ANNALS OF COMMUNICATIONS

OUTSIDE THE BOX

Netflix and the future of television.

BY KEN AULETTA

In the spring of 2000, Reed Hastings, the C.E.O. of Netflix, hired a private plane and flew from San Jose to Dallas for a summit meeting with Blockbuster, the video-rental giant that had seventy-seven hundred stores worldwide handling mostly VCR tapes. Three years earlier, Hastings, then a thirty-six-year-old Silicon Valley engineer, had co-founded Netflix around a pair of emerging technologies: DVDs, and a Web site from which to order them. Now, for twenty dollars a month, the site's subscribers could rent an unlimited number of DVDs, one at a time, for as long as they wished; the disks arrived in the mail, in distinctive red envelopes. Eventually, Hastings was convinced, movies would be rented even more cheaply and conveniently by streaming them over the Internet, and popular films would always be in stock. But in 2000 Netflix had only about three hundred thousand subscribers and relied on the U.S. Postal Service to deliver its DVDs; the company was losing money. Hastings proposed an alliance.

"We offered to sell a forty-nine-percent stake and take the name Blockbuster.com," Hastings told me recently. "We'd be their online service." Hastings, now fifty-three, has a trimmed, graying goatee and a slow, soft voice. As he spoke, he was drinking Prosecco at an outdoor table at Nick's on Main, a favorite Italian restaurant of his, in Los Gatos, an affluent community in the foothills of the Santa Cruz Mountains. The sounds of Sinatra carried across the patio.

Blockbuster wasn't interested. The dot-com bubble had burst, and some film and television executives, like those in publishing and music, did not yet see a threat from digital media. Hastings flew home and set to work promoting Netflix to the public as the friendly rental underdog. By the time Blockbuster got around to offering its own online subscription service, in 2004, it was too late. "If they had launched two years earlier, they would have killed us," Hastings said. By 2005, Netflix had 4.2 million subscribers, and its membership was growing steadily. Hastings had rented a house outside Rome for a year with his wife, Patty Quillin, and two children and was commuting to his Silicon Valley office two weeks each month. Hollywood studios began offering the company more movies to rent; the licensing arrangements presented a new way to make money from their libraries and provided leverage against Blockbuster.

By 2007, when Netflix began streaming movies and TV shows directly to personal computers, it had all but won the rental war. Last November, Blockbuster said that it was going out of business; the previous month, Netflix had announced that it had thirty-one million subscribers in the United States, three million more than HBO, and that its stock was at an all-time high. In 2013, it launched an original-programming series, "House of Cards," which became a critical hit. During peak hours, Netflix accounts for more than thirty per cent of all Internet down-streaming traffic in North America, nearly twice that of YouTube, its closest competitor. The Netflix Web site describes the company as "the world's leading Internet television network."

Hastings has succeeded, in large part, by taking advantage of what he calls viewers' "managed dissatisfaction" with traditional television: each hour of programming is crammed with about twenty minutes of commercials and promotional messages for other shows. Netflix carries no commercials; its revenue derives entirely from subscription fees. Viewers are happy to pay a set fee, now eight dollars a month, in order to watch, uninterrupted, their choice of films or shows, whenever they want, on whatever device they want. "Think of it as entertainment that's more like books," Hastings said. "You get to control and watch, and you get to do all the chapters of a book at the same time, because you have all the episodes."

Television is undergoing a digital revolution. Last autumn, in the company's annual "Long-Term View" report to shareholders, Netflix argued that "the linear TV experience," with its programs offered at set times, "is ripe for replacement." Hastings told me, "We are to cable networks as cable networks were to broadcast networks." But Netflix is just one of many contenders. "It's like little termites eating away," Jason Hirschhorn, an Internet entrepreneur and a former Viacom executive, told me. "I don't think the incumbents are insecure enough."

In the early days, television was both a box and the black-and-white world that issued from it: quiz shows, soaps, Ed Sullivan, Edward R. Murrow, "I Love Lucy." Until the nineteen-eighties, the vast majority of the shows were commissioned and carried by ABC, CBS, and NBC, which started out as radio networks and were granted television licenses by the F.C.C., with the expectation that they broadcast at no charge to viewers. Audiences were rapt, and broadcasters made money by selling spots to advertisers.

