platform will always have an effect on what passes through it. Platforms, according to Gillespie,

> have precise (and shifting) technical affordances that constrain and guide practice—both in their own design and in their fit with a myriad of infrastructures, including their back-end data systems, the protocols of the Web, and the dictates of mobile providers. They have rules and norms that bless some practices and are used to restrict others. They have myriad international, sometimes conflicting, legal obligations they must enforce. They have commercial aspirations and pressures that drive decisions about how they're marketed, how they're updated, and how they're positioned against their competitors. (Gillespie in Clark et al. 2014, 1447)

Following Gillespie's arguments, it is possible to see how Netflix—while certainly not a social media platform—exploits the same quality of discursive slipperiness as these other platforms. Netflix, like Facebook and YouTube, is presently engaged in a number of disputes with government agencies about how and whether it should censor its film and television content. In India, for example, Netflix claims that because it is an internet-delivered service rather than a broadcaster, it should not have to follow the obscenity policies that apply to Indian television stations (see Chapter 4). This is not all that

far from Uber's insistence that because it is a technology platform it should not have to follow the licensing and tax laws that apply to taxi companies, or Facebook's insistence that it is not a media company and therefore should not have to fully regulate the communications taking place through its networks. In each case, a service's digital status is invoked to sidestep regulatory responsibilities.

Even though these three companies operate in very different markets (transport, communications/advertising, and scripted entertainment), they have a common operational logic that hinges on their status as a digital service that is (a) categorically dissimilar to the established incumbents they now compete with and (b) operating in global markets from a U.S. base, partially outside the jurisdictional reach of national governments. Following this logic, and notwithstanding the lines of historical evolution between Netflix and television traced in the previous section, one can also argue that these structural similarities with other digital services place Netflix within the platform economy as much as within the entertainment industries.

Another common characteristic of digital media platforms is a reliance on algorithmic recommendations. Along with Amazon and Pandora, Netflix has played a pivotal role in the development and popularization of recommendations generally, having invested heavily in this area since its years as a DVD rental service. The company famously ran an open engineering competition, the US$1 million Netflix Prize of 2006–2009, to improve its predictive powers by 10%. The fruits of these efforts have paid off in the form of its eerily accurate prediction engine, which seeks to, in Hastings's words, "get so good at suggestions that we're able to show you exactly the right film or TV show for your mood when you turn on Netflix" (*The Economist* 2017). On the Netflix home screen, algorithmic recommendations are used to autocurate selections of content geared around individual users' data profiles. Every video selection that appears on the home screen is the result of intricate calculations based on user-submitted data (movie ratings and viewing history), collaborative filtering (predictions based on other people's activities),

and manual coding of films for all conceivable metadata points, from character types to endings.

This naturally puts Netflix squarely in the middle of debates about the datafication of culture, filter bubbles, and big-data politics (Pariser 2011; boyd and Crawford 2012; Beer 2013). Its recommendation system has been accused of everything from unjustified consumer surveillance to the demise of the mass audience and the end of serendipity. Film scholars in particular have voiced concern about the way personalization leads to filter bubbles. In an essay on Netflix's "mathematization of taste," Neta Alexander (2016, 94) warns that "the rise of predictive personalization might be good news for the study of artificial intelligence and machine learning, but it is bad news for anyone who wishes to encounter what Sontag calls 'great films.' " We should, however, bear in mind that algorithms can be programmed for diversity as well as for taste reproduction (Blakley 2016).

The debate about Netflix's effect on taste and consumption continues to rage, though it is not a primary focus of this book. For our purposes, let us instead focus on the design of the Netflix interface and how this mediates relations between television, cinema, and digital media. The Netflix interface changes regularly but at the time of writing is organized into categories that are curated automatically from a list of thousands of potential options, including popular genres (romantic comedies) as well as hyperspecific microgenres (fight-the-system documentaries) (Madrigal 2014). This smorgasbord of content is arranged into celluloid-like strips of color that slide off the right-hand side of the page, suggesting an infinite variety of choices. In this way, the viewer is positioned as the sovereign navigator-user of an endless archive of screen content. Such design choices are carefully constructed to create the appearance of textual abundance and conceal limitations in what is a finite Netflix catalog.

