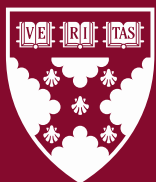


Working Paper 22-049

# The Routledge Handbook of Digital Consumption

## Chapter 41: The Internet's Effects on Consumption: Useful, Harmful, Playful

John Deighton  
Leora Kornfeld



**Harvard  
Business  
School**

# The Routledge Handbook of Digital Consumption

## Chapter 41: The Internet's Effects on Consumption: Useful, Harmful, Playful

John Deighton  
Harvard Business School

Leora Kornfeld

**Working Paper 22-049**

Copyright © 2022 by John Deighton and Leora Kornfeld.

Working papers are in draft form. This working paper is distributed for purposes of comment and discussion only. It may not be reproduced without permission of the copyright holder. Copies of working papers are available from the author.

Funding for this research was provided in part by Harvard Business School. Forthcoming in Russell Belk and Rosa Llama (Eds.), *The Routledge Handbook of Digital Consumption*, Second Edition, Milton Park: Routledge.

# The Routledge Handbook of Digital Consumption

## (2<sup>nd</sup> edition)

Forthcoming in Russell Belk and Rosa Llama (Eds.), *The Routledge Handbook of Digital Consumption*, Second Edition, Milton Park: Routledge.

### Chapter 41:

#### **The Internet's Effects on Consumption: Useful, Harmful, Playful**

John Deighton ORCID.org/ 0000-0002-3052-3780

Leora Kornfeld ORCID.org/ 0000-0003-3763-8350

#### **Abstract**

This chapter considers how digital culture has changed over the past decade, as the internet has grown its scope and user base. Billions around the world connect daily to an ever-expanding set of applications. A framework for thinking about digital effects is offered: their utility, their harms, and their capacity to reward play. In the utilitarian domain, two forces work in opposition. Five tech giants have grown their employment at thirty percent each year for the decade, while at the same time solo activity and entrepreneurship have begun to expand at a similar scale, as connectivity has shifted from being a technical consideration to a feature of everyday life. Music is explored as one instance of the cultural consequences of liberating individuals from corporate gatekeepers. At the same time, as the flow of information at scale is made frictionless and permissionless, and a business model rewards attention with advertising, bad actors have flourished over the decade. The range of motives for online activity account for its variety, among which still exist prosocial phenomena that greatly benefit consumers-

#### **Introduction**

The internet has been a disappointment to its parents. Tim Berners-Lee has said it “failed instead of served humanity,” calling it “a large-scale emergent phenomenon which is anti-human” (Brooker 2018). It has not grown up, as John Perry Barlow’s manifesto said it would, to be a space “independent of tyrannies,” (Barlow 1996) and is not the decentralized, autonomous liberating force that Kevin Kelly hoped for (Kelly 1998). It has grown up to enact the prophesy of Eric Schmidt that, “the Internet is the first thing that humanity has built that humanity doesn't understand, the largest experiment in anarchy that we have ever had.” (Schmidt 1999.) Barack Obama has described the maturing internet as “the single biggest threat to our democracy,” (Goldberg 2020). The mature internet has not even kept alive the flame of fun seen in the days of

ROFLcon<sup>1</sup>. Its outrages are cataloged annually by Misinfocon, a movement that began as a conference at MIT in February 2017. In our everyday conversations we have found people laying at the internet's door such ills as the loss of privacy, threats to the welfare of children, and political incivility. Young professionals working for internet companies have told us that their friends see them as morally deficient: "You say Facebook and you may as well be saying Goebbels."

Is it fair to sum up the internet so bleakly? This chapter considers the question by reflecting on the ten years between the two editions of the Handbook of Digital Consumption. We are helped by the Handbook's articles, studies we have undertaken every four years to map the internet and measure its employment<sup>2</sup> and by a series of case studies written on early social media phenomena<sup>3</sup>. The studies show that over the decade internet jobs have grown at a steady fifteen percent annually as analog work has shifted online and new applications have been created. But growth is no evidence of goodness.

We see three kinds of societal consequence of this growth. Some are beneficial to society, some are frivolous, and some do harm.

### **The Utilitarian Internet**

The internet has certainly been useful to the world's economies, improving the efficiency and scope of market-making to the benefit of firms, entrepreneurs and often of consumers. Advertising reaches behaviorally relevant consumers. Ecommerce cuts consumers' shopping time, reduces total system inventory and cost, lets market entrants bypass physical retail and go directly to digital, and can link communication to transaction to assess attribution. New markets in ride hailing, accommodation, delivery, online instruction, music distribution, and many others have emerged.