Today, the audience for the broadcast networks is a third what it was in the late seventies, lost to a proliferating array of viewing options. First came cable-television networks, which delivered HBO, ESPN, CNN, Nickelodeon, and dozens of other channels through a coaxial cable. Cable operators and networks charged monthly fees and sold ads, and even commercial-free premium networks such as

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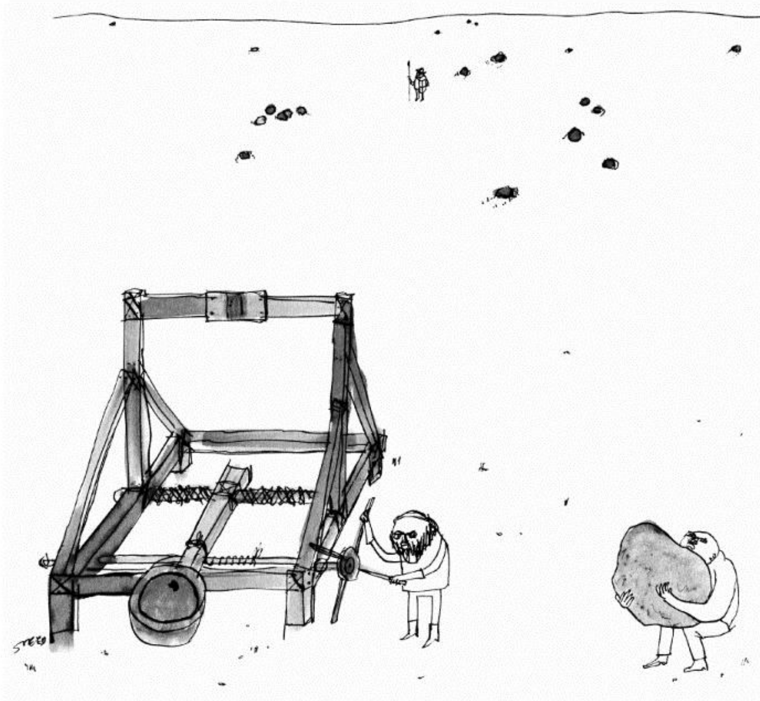
ILLUSTRATION BY LEO ESPINOSA



"You also had a very good feeling about the last one."

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HBO made money for cable operators, because they attracted subscribers. Traditional broadcasters saw their advertising income slow, but they compensated by charging cable companies for carrying their content, a "retransmission consent" fee made possible, in 1992, by the Cable Television Consumer Protection and Competition Act. Soon after, the F.C.C. relaxed rules that restricted the networks' ownership of prime-time programs, which opened a new stream of revenue from the syndication of their shows to local stations, cable networks, and other platforms.

The advent of the Internet and streaming video brought new competitors. In 2011, Amazon made its streaming-video service, Instant Video, available free to every customer who signs up for its Amazon Prime program, which, for seventy-nine dollars a year, also provides free two-day shipping. The arrangement inverts the traditional advertising model: instead of forcing you to view commercials, video is the gift you get for shopping. Amazon Prime subscribers number about twenty million, although the number of those who are Instant Video viewers is certainly smaller. Last fall, Amazon released its first original series, "Alpha House," created by Garry Trudeau. Apple, which popularized the purchase of digital music, offers video sales and rentals through iTunes. It is not expected to develop its own content.

The busiest "television" platform in the world is YouTube, which is owned by Google and has a billion unique visitors watching six billion hours of video every month. Ynon Kreiz, the executive chairman of Maker Studios, the world's largest provider of online content, noted that its series "Epic Rap Battles of History," broadcast on YouTube, and which offers comical face-offs between, say, a faux Miley Cyrus and Joan of Arc, attracts on average forty million viewers—almost four times the viewership of the finale of AMC's "Breaking Bad." YouTube makes money through what Robert Kyncl, a vice-president at Google and the head of content and business operations at YouTube, calls "frictionless" advertising, which allows viewers to click on a TrueView button to skip ads and asks advertisers to pay only when viewers watch the ad. YouTube claims that forty per cent of its views are on mobile devices, a leap from just six per cent in 2011.