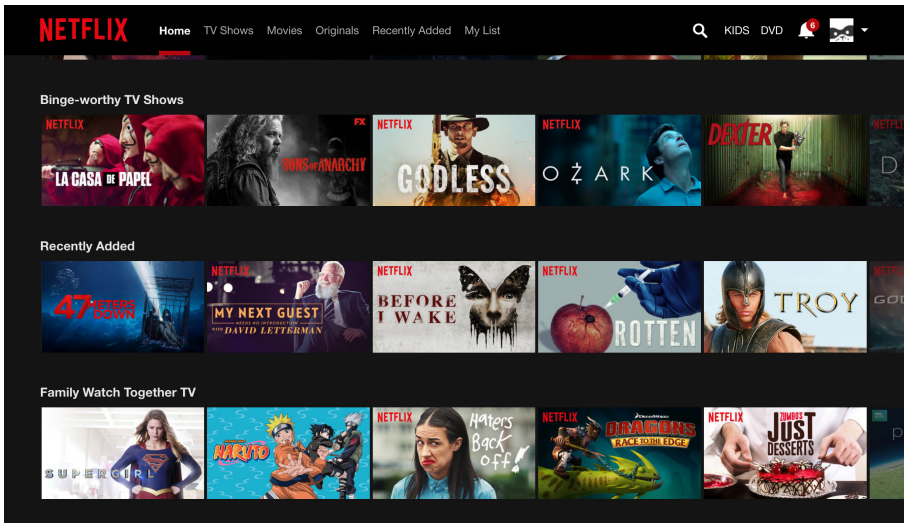

Figure 1.2. Netflix desktop interface, as of January 2018. The interface, designed in such a way as to conceal catalog limitations, suggests an endless bounty of content available to the user. Screenshot by the author.

Until 2015, the Netflix desktop interface had a light grey background. Video artwork was formatted in vertical, DVD-style boxes, so that the overall effect was reminiscent of a video store. Now, the background is dark—as in a movie theater—and the DVD covers have been rearranged into a horizontal format suggesting frames on a celluloid filmstrip. This site update seems designed not only to make the service as tablet-friendly as possible, hence the shift to the horizontal format, but also to discursively reposition the site within the pantheon of older media technologies by moving the idea of Netflix away from video-store and DVD culture—surely a fading memory for most of its users—and realigning the service with that most resilient medium, cinema. Interestingly, the iconography of television is nowhere to be found in Netflix's interface design, despite the abundance of TV series available through Netflix. There are no remote controls, advertisements, or schedules. Even though the idea of television is central to Netflix's commercial ambitions—recall Hastings's description of Netflix as "a new global Internet TV network"—the television experience does not seem to be central to how Netflix wishes its users to imagine streaming. Perhaps this is because of the degraded nature of the "idiot box," and Netflix's

related desire to market itself as a premium service. In any case, it is one of the ironies of internet television that its referent medium, television, is being simultaneously reimagined, integrated, erased, and remediated through the emergence of streaming services.

Toward a Synthesis

This brings us back to Netflix's relationship to screen media. As we have seen, Netflix is a shape-shifter: it combines elements of diverse media technologies and institutions. This has implications for the analytical frameworks we use in media research. The trick is not to take an either/or approach, trying to shoehorn Netflix into one box or another, but rather to see it as a media object that *performatively enacts* its association with these media at different times and for different purposes. In its dealings with government, Netflix claims to be a digital media service—certainly not television, which would attract unwelcome regulation. Yet, in its public relations, Netflix constantly refers to television, because of its familiarity to consumers. Its interface design, on the other hand, prefers to evoke the cinema experience. Meanwhile, its subscription business model has echoes of pay-TV, but its algorithmic recommendation system is pure new media. In other words, Netflix is a hybrid technology that remediates a range of earlier media technologies in different aspects of its operation, and this mix of associations is constantly changing.

The good news for television studies is that these issues are already quite familiar to scholars. Television is a hybrid medium that combines and rearranges elements of previous media forms, including radio, cinema, newspapers, and the theater. Equally, television studies—to the extent that it exists as a discrete academic field—has evolved as a historical amalgam of different critical approaches, research methods, and ways of knowing. Television studies is a malleable discipline, and this natural flexibility will be an asset as we enter further into an era of internet-distributed television services, which requires us to keep an open mind as to what exactly television *is* and how it might be studied. In this respect, Netflix is an important object lesson precisely because it invites us to revisit what

we think we know about television and to reconstitute that knowledge anew.

