UNIVERSITY OF CALIFORNIA,
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Entertainment Capital:
Hit Games Production, Corporate Data, and the Science of Viral Demand in America's Games Industry

DISSERTATION

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for the degree of

DOCTOR OF PHILOSOPHY

in Anthropology

by

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DEDICATION

To my partner,
friend,
and life booster

Allison

"Everyone ready for a big show?"

Geoff Keighley, *The Game Awards 2018*,
at the Microsoft Theater in Los Angeles

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interlocutors regularly appear alongside my own in the following chapters, and I can only hope that I did them justice.

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ABSTRACT OF THE DISSERTATION

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Colin M. Ford

Doctor of Philosophy in Anthropology

University of California, Irvine, 2019

Associate Professor Mei Zhan, Chair

This text is the result of years of ethnographic fieldwork among market research analysts at XPG [pseudonym]—a small firm that specialized in collecting, processing, and reporting on consumer data for the videogame industry. Acting as a participant-observer at XPG, I examined the socio-technical processes through which large videogame publishers came to know their audiences, weigh their opinions and desires, and develop new products for them. In the pages below, I alternately explore the perspectives and practices of professional consumer analysts, entertainment capitalists, and outspoken consumers of games, showing how the dynamic relationships between such actors help constitute the warp and weft of the mass-market gaming scene, a variegated cultural context that connects and divides people across the globe. More broadly, this text represents an ethnography of popular demand, showing how players' demands were incited, expressed, elaborated, interpreted, performed, and accounted for both in public gamer discourse and behind the closed doors of the videogame industry. My aim in this approach is to show how and why certain demands come to matter for businesses—and others do not. Along the

way, I encounter myriad complications to the notion of popular demand, detailing how players' demands are historically situated (Chapter 1), relational (Chapter 2), multiple (Chapter 3), and cyclical (Chapter 4). Taken as a whole, I argue for a reconsideration of demand and its role in capitalism, one that understands capitalists as more than rational, profit-maximizing machines responding to demand automatically as if it were merely a market "force" or "pressure." Rather, I depict capitalists as thickly enmeshed in tangles of collective judgments which they recognize, incite, and attempt to shape, but never fully control. Similarly, I argue for a reconsideration of videogames as a medium, showing how their current instantiation as mass-market, viral entertainment—in the style of Hollywood blockbusters—differs greatly from scholarly understandings of videogames as text, as rule-based systems, or as virtual worlds. Rather, as viral products, I describe how the point of mass-market videogames is to propagate, generate, mutate, connect, and trigger the deeply held feelings, associations, and fantasies that we share in common.

INTRODUCTION

Popular demands

Anaheim Convention Center was packed for the opening ceremonies of BlizzCon 2018. Avid fans of venerable videogame developer Blizzard Entertainment had gathered with a rush of enthusiasm, crowding in to hear breaking news about future game content that the company had in store for its players. The stage flashed with announcement after announcement as Blizzard worked their way through beloved game franchises, regularly eliciting applause. Late into the ceremonies, the microphone passed to Wyatt Cheng, who was introduced to the audience as the "lead game designer" for *Diablo*.[1] Cheng started strong, announcing with a grin and a double fist pump: "We *love* Diablo." The crowd roared. But as Cheng continued his rehearsed speech, the enthusiasm gradually bled out of the audience. Cheng explained that the next game Blizzard would release for its legendary *Diablo* franchise—named *Diablo Immortal*—was exclusively for mobile devices, causing scattered, polite claps to break through an otherwise silent room. Waiting for cheers that never came, Cheng's performance seemed to falter under the pressure. At one point, he got lost in his lines and chuckled to himself awkwardly, interlacing his fingers in consternation.[2] Later, when Cheng and other designers for *Diablo Immortal* took live questions from the audience, one fan asked whether the announcement might be an "out-of-season April fools joke."[3] Another questioner wanted to know whether there was any possibility the game might come out on PC. When the designers informed him that there were no plans to bring the game to PC, the crowd booed. Frustrated, Cheng snapped back a sarcastic retort: "Do you guys not have phones?"[4]