"We now live in a world where every device is a television," Richard Greenfield, a media and technology analyst for the New York-based B.T.I.G., told me. "TV is just becoming video. My kids watch 'Good Luck Charlie' on Netflix. To my ten-year-old, that's TV." Consumers don't care "that a show is scheduled at eight o'clock," he said. Paul Saffo, a Silicon Valley technology forecaster, says that couch potatoes have given way to "active hunters," viewers who "snack" and control what they watch and when.

Leslie Moonves, the C.E.O. of the CBS Corporation, which includes CBS and other networks, says he is untroubled. "For twenty-five years, I've been hearing that network television is dead," he told me. "We're thriving like never before." CBS has been the top-ranked network in prime time for ten of the past eleven years. On the day before we spoke, last October, the company's stock price had risen to nearly sixty dollars a share, almost twenty times higher than its lowest share price in 2009. Moonves is the most richly compensated executive in traditional media; his total compensation in 2012 was sixty-two million dollars. He insists that advertisers need a mass audience to introduce products, an audience that only a broadcast network can deliver consistently. The CBS Corporation is less dependent on commercials, which now account for just over half of its revenues. The rest comes from its overseas sales, which totalled $1.1 billion last year, and from licensing deals with cable and digital platforms such as Verizon FiOS and Netflix; Netflix pays CBS and Fox about two hundred and fifty million dollars each to let it air programs from their archives.

Other observers are more critical. The venture capitalist Marc Andreessen, who co-invented Mosaic, the first commercial Internet browser—it later became Netscape—told me, "TV in ten years is going to be one hundred per cent streamed. On demand. Internet

Protocol. Based on computers and based on software." He said that the television industry has managed the transition to the digital age better than book publishers and music executives, but "software is going to eat television in the exact same way, ultimately, that software ate music and as it ate books."

In 2007, in an effort to combat Netflix, NBC and Fox—joined, two years later, by ABC—created Hulu, a Web site that lets viewers watch current and many past television shows but is subsidized by the same complement of commercials seen on broadcasters' Web sites. Five million viewers subscribe to Hulu Plus, which, for eight dollars per month, offers more current content and past shows, on multiple devices and with fewer commercials.

Last year, Hulu began to invest modestly in original programming. "Hulu is growing incredibly fast," Jason Kilar, its C.E.O. from 2008 until 2013, told me. "It generates one billion dollars of revenue." But Hulu has had an uneasy relationship with its parent companies. In February, 2011, Kilar wrote a five-page blog post that sketched out "the Hulu team's point of view on the future of TV." Traditional TV, he wrote, "has too many ads," and doesn't serve consumers, because viewers "want programs to start at a time that is convenient for their schedules, not at a time dictated to them." Hulu, he promised, "is not burdened by that legacy." In April of last year, Kilar chose to leave the company, to start a new venture.

The television industry has fared better than music and newspapers in part because its factions are dependent on one another for revenue, and none are eager to see the others vanish. Broadcast television has lost viewers to cable networks but syndicates programs to them to rerun. Cable systems battle with broadcast TV over retransmission fees but need access to its programs. All are wary of Netflix but welcome either the licensing fees or broadband customers. "Netflix is our friend, but also our competitor," Moonves said. "As is everybody."

Hastings grew up in Cambridge, Massachusetts, where he attended private schools, then got an undergraduate degree in math at Bowdoin College, in Maine. After two years in Swaziland as a high-school math teacher for the Peace Corps, he earned a master's degree in computer science from Stanford and landed in Silicon Valley. "I really loved software," Hastings says. "I never loved anything so much." But, he adds, "The big thing Stanford did for me was turn me on to the entrepreneurial model."

In 1991, Hastings launched a company called Pure Software, built around Purify, a popular computer program he'd created that identified bugs in software programs. Andreessen, who used the debugging program for his Mosaic and Netscape browsers, describes Purify as "one of the reasons Mosaic worked and didn't crash." Pure Software took off, but Hastings was unprepared to manage a company that, by 1996, had grown to six hundred employees. "The product was excellent," he said. "My management style was not excellent."