Arguably, what is more important than what we call Netflix is how we think about it. In this chapter, I have argued for a both/and perspective, suggesting that we should acknowledge the specificities of Netflix as a digital media service (such as its mode of interactivity, algorithmic filtering, and regulatory slipperiness) and what this means for its distribution function (its catalog structure, lack of capacity limitations, and nonlinearity) while also appreciating the continuities between Netflix and broadcast media, which are especially noticeable at the level of text, engagement, and experience (the "it's still TV" argument). It is not enough to treat Netflix just like any other digital platform, because this misses its specificity as a hybrid TV-cinema-digital media distribution system with a unique set of experiential and aesthetic connections to older media. Nor is it enough to wheel out the standard theories of television studies and apply them to Netflix. A better approach would be one that is literate in both screen and digital media studies and can move between these ways of knowing. The need for such an approach will become evident in the next two chapters, when we turn our attention to Netflix's distribution model and infrastructure.

NOTES

INTRODUCTION

1 The video of Hastings's presentation can be viewed at www.youtube.com/watch?v=l5R3E6jsICA.

2 This was the rule, but there were many exceptions—witness the spillover of broadcast signals across national borders, especially in Europe (discussed in more detail in Chapter 2).

3 YouTube fits in this category, too, but it is more properly described now as a hybrid site offering a subscription package (YouTube Premium), free videos, and paid transactional rentals.

4 The MAVISE database is available at mavise.obs.coe.int.

5 China Global Television Network (CGTN), formerly CCTV International, is China's 24-hour English news channel.

6 These policies were documented in a famous slideshow (available at www.slideshare.net/reed2001/culture-1798664) that has been viewed 17 million times and is now taught in management schools.

7 I refer here to Wagman and Barra's Cultures of Netflix panel at the 2016 ECREA (European Communications Research and Education Association) conference.

CHAPTER 1. WHAT IS NETFLIX?

1 This historical progression can be studied via the company's quarterly earnings releases since 2002, available at ir.netflix.com.

2 Think here of how Netflix wants to compete with international pay-TV services while simultaneously insisting that it should not be regulated like a media company—a topic we return to later.

CHAPTER 2. TRANSNATIONAL TELEVISION

1 An example is Time Warner CEO Steve Ross's 1990 speech praising the electronic media's capacity for "free flow of ideas, products and technologies in the spirit of fair competition" (cited in Morley and Robins 1995, 11).

2 Note the trajectory implied in the subtitle, which gives a clue as to Straubhaar's argument.

CHAPTER 3. THE INFRASTRUCTURES OF STREAMING

1 A note on sources: there is a considerable amount of technical material available online, as many of Netflix's engineers use open platforms such as YouTube, Slideshare, and Github to share internal information, as is common among tech circles. Useful sources include Netflix's Github repository (github.com/Netflix); the Netflix UI engineering, Netflix OSS, and Netflix Performance and Reliability Engineering channels on YouTube; and online videos from tech industry events where Netflix engineers regularly give keynote talks, such as AWS re:Invent. The Netflix Tech Blog is another rich resource, which gives a sense of how Netflix projects itself to the tech community at large.
2 There exist numerous lists of this kind (e.g., Jackson et al. 2007; Star and Ruhleder 1996) and many more studies that could be mentioned as exemplars. The list of terms and references here includes those I think are most useful for media and culture scholars.
3 Netflix CEO Reed Hastings is also well connected on the progressive side of U.S. politics and is a major donor to the Democratic Party.
4 In Africa, the most popular applications in terms of downstream internet traffic are YouTube (19%), general web browsing/HTTP (18%), Facebook (9%), and BitTorrent (8%) (Sandvine 2016b).
5 An AWS region includes various server locations within it, although it is difficult to pin down their geography with any accuracy. As a journalist from *The Atlantic* discovered when she tried to find out exactly where the AWS servers in Northern Virginia were located, "Unlike Google and Facebook, AWS doesn't aggressively brand or call attention to their data centers. They absolutely don't give tours, and their website offers only rough approximations of the locations of their data centers, which are divided into 'regions.' Within a region lies at minimum two 'availability zones' and within the availability zones there are a handful of data centers" (Burrington 2016).
6 Open Connect is for larger ISPs that have 100,000 users or more.

CHAPTER 4. MAKING GLOBAL MARKETS

1 Murdoch initially partnered with MTV, carrying MTV on his Star satellite service in Asia. He later broke off the agreement and developed his own clone service, Channel [V].
2 Individual broadcasters may use a combination of these strategies for different markets and combine country-specific channels with regional feeds