The number of people who work in these new or expanded systems of digital marketing in the United States has grown at a seemingly unstoppable pace. Ten years ago, the internet as market maker employed about two million in the US (Deighton and Kornfeld 2012). In 2020 it employed seven million (Deighton and Kornfeld 2021). So, while the economy as a whole grew at about 2 percent a year, the part using the internet grew, if size is measured by livelihoods, at a compounded 15 percent a year.

The largest firms grew much faster than 15 percent. Our studies found that five market-making companies, Amazon, Apple, Microsoft, Alphabet and Meta Platforms, grew their internet-dependent employment at closer to 30 percent. Relying on filings to the Securities and Exchange

---

<sup>1</sup> ROFLcon is derived from the abbreviation of "roll on the floor laughing" used in online chat, and con for convention, was a conference held in 2008, 2010, and 2012 that brought together the 'internet famous' viral video and meme stars with academics and practitioners and was held at MIT in Cambridge, Massachusetts.

<sup>2</sup> Hamilton Consultants, Deighton and Quelch 2009, Deighton and Kornfeld 2012, Deighton, Kornfeld and Gerra 2017, Deighton and Kornfeld 2021),

<sup>3</sup> The cases cover such phenomena as a large-scale viral video, JK Wedding Dance, Ford's pioneering use of user generated content to launch the Fiesta using bloggers and YouTube 'microstars,' Coca-Cola's use of Facebook, and a content network called Cheezburger which assembled entertaining memes and brief videos.

Commission, and making subjective adjustments where necessary, we found that these five companies grew their internet workforces from about 80,000 to 850,000 in the decade. So as the internet has spread to many new sectors of the economy, the firms pioneering the spread have become more concentrated. Four of these five firms did not exist (or in Apple's case was a minor factor) in the world before the internet. That they grew faster than the internet as a whole may be because their technologies were foundational to creating the internet – its mobile navigation devices, its search technology, a near-universal system of social networks, and the platform that enabled ecommerce. The gains from market-making efficiency were disproportionately captured by the five firms.

The smallest firms, and in particular the self-employed, have also grown fast, perhaps as fast although our studies are not definitive on this point. Our 2020 study found that there are about 1.3 million<sup>4</sup> solo entrepreneurs and small teams in the U.S. doing work that once required them to be employed in corporations to be coordinated. Much of this solo entrepreneurship has become possible because of the efforts of thousands of software development firms that have created platforms and services that support solo entrepreneurs and small teams.

These 1.3 million people, liberated from salaried employment (or who may never have worked for an employer in their lives), play roles that blend consumer and producer<sup>5</sup>, much as Lanier, Rader and Fowley (Chapter 30) observe of fans, who “lie somewhere between consumer and producer, audience and performer, and reader and writer.” For many of the creatively self-employed, work and hobby are one. Digital platforms match those who make and those who consume. There are several kinds of matching platform. Retail platforms include Etsy, Ebay, Craigslist and Amazon's Marketplace. Non-retail platforms match individuals who work as Airbnb hosts, Uber, Lyft and Amazon Flex drivers, and Instacart and DoorDash workers, to consumers of those services. Several million people work, mostly part-time, as performers and entertainers (for example in music, online game commentary, education, and short comedy, as newsletter writers, fiction writers, fitness instructors, cooking instructors, coaches on art production, and as brand influencers). They use familiar platforms like YouTube, Instagram, Snapchat and Tik Tok, and more specialized platforms like Twitch, Roblox, Bandcamp, Sessions, Substack, Revue, Medium, Wattpad, Kajabi, Udemy, Upwork, and Cameo, and crowdfunding platforms like Patreon and Kickstarter. There are non-platform software-as-a-service providers such as Shopify, WooCommerce and PinnacleCart for small retailers. And for professionals such as architects, lawyers and accountants, software-as-a-service makes it possible to work in solo or very small practices if the only motive for large partnerships is to share administrative costs.

In the creative sectors, liberation from salaried employment is also liberation from the bets on consumer tastes that organizations make and impose on those who work for them. It leads to

---

<sup>4</sup> This number is calculated from a larger number of people, some working part-time, by expressing the number as a full-time equivalent population earning the US median income.

<sup>5</sup> Here we are saying that, although the roles of producer and consumer are distinct in the context of work, the same person can play both roles. In the context of media, however, particularly feed-based, permissionless social publishing platforms like Instagram and Twitter, users integrate the two roles even more tightly. It is, we suggest, not helpful to say that posting and reading are separate roles. By extension, perhaps we may find that, for solo actors in creative industries, it is not helpful to distinguish the motive to create (produce) from the motive to enjoy (consume) because creators produce what they find it rewarding to consume.

wins for creators whose tastes match consumer tastes, or who create things that consumers did not have the foresight to see that they wanted.