In 1997, Pure Software was sold to Rational Software (which was later bought by I.B.M.) for seven hundred million dollars, and Hastings soon left. After "a period where I felt like a failure," he concluded that he was spending too much time thinking about engineering and too little thinking about how to recruit and retain a team of capable people. He now lives in Santa Cruz with Quillin and their two teenage children. They have four shelter dogs, and, in the back yard, four goats and ten chickens. He is involved in various philanthropic ventures that promote charter schools and education reform. "Unfortunately, and weirdly, I have almost no hobbies," he said. "I don't sail, I don't fish. I'm a pitiful failure as a Renaissance man."

Hastings founded Netflix, in 1997, with Marc Randolph, who worked for him at Pure Software. To manage the technical aspects of the Web site, he recruited Neil Hunt, another mathematician and former colleague. Hunt helped to create a "personalization" engine that would decipher what each subscriber liked to watch, based on what the subscriber had watched before, and suggest what he or she might want to see next. Similar advisory algorithms were entering the home through TiVo, the digital video recorder introduced in 1999, and Amazon's Web site. In 1999, Hastings hired Ted Sarandos, who had been the vice-president of product and marketing for West Coast Video, a Blockbuster-like company with nearly five hundred stores. Sarandos had a deep knowledge of movies and television shows and began to broaden the range of material that Netflix made available. In 2002, the company turned profitable and went public.

Hastings pressed his team to begin streaming movies and television shows over the Internet. The film industry, worried about digital piracy, initially resisted licensing its content to stream; and Netflix lacked access to recent movies, because the studios had exclusive long-term deals to sell them to HBO and other cable subscription channels such as Starz. Finally, in 2008, Netflix made a deal with Starz to stream the movies it had acquired. "We agreed to pay thirty million dollars annually," Sarandos said. "It was about three times my budget!"

Starz and other content providers realized that Netflix offered not only a new source of revenue but also a way to build audiences for current broadcast and cable shows, by allowing Netflix subscribers to watch prior seasons. The ratings for the fifth season of AMC's "Breaking Bad" were more than double those of the season before, and several times higher than those of Season One. "It seems to me close to inarguable that, when past seasons were available, people were introduced to them through on-demand services like Netflix," Josh Sapan, the president and C.E.O. of AMC Networks, told me. "They became engaged." Between 2007, when streaming began, and the end of 2009, Netflix subscriptions jumped from 7.5 million to twelve million. Media executives dismissed the notion that Netflix was a threat. In 2010, Jeff Bewkes, the C.E.O. of Time Warner, told the *Times*, "It's a little bit like, is the Albanian army going to take over the world?," adding, "I don't think so."

Hastings told me that he treated Bewkes's comment "as a badge of honor. For the next year, I wore Albanian Army dog tags around my neck. It was my rosary beads of motivation." Netflix continued to expand,

making itself available on game consoles, mobile phones, tablets, and other streaming devices, such as Apple TV and Roku—and, for the first time outside the U.S., in Canada. It reached licensing agreements to air complete previous seasons of programs from ABC, NBC, Fox, CBS, and the leading cable networks.

Whatever Hastings's ambitions, he was eager not to appear to be competing with his sources of content. In its first-quarter report for 2011, Netflix declared that it was "fundamentally correct" to characterize the company as "rerun TV." But the broadcast networks would not sell Netflix the current seasons of television shows; customers had to turn to Hulu. For Hulu, the networks defensively bought the rights to popular cable programs like "The Daily Show with Jon Stewart" and "The Colbert Report," which are not available on Netflix.

Hastings sees his main competitors as Showtime and, especially, HBO. Both have lucrative arrangements with cable providers, through which they offer a library of shows and movies to watch on demand; and both now offer apps—HBO Go and Showtime Anytime—that enable cable subscribers to watch any of those channels' programs on any device. HBO has more than two and a half times as many subscribers worldwide as Netflix—a hundred and fourteen million—and its list of original hits, from "The Sopranos" to "Game of Thrones," is extensive.