Blizzard's president J. Allen Brack would eventually admit that the business "failed" in its presentation of *Diablo Immortal*.[5] As of October 2019, the gameplay trailer for *Diablo Immortal* stood at 332,000 dislikes on YouTube,[6] and the cinematic trailer had 753,000 dislikes.[7] Commenters online called the game a "cash grab,"[8] a "travesty,"[9] a "slap in the face,"[10] and "worse than nothing."[11] Cheng's reply—"do you guys not have

[1] CrazyQuiltGamer. 2018. "BlizzCon 2018 Diablo 3 MOBILE Announcement w/ Live Reaction (YouTube)." *YouTube.com*: November 2. https://youtu.be/q6UnNC6D3A8
[2] Ibid.
[3] Nexius. 2018. "The Moment Diablo Died At Blizzcon 2018 (Hardcore Death Highlight)." *YouTube.com*: November 3. https://youtu.be/MmkHAlhCvWg
[4] Diablo3Inc. 2018. "Blizzard Diablo team 'booed' at Blizzcon 2018 - Diablo Immortal." *YouTube.com*: November 2. https://youtu.be/50KBNQe5hTM
[5] Stevens, Colin. 2019. "Blizzard Learned A Lot From Controversial Diablo Immortal Reveal." *IGN.com*: May 21.
[6] Diablo. 2018. "Diablo Immortal Gameplay Trailer." *YouTube.com*: November 2. https://youtu.be/Ab2-WW1skOM
[7] Diablo. 2018. "Diablo Immortal Cinematic Trailer." *YouTube.com*: November 2. https://youtu.be/RtSmAwpVHsA
[8] Siccoblue. 2018. Comment in "Blizzard used to cancel games like ghost and titan for not meeting Blizzard quality. Now they are outsourcing and reskinning games. I'm not sad just disappointed and angry," lnclincoln. *Reddit.com/r/Diablo*: November 3.
[9] Silkku. 2018. Comment in "Diablo Immortal Cinematic Trailer," Shalaiyn. Reddit.com/r/Games: November 2.
[10] Surprentis. 2018. "Blizzard, Diablo on mobile is a slap in the face." *Reddit.com/r/Diablo*: November 2.
[11] cyprin. 2018. Comment in "Diablo Immortal Cinematic Trailer," Shalaiyn. *Reddit.com/r/Games*: November 2.

> phones?"—became a meme regularly shared among Blizzard gamers to poke fun at the company's apparent disdain for their dedicated fans.[12] In an industry where companies bank up and build enthusiasm for years before releasing new titles, the announcement was nothing short of a disaster, a warning signal to games publishers that audiences do not always react how you might expect.

This is a common tale in corporate America, a drama whose moral message is clear: good businesses give the people what they want. If the American Dream is a collective narrative that explains individual success, then "by popular demand" is the tale we tell each other about why companies succeed (or fail). From Ford Motor to Nike to Starbucks to Apple, the corporations with the most public salience seem to be those whose success is attributable to the creation of new products that become extraordinarily, enduringly, widely desirable. These products are the materials of our lives, the stuff we wear, eat, drink, use, attend to, browse, travel in, rest on, work with, and play with. The story goes that companies are always competing to give us more desirable things, so our lives are always getting better. This is the story of innovation, of trends, of technological progress, and of GDP growth. It is also the story of the videogame industry: once a niche market for coin-eating curiosities, now a major international business sector with billions in revenue.[13] Big games publishers like Activision-Blizzard, Electronic Arts, Warner Bros., Ubisoft, and Microsoft have risen in prominence—and profits—not just by making hit titles, but by repeatedly increasing players' expectations with new games that promise to exceed the scope, graphical fidelity, and design prowess of their predecessors. Wyatt Cheng's presentation to the BlizzCon 2018 crowd directly invoked this narrative, framing *Diablo*

[12] Benezet. 2019. "I don't like the 'Don't you guys have phones?' meme." *US.Forums.Blizzard.com/en/wow*: February 25.
[13] Shieber, Jonathan. 2019. "Video game revenue tops $43 billion in 2018, an 18% jump from 2017." *TechCrunch.com*: January 22.

Immortal as yet another leap forward for the *Diablo* franchise because the mobile platform enabled Blizzard to give their fans "a full-fledged action RPG you can play anywhere, with everyone."[14] Given that he was speaking at a convention celebrating all things Blizzard, it was quite reasonable for Cheng to expect that his pitch would succeed.