Granted this observation may be wrong for creative processes where many kinds of creator must collaborate on a centrally generated design, as in motion picture production. But we will explore his creative liberation for music. Why music? As an instance of technoculture (Kozinets Chapter 12) that was early to exploit the affordances of digital disintermediation, music does for musicians and audiences what plausibly will happen to industries more generally.

Before the internet, most music came to market only if it won support from one of the major publishing labels. It was only possible to release music outside of the system if the artist could self-finance or if the small budgets of independent labels were sufficient. Distribution was a challenge, so, with limited opportunities for placement in retail outlets, it was common for independent artists to sell their wares from tables at the events where they performed. And while some artists were independently successful, such as Ani DiFranco, Fugazi, Macklemore, and Zoe Keating, the large majority still benefited from a music label to discover them, shape them, promote them, and distribute them.

By the late 2010s this support was becoming unnecessary. Solo music creators depended less on discovery by labels because, if their tastes matched audience tastes, they could reach audiences through mechanisms such as playlists on streaming services or engineer an audience into existence. Montero Lamar Hill illustrates the process. As a teenager in a small town in Georgia he became skilled at internet trickery and pranks. "I was doing Facebook comedy videos, then I moved over to Instagram, and then I hopped on Twitter where I really was a master. That was the first place where I could go viral." (Nilles 2019). In 2019 he used these skills and these platforms to break out as Lil Nas X with the song Old Town Road. It set a record for the longest running top song on Billboard's ranking while he, aged 19, was living with his sister and working minimum wage jobs. Technology augmented his talent. The song was built on a beat he purchased for \$30 at Beatstars.com and uploaded to SoundCloud.

He promoted the song to listeners with methods that mainstream publicists might have shunned. For example, he exploited the comments sections on Reddit<sup>6</sup> by anonymously challenging its genre (was Old Town Road hip hop, was it trap, was it country, was it something new?), and created tensions that earned attention and media coverage, both mainstream and niche, online and offline. He benefitted from the early years of TikTok, where memes based on a hip-hop cowboy were taken up by kids, parents, grandparents, co-workers, and celebrities dressed in country-tinged attire, lip synching to a loop of his song. "TikTok helped me change my life," he said. "[It] brought my song to several different audiences at once."<sup>7</sup>

---

<sup>6</sup> For more on some of the promotional methods used by Lil Nas X online, such as anonymously posting on the 'Name That Song' subreddit and changing the song title on YouTube and SoundCloud to "I got the horses in the back", arguably the most memorable refrain from the song, see [https://www.reddit.com/r/popheads/comments/ez9n9s/interesting\\_read\\_on\\_how\\_lil\\_nas\\_x\\_promoted\\_otr/](https://www.reddit.com/r/popheads/comments/ez9n9s/interesting_read_on_how_lil_nas_x_promoted_otr/)

<sup>7</sup> "Lil Nas X takes the Old Town Road from TikTok to the top of the charts", April 5, 2019, <https://newsroom.tiktok.com/en-us/lil-nas-x-takes-the-old-town-road-from-tiktok-to-the-top-of-the-charts/>

Ten years later the process played out on a global scale in the career of Benito Martinez Ocasio. In 2021, performing as Bad Bunny, he became the world's most streamed artist, more so than Drake, Taylor Swift, and Justin Bieber.<sup>8</sup> He found a market from a small town in Puerto Rico, uploading his music to SoundCloud as Lil Nas X had done. Barriers to creating music were now so low that he could experiment while taking classes at the local university and working part time at a supermarket. His impact was immediately global because of the cross-border and transnational reach of digital platforms. He sang in Spanish in genres that spanned reggaeton, Latin trap, and hip-hop, appealing in particular to the huge audiences available in South America. A journalist observed that national music charts no longer measure success: "On a dispassionate, lab-coated level, this success is simply down to there being a metric for it. Before Spotify arrived, there was no way to tally the listening habits of the planet in a single chart – and Latin America, Bad Bunny's biggest market, is becoming ever more influential in this global headcount." (Beaumont-Thomas 2019)

Generalizing from music to creative industries more generally, the internet opens markets to solo entrepreneurs where discovery, distribution, and promotion frictions had once tied them to the large platforms. Our analysis has emphasized the proliferation of opportunities for individuals to turn their talents into consumable products, entertainment, and services. But we have not said much about the digital consumption spaces where buyers and sellers come together. Much attention is being given to the notion of a metaverse, often relying on excited claims for non-physical enabling technologies such as blockchain ledgers, digital currencies, and non-fungible tokens. Digital consumption spaces already exist, and some, but not many, solo entrepreneurs use them. Second Life supports a digital marketplace from which sellers extract about \$60 million annually (New World Note 2017). Minecraft and Roblox are digital social marketplaces where individuals, mainly children, can create and consume, as discussed in more detail in the section on play.