In the spring of 2011, Netflix announced that it was aggressively entering the business of original programming. The company spent a hundred million dollars to make the two-season, twenty-six-episode political thriller "House of Cards," directed by David Fincher and starring Kevin Spacey. The director and the actor had approached several networks; Netflix offered to approve the project without seeing a pilot or test-marketing it with viewers. Last year, Spacey told an audience at the Guardian Edinburgh International Television Festival, "Netflix was the only network that said, 'We believe in you. We've run our data and it tells us that our audience would watch this series. We don't need you to do a pilot. How many do you wanna do?' "

Netflix tracks not only its subscribers' preferences and habits but also how quickly they watch each episode and how many episodes they watch in one night. It has organized its library into seventy-nine thousand categories—Foreign Sci-Fi & Fantasy, Dark Thrillers Based on Books—to better predict what you might want to watch next. "There's a whole lot of Ph.D.-level math and statistics involved," Hunt says. The Netflix database indicated that the original series on which "House of Cards" was based, a British production with the same name, was popular with Netflix users. So were political thrillers, Fincher's films ("Fight Club," "The Social Network"), and Spacey, who has starred in a range of movies, including "Se7en" (another Fincher film) and "The Usual Suspects."

But, in September of 2011, Hastings made a major miscalculation. Netflix's DVD rentals were falling, and the company had announced that it was splitting its subscription in two: one for DVDs by mail, a second for online streaming. Hastings then announced that the DVD rentals would now be handled by a new entity, Qwikster. Hastings had seen how companies such as AOL had been slow to replace dial-up Internet access with broadband. "I was so obsessed with not getting trapped by DVDs the way AOL got trapped, the way Kodak did, the way Blockbuster did," he told me. "We would say, Every business we could think of died because they were too cautious." Netflix's combined subscription rate rose by sixty per cent, to sixteen dollars a month, and thousands of customers posted complaints on the company's Web site. Eight hundred thousand subscribers abandoned the service, and the stock price plummeted. By October, Netflix had reversed the decision to split itself into two companies.

The crisis soon faded. "House of Cards," which appeared in February, 2013, won three Emmys—the first time a non-traditional television show had won the award. In October of 2013, Netflix's stock price surpassed its all-time peak, approaching four hundred dollars per share, although the company's third-quarter net income was only thirty-two million dollars. (HBO's earnings exceeded $1.7 billion on five billion dollars in revenues.) By the end of 2013, Netflix's stock had tripled in value since the beginning of the year, and the board voted to boost Hastings's total compensation to six million dollars.

Television today faces two major threats. The first is to the advertising model. About fifty per cent of viewing households use a digital video recorder. Between half to two-thirds of those households skip the ads, and new features, such as those on the Hopper, a DVR with the Dish satellite network, allow viewers to do so instantly on select shows. Every viewer who skips an ad, or who leaves a broadcast or cable channel to watch Netflix or another ad-free service, is evidence to advertisers that television airtime isn't worth what it once was—a conclusion that will eventually mean less revenue for broadcast and cable networks. Sixty-six billion dollars—four out of every ten media dollars—is spent annually on TV commercials, according to Sir Martin Sorrell, the chairman and C.E.O. of W.P.P., the world's second-largest advertising and marketing agency. Sorrell told me that W.P.P. has shifted eighteen billion dollars, or thirty-five per cent of its advertising expenditures, to digital media since 2000.

The second threat is existential. Starting around 2008, viewers could stream video services through the television only by attaching another device, such as a DVD player, an Xbox, a Nintendo Wii, or an Apple TV. The streaming services are getting cheaper and easier to use. Last July, Google released Chromecast, a device that looks like a flash drive (you plug it into your TV's HDMI port) and allows you to stream from such sources as Netflix, YouTube, Hulu Plus, Google Play, or whatever you happen to be watching on Google's Chrome Web browser. The

device costs thirty-five dollars. As consumers grow more aware of such options, they are bound to ask why they bother subscribing to cable television.

The latest menace is Aereo; for eight or twelve dollars a month, the service connects each customer to a remote, dime-size antenna that allows members in almost two dozen cities to watch over-the-air broadcasts or record shows in a cloud-based DVR. Chet Kanojia, an engineer and the company's C.E.O., says that he created Aereo to help spare people the cost and the waste of the typical cable bundle. Technically, one can still watch broadcast television using just an antenna, but people have grown accustomed to the more reliable picture, and to the DVR functions, that cable provides; and broadcasters have come to rely on the retransmission fees. Still, Kanojia wondered, why should viewers have to pay an expensive cable bill if mostly what they want to watch are the broadcast channels?