Yet the presentation's abject failure speaks to the duality inherent in the narrative of popular demand. If businesses have their role, then so do we as consumers. Businesses make products that shape our lives, but—so the story goes—we have the power to shape businesses' fortunes by choosing what to buy, support, recommend, ignore, reject, or boycott. Where there is demand, supply shall follow. In the case of *Diablo Immortal*, the crowd's responses made the game seem doomed before it even released. Instead, the game would be judged as morally suspect, a "cash grab"[15] that stained Blizzard's reputation. Just as the American Dream distinguishes between hard-earned income and the suspect wealth of idleness,[16] the narrative of popular demand similarly differentiates deserved corporate profits from undeserved profits. Profits seem justified when consumers' demands are anticipated, and unjustified when these demands are ignored or misinterpreted. The biggest problem with the *Diablo Immortal* announcement was not the game itself, but the absence of any mention of *Diablo 4*, the rumored sequel to *Diablo III (2012)* that fans had been eagerly anticipating for years.[17] By failing to acknowledge the popular demand for

[14] CrazyQuiltGamer. 2018. "BlizzCon 2018 Diablo 3 MOBILE Annoucement w/ Live Reaction (YouTube)." *YouTube.com*: November 2. https://youtu.be/q6UnNC6D3A8
[15] Work To Game. 2018. "Diablo Immortal Is this a Joke? Has Blizzard Lost Touch or Have Gamers? [Let's Discuss] [Rant]." *YouTube.com*: November 2. https://youtu.be/aEMrU0AXqUU
[16] Hanson, Sandra, and John Kenneth White, Eds. 2011. *The American Dream in the 21st Century*. Temple University Press.
[17] Schreier, Jason. 2018. "The Past, Present, and Future Of *Diablo*." *Kotaku.com*: November 21.

Diablo 4, Blizzard risked accusations of betraying their "loyal" audience.[18] As fan reactions turned into a backlash against *Diablo Immortal*, the moral message of popular demand gained an additional wrinkle: give the people what they want, or else.

This event shows how popular demand is more than an abstract force of neoclassical economics, more than just the quantity of goods that people are willing to buy at a given time. Rather, it is the normative social environment in which businesses operate, the context in which products are judged as good or bad, businesses are treated as successful or unsuccessful, and consumers' lives are understood as improving or worsening. This means that demand is never natural, inherent, spontaneous, or timeless. But neither is it simply theoretical or insubstantial. Like any story we tell ourselves, demand becomes more real the more it is discussed, incorporated, and applied. And in the videogame industry, demand is a constant topic of interest. Games companies are always looking to know what players enjoyed in the past, what they are playing now, and what they want next. Players are more than willing to oblige, often flooding games companies' forums and social media with feedback both solicited and unsolicited. Poking into this story yields more questions than answers. Who speaks for the consumer collective? Whose demands should be met? Which demands are reasonable, and which are unreasonable? How should demands be expressed, and how should they be interpreted? The answers here are not given; they have to be worked out by game-makers and game-players in each situation. The encounter between Wyatt Cheng and the Blizzcon 2018 crowd was one instance of this dynamic unfolding, through which both commenters online and Blizzard employees began

[18] Gilbert, Ben. 2018. "Fans of the legendary 'Diablo' game franchise are furious about a new game in the series: 'Is this an out of season April Fools joke?'". *Business Insider*: November 5.

formulating answers to the questions of demand for a *Diablo* mobile game. But *Diablo Immortal* is still unfolding. Eleven months after its reveal, Blizzard's president reaffirmed his conviction in the game's potential to appeal not just to mobile gamers, but to Blizzard's stated audience of "core PC gamers."[19] Only time will tell which version of the demand narrative will eventually prove out, and which will falter.