### **The Corrosive Internet**

When the flow of information at scale is made frictionless and permissionless, and when there is a business model attached to capturing and retaining attention in the form of advertising, there exist all the ingredients for bad actors to do harm.

The ease with which individuals and organizations could post and share content was a hallmark of earlier internet optimism, so much so that media scholars Jenkins, Ford, and Green (2013) proclaimed "if it doesn't spread, it's dead." Spreadability (or memetic propagation as Yeo categorizes it in Chapter 38) was seen as a way around the control of centralized media; a way for individuals to have increased agency through bottom-up efforts and digital networks.

It might be said that it's all fun and games until politics enters the story. The volume of spreadable content was decisive in the last 4 months of the 2020 US presidential campaign. The Clinton team created 66,000 different messages. The Trump campaign created 5.9 million. The Trump campaign's lead digital strategist Brad Parscale said: "Those are ads targeted directly to

---

<sup>8</sup> Spotify reported 9.1 billion streams for the music of Bad Bunny in 2021, and 8.3 billion in 2020. He was the most globally streamed artist for both years. <https://newsroom.spotify.com/2021-12-01/what-the-world-streamed-most-in-2021/>

people the way they want to consume them. I stopped looking at people as demographics, groups, personas. I said: let's look at people as individuals, how do they act. Because two people who look the same might act differently.” (Filloux 2019). The ability to deploy granular data in a highly targeted manner, as opposed to the largely undifferentiated messaging of broadcast media, allows biases and emotions to be identified and exploited. Two years later in the 2018 Brazilian presidential election, Bolsonaro's campaign blanketed WhatsApp, used by two thirds of Brazilian voters, with “false rumors, manipulated photos, decontextualized videos and audio hoaxes...with no way to monitor their origin or full reach.” (Boadle 2018)

Where print journalism was meant to be safe and accurate by design, digital logics favor information that activates the extremes of emotion and spreads quickly. Criteria of trustworthiness and accuracy lose out to the impulse to retweet or click the share button. A Pew Research article on the role of digital spaces in democracy noted, “...the climate in some segments of social media and other online spaces has been called a dumpster fire of venom, misinformation, conspiracy theories and goads to violence.” (Anderson and Rainie 2021)

The internet is home to the conspiracy hotbeds of 4chan, 8chan, Parler, Rumble, and perhaps most notoriously QAnon. These sites are known not only for fomenting hatred online, but for propagating ideas with consequences in the non-digital world. They include a 2017 shooting in a Washington, DC pizzeria brought on by a conspiracy theory about top Democrats' involvement with satanic child abuse on the premises, and civic meetings disrupted by the QAnon faithful, many of whom became active in local politics and school boards during the Covid-19 pandemic.(Collins 2021) The documentary film “Feels Good Man” describes how a cartoon character, Pepe the Frog, was coopted from the world of indie comics by the alt right, appearing in posts and memes online and even on masks worn during the 2021 attack on the US Capitol.<sup>9</sup>

Malice is not the only motive driving internet users to do harm. Lanier et al (Chapter 30) describe a trickster motive in some fans (and political supporters are surely fans). Status in a fan community can be won by “what fans directly and openly contribute to the fan community,” and subversion of constraints (including the constraint of consensual truths) is a status-enhancing action that is a mainstay of the trickster repertoire.

If there is a scintilla of good news, it is that for every negative action on the internet, a positive one can emerge. There are activists and organizations fighting against the flood of misinformation online. Among the earliest was Sleeping Giants, a grassroots effort run by 2 people, Matt Rivitz and Nandimi Jammi, at first as a Twitter account. Beginning in 2016 Rivitz and Jammi used Twitter to tag companies and brands whose advertisements were running, unbeknownst to them, on alt-right websites. Over 4,000 advertisers were successfully contacted through the efforts of Sleeping Giants, and the list of those that pulled their ad dollars from sites promoting misinformation and conspiracy theories included AT&T, BMW, Deutsche Telekom, Kellogg's, and Visa. Larger organizations fighting misinformation have also emerged, such as Newsguard, whose trained journalists have performed accuracy and credibility ratings on the news sources that make up 95% of online engagement.”<sup>10</sup> For example, Newsguard performed