"Consumers had the right to this programming because it was free to air," Kanojia said. As he describes it, Aereo merely allows customers to connect to antennae that receive broadcast signals. (You can fast-forward past the ads when watching recorded shows.) But TV executives don't see it that way. "It's a technology that basically wants to steal our signal," Moonves said. "How do you take our signal"—and the programs that CBS has paid for—"and sell it to customers?" So far, Aereo has successfully convinced some courts that the technology is little different from the antennae that television viewers once mounted on their rooftops. The Supreme Court is expected to rule on Aereo's legitimacy by July.

In 2013, at his annual investor conference, John Malone, the chairman of Liberty Media Corporation, which has investments in cable companies, said that cable executives needed to respond more creatively to these new technologies. He urged his colleagues to create an Internet-based streaming service to rival Netflix. As an example, he cited Comcast's XFinity, which, like Hulu, offers streaming video. Last week, Verizon announced plans to acquire Intel Media, the chip-maker's digital-TV division, in a further effort to make TV available anywhere and on any screen.

Jeff Bewkes, of Time Warner, which no longer owns or has a stake in the cable company of the same name, assails the "lunacy" of the many cable-system owners trying "to protect their culture of gatekeeper." Last year, ABC, Fox, and NBC, which had been planning to sell Hulu, decided to hold on to it, to compete with Netflix. "The digital space was too important," Chase Carey, the president and C.O.O. of 21st Century Fox, told me. To keep viewers from skipping ads, the cable industry has embraced an antediluvian strategy: offer more comprehensive video on demand, including the newest episodes of many of broadcast TV's biggest hits, at no extra cost, but with fast-forwarding disabled.

Customers may be starting to revolt. Time Warner has lost cable subscribers in each of the past eighteen quarters. Cable-system owners blame the decline on the networks, which force them to carry expensive bundles of channels that many viewers don't want; according to analysts, ESPN alone accounts for roughly six dollars in every cable bill, even for viewers who never watch it. "The largest concentration of power is in the hands of a few content companies," Glenn Britt, who retired as the C.E.O. of Time Warner Cable in December, told me. "If a distributor wants ESPN, he or she has to pretty much buy everything Disney"—which controls ESPN—"sells, because that's how it's sold." Britt said that between those costs and the retransmission fees paid to networks, which are projected to rise from three billion to almost four billion dollars this year, the portion of a subscriber's bill spent on basic cable television could exceed the current average of seventy-five dollars a month.

What Netflix and the other new platforms still can't offer is the kind of appointment viewing—the Olympics, the Super Bowl, the Oscars, "American Idol"—that has been the mainstay of broadcast television and certain cable operators. The networks pay huge sums for the exclusive rights to broadcast these events. The future of traditional television, Hastings says, is in airing more live events, which attract higher advertising rates. In December, NBC broadcast a live musical, "The Sound of Music," starring Carrie Underwood. Although critics panned it, nearly nineteen million people watched it that night, the biggest NBC Thursday-night, non-sports audience in almost a decade. Among the few executives who express no concern about the shifting television terrain are those involved in sports. "The only certainty is sports," David Stern, the commissioner of the N.B.A., told me. Hastings agrees. "For a hundred million dollars," he told me, "we could get the Badminton League!"

Without commercial interruptions, Hastings argues, the viewing experience has become more immersive and sustained. When Netflix released "House of Cards," it made the entire first

"I'm declaring my French citizenship."

season of episodes available at once, and viewers binged. Cindy Holland, Netflix's vice-president of original content, told me that the average Netflix viewer watches two and a half episodes in one sitting. The creative experience is different, too, she said; making "House of Cards" was akin to making "a thirteen-hour movie." There was no need to recap previous episodes or to insert cliff-hangers. Increasingly, show creators can work without executives' notes, focus groups, concerns about ratings, and anxieties about whether advertisers will resist having their products slotted after a nude scene or one laced with obscenity.

"There's a reason why people now talk about this as the golden age of scripted drama," Michael Lynton, the C.E.O. of Sony Entertainment, told me. "You can write a character that grows over the course of thirteen hours of television. That's more attractive than a two-hour movie." The opportunities have enticed strong writers, directors, and actors. "What's happened as a result of this is a flourishing of an entirely new kind of television."