In this text, I present an ethnography of popular demand, showing how players' demands were incited, expressed, elaborated, interpreted, performed, and accounted for both in public gamer discourse and behind the closed doors of the videogame industry. My aim in this approach is to show how and why certain demands come to matter—and others do not. Along the way, I encounter myriad complications to the notion of popular demand, detailing how players' demands are historically situated (Chapter 1), relational (Chapter 2), multiple (Chapter 3), and cyclical (Chapter 4). Taken as a whole, I argue for a reconsideration of demand and its role in capitalism, one that understands capitalists as more than rational, profit-maximizing machines responding to demand automatically as if it were merely a market "force" or "pressure." Rather, I depict capitalists as thickly enmeshed in tangles of judgments which they recognize, incite, and attempt to shape, but never fully control. As in any capitalist system, these efforts can surely be linked back to profits, but reducing everything to balance books risks losing sight of other stakes that are important to games publishers and their audiences, such as the company's clout and reputation, as well as its workers' self-image, morale, sense of responsibility to their players, and pride in their work. As I show throughout this ethnography, such moral and social stakes surface again and again whenever popular demand is invoked. In asking what

[19] Hussain, Tamoor. 2019. "Blizzard's President On Making Sure Nothing Changes." *Gamespot.com*: October 1.

motivates big publishers aside from wealth accumulation, I also examine what publishers produce aside from individual games. Namely, I explore how the mass-production of blockbuster titles has built a popular gaming "scene" filled with demands potential, actual, and historical: a distributed social world connected and divided by shared gaming experiences, attachments, and tastes.

My access point to the demand-laden environment of the games industry was my field site, a small consumer research firm based in Los Angeles which I refer to under the pseudonym XPG. Specializing in collecting, processing, and reporting on consumer data involving the entertainment industry, XPG often boasted that its clients included many of the world's biggest film, tech, and videogame companies. More than just number-crunchers, I found that XPG analysts were often called upon as expert advisors on consumers' wants, thoughts, and behaviors. XPG's value proposition to publishers was grounded directly in the narrative of popular demand: in order to give people what they want, you need to first *learn* what they want. XPG analysts positioned themselves as intermediaries between publishers and player-audiences, using consumer surveys, interviews, focus group discussions, and other self-reporting methodologies to craft persuasive stories about what might motivate "average" members of the publisher's audience. This process involved analysts assuming the "voice of the consumer" (see Chapter 2), transforming the potentially endless multiplicity of players' feelings, desires, and suggestions into a discrete set of salient, quantifiable, and comparable demands. This ethnography therefore follows the construction and performance of data-based demands, showing how their elaboration tends to displace or at least recontextualize alternative instantiations of consumer demand in the games industry. While Cheng's pitch for *Diablo*

Immortal failed to win over BlizzCon 2018 attendees, who knows what tests Blizzard carried out with other audiences behind closed doors, potentially using firms like XPG? This ethnography is about how and why publishers scope between the demands of different audiences, determining whose demands matter, and how much.

Thinking about popular demand as an evolving context of capitalism requires attending to particular dynamics that occur *between* companies and their consumers. This approach draws inspiration from feminist anthropologists studying capitalism,[20] who reject the notion that capitalism is a totalizing system or a singular logic, instead finding capitalism to consist of heterogenous productive projects through which people and things relate.[21] Accordingly, I argue that demand is a key means of capitalist relation that has largely escaped the notice of anthropologists, possibly due to the monopolization of the term by economists, or else the collapse of demand into the more general category of consumption. On the one hand, anthropological studies of consumerism tend to focus on how people appropriate and invest meaning into capitalist goods, bracketing the question of how such activities are considered, incited, or anticipated by companies.[22] On the other hand,

[20] Yanagisako, Sylvia. 2002. *Producing Culture and Capital: Family Firms in Italy*. Princeton University Press.
Rofel, Lisa. 2007. *Desiring China: Experiments in Neoliberalism, Sexuality, and Public Culture.* Durham: Duke University Press.
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Tsing, Anna. 2015. *The mushroom at the end of the world: on the possibility of life in capitalist ruins.* Princeton University Press.
[21] Bear, Laura, Karen Ho, Anna Lowenhaupt Tsing, and Sylvia Yanagisako. 2015. "Gens: A Feminist Manifesto for the Study of Capitalism." Theorizing the Contemporary, *Fieldsights*: March 30.
[22] Kopytoff, Igor. 1986. "The cultural biography of things: commoditization as process," in *The Social Life of Things*: 64-91. Ed. Arjun Appadurai. Cambridge University Press.
McCracken, Grant. 1986. "Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods." *Journal of Consumer Research* 13 (1): 71-84.