<sup>9</sup> For an explanation and timeline of the co-optation of Pepe the Frog see <https://knowyourmeme.com/memes/pepe-the-frog>

<sup>10</sup> <https://www.newsguardtech.com/solutions/newsguard/>



an analysis of online advertising data and found that over 4,000 brands including Pepsi, Starbucks, Marriott, and even the CDC (Center for Disease Control) – purchased ad space on websites publishing Covid-19 misinformation and health hoaxes.<sup>11</sup>

Between these manifestations of the misinformation industry and the correlations between social media use and negative effects on the self-esteem and overall mental health of youth, it is perhaps not surprising that digital media is blamed for so many of society's ills. In addition to affecting politics, public health, and mental health, charges of harms across consumer rights, human rights, worker exploitation and discrimination, competition and national security are also being leveled against 'Big Tech'.

But this is not the first time that so many socio-economic problems have been ascribed to a single source. Fifty years ago, sociologist Stanley Cohen coined a term for the phenomenon, based on his study of the clashes between factions of mods and rockers in England in the mid-1960s. He called the public response to these skirmishes a "moral panic", and defined it as "a condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests... While the issues identified may be real, the claims "exaggerate the seriousness, extent, typicality and/or inevitability of harm" (Cohen 1972).

In the 2020's the moral panic crosshairs are trained on 'Big Tech', taking the form of movies such as "The Social Dilemma" and White House hearings on social media reform throughout 2021. In the so-called techlash, representatives from the major platforms were challenged, "We are telling you children have inflicted self-harm... and we are asking you... to take some responsibility", and "Self-policing depends on trust. The trust is gone." A congressperson accused the social platforms of having "...a business model that amplifies conflict and algorithms that emphasize conflict vs. co-operation, blame vs, acceptance."<sup>12</sup>

The problems can be addressed by industry self-regulation or by government regulation. Self-regulation has failed in the judgment of politicians and much of the public. Government regulation, once passed, can have, and already has had, such unintended outcomes as curtailing freedom of expression, and favoring the large incumbent players who can take on the high costs of complying with new regulations, such as content moderation and privacy requirements. Large firms have the resources to both litigate and defend themselves in ways that small firms and startup ventures do not.

But regulation can be to the advantage of the internet. Since 1996 the legal liability shield provided by Section 230 of the Communications Decency Act has enabled the internet ecosystem to flourish by limiting web publishers' intermediary liability for content posted on its sites by third parties. The Section states that, "No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider." Legal scholar Jeff Kosseff has called this passage "the twenty-six

<sup>11</sup> <https://www.newsguardtech.com/special-reports/special-report-advertising-on-covid-19-misinformation/>

<sup>12</sup> The first comment is from Senator Marsha Blackburn, made in hearings on social media reform on Dec. 8, 2021. The second comment is from Senator Richard Blumenthal, at the same hearings. The third comment is from Congressman Welch, made during hearings held on Dec. 1<sup>st</sup>, 2021.

words that created the internet” and comprehensively explains the genesis and implications of Section 230 in a 2019 book of the same name. (Kosseff 2019)

What is the benefit of liability-limiting legislation? The aim of Section 230 was to open opportunities for a new, and global, communications technology network. In the mid-1990s just 20 million Americans were online, with dial-up as the mode of connection. The business model was not yet clear, and without the protection of Section 230 the large media and technology incumbents of the time such as telcos, cable companies, broadcasters, and newspaper publishers would have had an explicit advantage, making the internet a mere digital extension of what had preceded it. The contours of the internet were still to be determined, and flexibility was required for new types of services, business models, and user behaviors to emerge. Section 230 gave protection to the startup YouTube, allowed product and service review sites, let websites run comments sections, and in general allowed small firms to upload and publish content.

### **The Internet as Playground**

The useful and the harmful internets both reward rationality, one for constructive and one for malicious ends, but alongside both lives an irrational internet. The first iteration of the Handbook appeared at the time of ROFLcon, an examination and lighthearted-celebration of what some were calling the economy of LOLs. It featured guests that included David and his parents from the viral video “David after Dentist,” and the inventor of Keyboard Cat. ROFLcon marked the peak of the internet’s age of innocence when wit and irony could be displayed on almost free self-publishing platforms for no purpose beyond self-presentation. By the time of the second Handbook, there is less that could be called lighthearted, and yet still much that could be called play.

Play has an expansive meaning, or, more accurately, is constructed from many contradictory meanings. One plays purposefully, but also to idle away time. Some play is rule-bound, and some bends rules. Players can be pranksters or tricksters, or they can be earnest. Play can be collaborative, or, when one plays into the other’s hands, it can be adversarial. Sometimes it rewards good judgment, and sometimes absurdity. But in every case play involves interaction with turn-taking: even in solitary play one takes turns with a machine or interacts with facets of oneself (Deighton and Kornfeld 2014). The internet is a playground in all these senses.