Netflix has also begun investing heavily in children's programming; last June, it signed a five-year deal with DreamWorks Animation, which will produce three hundred hours of original animated kids' shows. "We have become Netflix's single largest supplier of original kids' content," Jeffrey Katzenberg, the C.E.O. of DreamWorks Animation, said. The effort is part of a long-term strategy to train viewers to watch Netflix. "It's habit-forming," Sarandos, Netflix's chief content officer, said.

But there are other ways to consume video than those which Netflix has in mind. Brian Robbins, the founder of AwesomenessTV, a provider of YouTube channels, first gained recognition in the mid-nineteen-eighties as a young actor on "Head of the Class," an ABC sitcom. He went on to direct more than ten movies, including "Varsity Blues," before becoming a writer and a producer for long-running children's programs on Nickelodeon. Four years ago, his agent told him about Fred, a teen-ager from Nebraska who had his own YouTube channel. Fred recorded short rants in a screechy voice on such topics as staying in a fancy hotel room and dreaming of being a famous actor. His real name was Lucas Cruikshank, and his hotel riff drew twenty-three million views, more than the biggest hit show on television. Fred's videos were a few minutes long, perfectly tailored to the medium. Robbins came home that night and asked his tween children, "You know who Fred is?" They did.

Robbins decided to make a movie with Fred. "I had a relationship with Paramount but knew they wouldn't do it," Robbins told me. So, in August of 2009, he put up a million dollars; four months later, he had a ninety-minute movie, about a boy trying to get a girl to fall in love with him. He sold "Fred: The Movie" to Nickelodeon, and it proved so popular that two more Fred movies and a twenty-four-episode series, "Fred: The Show," followed. Robbins decided to form a company, AwesomenessTV, to create content for YouTube channels—there are more than half a billion on YouTube.com. In the world of YouTube, not only is every device a television but every viewer is a potential network and content provider.

Robbins works in a brick-walled office in a two-story industrial building in West Los Angeles. He has thirty young employees, and he roams around in jeans, a T-shirt, and shiny black sneakers. Just before Thanksgiving in 2012, AwesomenessTV ran a promotion asking subscribers, "Do you want to be the next YouTube star?" Two hundred thousand teen-agers responded, and nearly half of them started their own YouTube channels, attracting sixty million unique monthly visitors. Today, eighty-five thousand kids have channels on AwesomenessTV, and thirty-one million teens and tweens have visited the site. "When you speak to kids, the No. 1 thing they want is to be famous," Robbins said. "They don't even know for what."

"Thank you for really letting me occasionally text you during my dark time."

Advertisers want to reach this young demographic. Last May, DreamWorks Animation bought Robbins's company, for thirty-three million dollars. Katzenberg told me that, "by the end of next year, under AwesomenessTV, we could have as many daily active users as the Disney Channel, Cartoon Network, and Nickelodeon together."

Established executives in traditional TV are reassured by Nielsen ratings suggesting that, of the forty-two hours of television that Americans watch each week, only three hours are on portable devices or computers. But Pat McDonough, a senior vice-president of analysis at Nielsen, concedes that the company does not have the capability to compile smartphone usage among very young people. "For mobile devices, we are not measuring below age thirteen today," she said. And yet, she

noted, "We think there's a lot of consumption on their parents' devices." Although viewers under twenty-four watch less traditional television than ever, McDonough was confident that they would grow into the habit. "The older you get, the more you watch," she said.

Robbins disagrees: "That's like saying when color TV came in that people were going to go back to watching black-and-white television when they got older, because that's what their parents and grandparents did!" He added, "The next generation, our audience and even younger, they don't even know what live TV is. They live in an on-demand world."

Hastings predicts that by 2016 half of all television will be delivered by the Internet, and he expects Netflix to be an ever bigger part of it. Over dinner, he asserted that the company can double or even triple its domestic audience: "I think sixty to ninety million subscribers is Netflix's potential U.S. market." Netflix is also expanding aggressively overseas, where almost a quarter of its forty-four million subscribers live.