Some play is commercially organized, as Dalmoro, Fleck and Ross (Chapter 31) discuss in their chapter on bilateral and multiplayer online games. These commercial games evolved from pre-internet console games, in which there was little scope for spontaneity. But internet games opened the possibility of building ‘worlds’ as these authors announced in the first edition of the Handbook and developed in Chapter 31 of this one. Digital world-making is the evolution that lets rule-bound games become rule-bending self-and social expressions. It creates the path by which Minecraft, and Roblox prepare consumers for the Metaverse (Burns 2021). Events in the metaverse playgrounds are “real in their consequences” (Merton 1968), so that the category of games intrudes into the useful and harmful internets.

Some play begins at the initiative of a single creative consumer. The “Birds aren’t Real” movement, for instance, was started by Peter McIndoe in his late teens, to promote the contention that birds have been replaced by drones installed by the US government for surveillance. It was a parody conspiracy theory supported by evidence that birds sit on power lines to recharge their batteries. Four years later the movement has members and organizers from Pennsylvania to Florida. From funds generated by selling tee-shirts the movement has paid for billboards and hired an actor to perform in a video as a former C.I.A. agent who worked on bird drone surveillance. The video attracted 20 million views on TikTok. Other actors were hired to play at being bird truthers in videos on Instagram (Lorenz 2021).

Other play depends on groups of consumers. When the online broker Robinhood launched a no-fee stock trading service, some consumers saw the opportunity for play: to organize runs on stocks like GameStop that had been subjected to short sales. Spirited exchanges took place on Reddit’s /r/wallstreetbets. It became a hub for high risk/high reward trading tips. It was used to organize so-called meme traders into a short squeeze movement by persuading them to buy GameStop stock and force the traders who had sold in anticipation that the price of the stock would fall to become buyers to avoid greater losses. In the language of Schroeder and Zwick (Chapter 25) these players are “kinetic investors” viewing the stock market as a place for “chasing aesthetic experiences of thrill, speed, and agency.” What began as a game or prank may have become a more systematic clash between the values of traders and the values of fans of the companies targeted for short sales.

Self-organized constructive play (our term, not the author’s) is explored in Veer (Chapter 18). The chapter shows how people whose identities lie at the fringe of orthodox society form into online groups to enact a sense of belonging, sometimes secretly but sometimes openly. While the purpose of this play is always constructive to the group members, the chapter shows that the effects on wider society or even, in the judgment of professionals, on the better interests of the members, may be very destructive.

Some consumer play is opportunistic, and in that sense not organized at all. When Pepsico launched and designed the “LAY’S® Do Us A Flavor™” contest as a competition that offered a \$1 million prize to the person who proposed the new potato chip flavor that received the largest number of votes on Lay’s website, many consumers saw, independently, the potential for fun. While many entrants played to win, others used the Lay’s website to create chips with flavors such as “7th grade locker room”, “Toothpaste and orange juice”, and “Crunchy frog and blue cheese.” Others bent the rules to create chips with slogans such as “Dad never came home,” and “Blood of my enemies.” (Deighton and Kornfeld 2014).

User-generated content posted online in a spirit of play is, at least in form, similar to more instrumental content such as consumer reviews on sites like TripAdvisor and Yelp, and to brand promotion seeking a more authentic voice (Deighton and Kornfeld 2012 b, c, d). In this way the distinctions we are drawing between the useful, the harmful and the playful are more fluid than our presentation suggests, more teleological than formal.

## **Conclusion**

From ROFLcon to QAnon, the internet’s “experiment in anarchy” may seem to deserve its parents’ bleak prognosis, but the experiment is far from over. One factor prominent in our analysis has been advertising, but advertising’s role may be diminishing. It created distance between the purpose of an internet venture and its method of funding. It supported communication that was free to the consumer but tempted publishers to grow audiences by any means possible. Now advertising is just one of several ways to fund internet services.

For instance, the freemium business model (a lower tier of free ad-supported content and a premium tier supported by subscription) depends on delivering enough utility from the free version to attract users to upgrade to subscription. The reach and scale of digital businesses makes it possible to build a profitable freemium venture with only three to five percent of paying users (Kumar 2014). An instance of free content without the bias to inflame passions is provided by a firm that distributes copyright-free music to content creators in need of music (Jones 2021) in the expectation that this exposure will turn into paid music streams. Duolingo, the world’s most popular online language learning product with over 500 million users in 194 countries, began by funding free, gamified language instruction by asking its students to translate English text into their native languages. It used machine learning to average across many student translations to obtain accurate versions, which it then sold to large business clients. In this way the early years of the business were immune from the misalignment of incentives that advertising can produce (Adams 2019, Quast 2021).