To hold its own against HBO and video on demand, Netflix will have to invest further in original content. It spends only about two hundred and fifty million dollars on originals, some eight per cent of its three-billion-dollar programming budget. HBO spends four times as much. And unlike HBO, which owns the sixty-eight series it has produced, Netflix owns only the first-window streaming rights of its programs, including "House of Cards." Sarandos boasts that eighty per cent of Netflix's current spending is on "exclusive" content, but this simply means that Netflix licenses these programs exclusively for a limited period, after which they may be sold elsewhere. Netflix is still largely dependent on the film and television studios, which can raise their licensing fees as they wish.

Most Wall Street analysts extoll the virtues of Netflix, pointing to its impressive subscriber growth, but Michael Pachter, an analyst at Wedbush Securities, is a skeptic. He says that Netflix is spending more than what is reflected in its earnings. In 2012, the company reported a net income of seventeen million dollars on revenues of $3.6 billion, yet its free cash flow was a negative fifty-eight million dollars. At the end of 2013, its cash flow was a negative sixteen million dollars, while its net income was a hundred and twelve million. (Its cash balance, however, was $1.2 billion.) The gap is hidden because the cost of programming gets amortized over the life of the license, Pachter says: "It's a big ticking time bomb." He believes that Netflix has to either slow spending or raise its monthly subscription price. But Netflix's strategy—grab the market first, worry about profits later—is common among Internet startups, and has worked well for Amazon and Facebook. Hastings dismissed Pachter's assessment: "Michael Pachter has been bearish about Netflix since 2005, when he put a three-dollar price target on us and wrote that we were 'a worthless piece of crap.' He continues to be wrong."

In the long run, Hastings has a bigger worry: whether Netflix will be as readily accessible to its customers as it is now. Netflix, YouTube, Amazon Instant Video, and the other streaming-video providers all require a broadband connection. That's an integral, and lucrative, part of the dread cable bill and will become only more so. "The future is broadband," Hastings concedes. "That business has nearly one-hundred-per-cent margins."

Glenn Britt, of Time Warner, said that he could envisage cable-systems operators giving up on the cable-television portion of their business altogether: "It may be perfectly viable in the future for a cable company to say, 'I'm losing enough money selling television; I'm just going to sell broadband.'" Andreessen said, "The cable bundle is melting ice cream. Cable should aggressively shift over to a broadband service now and get out of programming and raise prices and free up broadband so it can offer higher speeds on all devices." That would be a major blow to broadcast and cable networks, Britt said, but "right now the content companies are in denial that that could ever happen." Verizon and A.T. & T. have broadband networks, but DirecTV, Dish Network, and other satellite television providers, which together serve about fifty million subscribers, do not.

Presumably, cable operators will look for ways to charge more for broadband service, perhaps by placing a meter on subscribers' Internet usage, just as power companies do with electricity. Last week, a federal court struck down F.C.C. rules, adopted in 2010, that required broadband providers to treat all Internet traffic equally. The decision appears to grant Verizon, Comcast, Time Warner Cable, and others much greater leverage in deciding how they can bundle and sell Internet access to their customers. The cable operators could work out deals with specific content providers—e-mail might cost less than gaming, and providers might offer, say, YouTube and Amazon Instant Video at a lower price, but Hulu or Netflix at a higher one. Last week, in a letter to shareholders, Netflix noted that providers "now can legally impede the video streams that members request from Netflix. . . . The motivation could be to get Netflix to pay fees to stop this degradation."

The court's decision will likely be appealed. "But, if cable companies try to charge more to Netflix and Google, digital companies may buy their own pipes," Andreessen said. In 2012, Google launched Fiber, which offers Internet and television service that's a hundred times faster than average broadband speeds, using fibre-optic cables; but so far Fiber has wired only Kansas City and Provo, Utah; Austin is next.

With Internet television, customers have grown accustomed to the idea that they might really have it all, whenever they want. What's unclear is whether that freedom will cost more than the current bargain. Last week, in a conference call with analysts, Hastings said that if broadband providers tried to block Netflix this would "fuel the fire for more regulation." But he also said that Netflix is considering a tiered-pricing plan; this might raise rates for new subscribers. And he emphasized his company's leverage: the broadband providers "want to expand," and providing "a good Netflix experience" is vital to that effort. "Our economic interests are pretty co-aligned." ♦