Another reason to think that the experiment may yet end well is the so-called Web 3. Its protagonists foresee a shift in internet organization as fundamental as the shift from Web 1, the read-only web, to Web 2, the read-write and social web. Dixon (2018) points to the prospect of an economy that can deploy decentralization and non-fungible tokens to counter, and eventually to end, the taxes extracted by the large platforms running the social web today. He writes, “Centralized platforms have been dominant for so long that many people have forgotten there is a better way to build internet services. We saw the value of decentralized systems in the first era of the internet. Hopefully we’ll get to see it again in the next.”

Finally, we see optimism in the way Wikipedia has flourished since its founding in 2001, undistracted and uncorrupted by the surrounding shrapnel of alternative facts, fake news and disinformation. Dreams of a World Brain (Wells 1938/2021), an *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers* (Diderot 1751/72/1968), a way to classify all knowledge (Dewey 1979), and a network of public libraries across every village, have been exceeded in our lifetime, and not by a corporate leviathan. As Benkler (2011) wrote of Wikipedia, “... (T)he dominant model of human behavior said that we were all fundamentally self-interested, and that without systems to reward good behavior and punish or constrain bad behavior, human enterprise cannot flourish. Without law or markets, we would simply devolve to mutual shirking and abuse. And yet, it moves.”

Benkler’s evocation of Galileo in “And yet, it moves” puts the fact of Wikipedia into collision with the faith of our age, market economics. In a cultural age that privileges capitalism, a social welfare impulse has harnessed the internet to set up the “greatest library in human history right there, at the dinner table” (Benkler 2006). It is the perspective that inspires Benkler’s decision to

title his 2006 book *The Wealth of Networks*, in contrast to *The Wealth of Nations* (Smith 1776/1904). Smith might reply that the internet's corporations created much broader gains in market efficiency. Machiavelli might want to point out that it has enabled a clickbait presidency. And yet it has given us Wikipedia.

## References:

Adams, Susan (2019), "Games of Tongues: How Duolingo Built A \$700 million Business With Its Addictive Language-Learning App", *Forbes*, July 16, <https://www.forbes.com/sites/susanadams/2019/07/16/game-of-tongues-how-duolingo-built-a-700-million-business-with-its-addictive-language-learning-app/?sh=28df72f03463>

Anderson, Janna and Rainie, Lee (2021), "The Future of Digital Spaces and Their Role in Democracy", November 22, <https://www.pewresearch.org/internet/2021/11/22/the-future-of-digital-spaces-and-their-role-in-democracy/>

Barlow, John P. (1996), "A Declaration of the Independence of Cyberspace," Electronic Frontier Foundation, <https://www.eff.org/cyberspace-independence>, accessed November 1, 2021.

Beaumont-Thomas, Ben (2020), "How did Bad Bunny become the world's biggest pop star?", *The Guardian*, December 4, <https://www.theguardian.com/music/2020/dec/04/how-did-bad-bunny-become-the-worlds-biggest-pop-star>

Benkler, Yochai (2006), *The Wealth of Networks*. Yale University Press.

Benkler, Yochai (2011), "Yochai Benkler on Wikipedia's 10th Anniversary," *The Atlantic* January 15.

Boadle, Anthony (2018), "Facebook's WhatsApp flooded with fake news in Brazil election", October 20, <https://www.reuters.com/article/us-brazil-election-whatsapp-explainer-idUSKCN1MU0UP>

Brooker, Katrina (2018), "I was Devastated": Tim Berners-Lee, the Man who Created the World Wide Web, Has Some Regrets," *Vanity Fair*, July 1.

Cohen, S. (1972), *Folk devils and moral panics: The creation of the Mods and Rockers*. London: MacGibbon and Kee.

Collins, Ben (2021), "QAnon's plan? Run for school board", *NBC News*, July 7, <https://www.nbcnews.com/tech/tech-news/qanons-new-plan-run-school-board-rcna1352>

Dalmoro, Marlon, João Pedro dos Santos Fleck, and Carlos Alberto Vargas, (forthcoming), "Online games: consuming experiences and interacting in virtual worlds," This volume Chapter 31.

Deighton, John and Leora Kornfeld (2012a) “Economic Value of the Advertising-Supported Internet Ecosystem.” Interactive Advertising Bureau, New York, September.

Deighton, John, and Leora Kornfeld (2012b) "Sony and the JK Wedding Dance." Harvard Business School Case 510-064, December,

Deighton, John, and Leora Kornfeld (2012c) "The Ford Fiesta." Harvard Business School Case 511-117, December.

Deighton, John, and Leora Kornfeld (2012d) "Coca-Cola on Facebook." Harvard Business School Case 511-110, December.

Deighton, John, Leora Kornfeld and Marlon Gerra (2017), “Economic Value of the Advertising-Supported Internet Ecosystem.” Interactive Advertising Bureau. New York (January.)

Deighton, John and Leora Kornfeld (2021), “The Economic Impact of the Market-Making Internet Advertising, Content, Commerce, and Innovation: Contribution to U.S. Employment and GDP.” Interactive Advertising Bureau, New York, November.

Dewey, Melvil (1979) Dewey decimal classification and relative index V 19. Albany: Forest Press.

Diderot, Denis (1751/72/1968) Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers. Paris, J'ai lu.

Dixon, Chris (2018), “Why Decentralization Matters”, Medium February 18.  
<https://onezero.medium.com/why-decentralization-matters-5e3f79f7638e>

Filloux, Frederic (2019), “Trump’s Digital Campaign for 2020 Is Already Soaring”, June 2,  
<https://mondaynote.com/trumps-digital-campaign-for-2020-is-already-soaring-d0075bee8e89>

Goldberg, Jeffrey (2020), “Why Obama Fears for our Democracy,” The Atlantic, November 16, 2020

Hamilton Consultants, John Deighton, and John Quelch (2009), “Economic Value of the Advertising-Supported Internet Ecosystem.” Interactive Advertising Bureau, New York, June 9.

Jenkins, Henry, Joshua Green, and Sam Ford (2013), Spreadable Media: Creating Value and Meaning in a Networked Culture, New York University Press, 2013

Kelly, Kevin (1998), New Rules for the New Economy. New York: Penguin Random House.

Kosseff, Jeff (2019), The Twenty-Six Words That Created The Internet, Cornell University Press.

Kozinets, Robert V., (forthcoming), "Understanding Technoculture," This volume, Chapter 12.

Kumar, Vineet (2014), "Making 'Freemium' Work", Harvard Business Review, May Issue.  
<https://hbr.org/2014/05/making-freemium-work>

Lanier, Charles, C. Scott Rader, and Aubrey R. Fowler III (forthcoming), "Digital Fandom (revisited): exploring the role of the hypermediated fan as trickster," Chapter 3

Lorenz, Taylor (2021) "Birds Aren't Real, or Are They? Inside a Gen Z Conspiracy Theory," New York Times, December 9, <https://www.nytimes.com/2021/12/09/technology/birds-arent-real-gen-z-misinformation.html>

New World Notes (2017), "Second Life Users Make About As Much Money As Linden Lab Itself Makes From Second Life," March 15, <https://nwn.blogs.com/nwn/2017/03/second-life-marketplace-linden-lab-revenue.html>

Nilles, Billy (2019) "Why Lil Nas X Breaking Records Is Such a Big Deal," E Online, August 2, <https://www.eonline.com/news/1060868/why-lil-nas-x-breaking-billboard-records-is-such-a-big-deal>

Petegree Andrew and Arthur der Weduwen (2021), The Library: A Fragile History, London: Profile Books

Quast, Jon (2021), "This is how Duolingo makes money," The Motley Fool, August 31.

Rosenberg, Matthew and Ainara Tiefenthäler (2021), "Decoding the Far-Right Symbols at the Capitol Riot," New York Times, January 13, <https://www.nytimes.com/2021/01/13/video/extremist-signs-symbols-capitol-riot.html>

Schmidt, Eric (1999), Remarks at Internet World Trade Show, New York, 18 November 1999. Cited in Oxford Essential Quotations (4 ed.), Susan Ratcliffe (Editor) Oxford University Press (2016).

Schroeder, Jonathan and Detlev Zwick (forthcoming), "Stock investing in the digital age," This volume, Chapter 25.

Smith, Adam (1904), The Wealth of Nations. London: Methuen.

Veer, Ekant (forthcoming), "They aren't secret, they aren't hiding and some online communities are more dangerous than ever," This volume Chapter 19.

Wells, Herbert G. (1938/2021) World Brain Cambridge, MA. MIT Press.

Yeo, Tien Ee Dominic (forthcoming), "Models of Viral Propagation in Digital Contexts: How Messages and Ideas -From Internet Memes to Fake News- Created by Consumers, Bots, and Marketers Spread," This volume, Chapter 38.