anthropological studies of capitalist firms—such as studies of "flexible" capitalism[23] —tend to focus on workers' experiences and precarity as business rush to meet fluctuating demand with just-in-time production or services, yet this approach leaves aside the question of how exactly companies come to understand changes in consumers' demands. This ethnography represents an attempt to bridge these two fields of study, looking at the videogame industry as a diverse site of encounters and relationships between players and publishers, many of which are incited, facilitated, and mediated by consumer research firms like XPG. By focusing on how popular demand arises from particular encounters and relationships, this analysis explicitly sets aside philosophical concerns about what might lie *below* or *behind* consumers' demands in general—variously going by names like desires, needs, interests, or passions. In practice, I found that the question of *what drove* players' demands was often a live one, an open topic of contention that was part of the emergence of demand itself.

Highlighting the situatedness of demand allows us to shift focus from universal causes or laws that might describe the economy writ large, and instead recognize that distinct demands emerge from different capitalist projects. The slow, unobtrusive demand for baking soda is not the same as the routine demand for local news, which is not the same as the volatile, class-laden demand for fashionable clothing, which is not the same as the flash-in-the-pan demand for blockbuster films. Each of these demands is not only quantitatively

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Douglas, Mary and Baron Isherwood, Eds. 1996. *The World of Goods: Towards an Anthropology of Consumption*. Psychology Press.
Miller, Daniel. 2002. *Consumption and its consequences*. Malden: Polity.
[23] Martin, Emily. 1994. "Educating and Training at Work," in *Flexible bodies: Tracking immunity in American culture from the days of polio to the age of AIDS*: 207-226. Beacon Press.
Martin, Emily. 2000. "Flexible survivors." *Cultural Values* 4 (4): 512-517.
Sennett, Richard. 2007. *The culture of the new capitalism.* Yale University Press.

distinct—with its own volume, velocity, and distribution—but emerges from qualitatively different interactions between people, things, and businesses, lending each a unique character. In the case of the Western videogame industry, I argue that big publishers are characterized by their attempts to cultivate *virality*: a type of popular demand that is rapid and contagious, yet short-lived and therefore requiring frequent mutation and reactivation (see Chapter 1). When a videogame "goes viral," it spreads quickly along networks of friends, family, social media, and games-specific media, capturing the imaginations of players who discuss it, anticipate it, play it, and grow attached to elements of it.

This active, shared, fleeting engagement with a succession of hit titles gives the gaming scene its texture and temporality, making it a dynamic social terrain through which publishers, developers, and players traverse (see Chapter 4). In such terrain, definitions of "good" games and companies never stand still. New viral becomings certainly warp the present, but they also have the power to redefine the past as prior experiences are variously recontextualized as prologue to current virality, as developmental dead ends, or as unconnected altogether to the present moment.

Virality is thus the specific form of popular demand which publishers continually pursue across all sorts of encounters with their audiences: from presentations at public gaming events like BlizzCon to influencer-based marketing to the in-game experience itself. What all of this activity adds up to is *viral capitalism*, a coherent set of relationships, projects, and cultural commitments organized around inciting short-lived, shared popular demands that travel quickly along social pathways. My analysis of viral capitalism throughout this ethnography shows how capitalist relations are oriented not around demand in the abstract, but around particular versions of demand that certain industries

seek to incite and cultivate, and which lend different industries distinct shapes, temporalities, and logics. For publishers, successfully inciting virality leads to more than just vast sales and profits. Successful titles are notable and impactful enough to reshape the terrain of demand, meaning that they lend publishers deployable resources for future viral gambits: social recognition, esteem, and lingering attachments to proprietary gameplay formulas, characters, or worlds. Such resources are often reinvested into sequels, spin-offs, and side ventures in which publishers attempt to make virality emerge again, tapping similar audiences, channels, and desires. In this context, consumer research firms like XPG serve as test labs of virality, staging controlled encounters with "representative" consumers in attempts to predict which products might go viral, to determine how to best activate products' viral potential, and to measure the susceptibility of certain audiences to virality based on exposure to similar viral products in the past. When this process is successful, publishers are able to craft business strategies that maximize their potential to engage with players, remold the viral terrain around their products, and release hits whose importance seems undeniable to game-players and game-makers. Modifying the narrative of popular demand for mass-market videogames, it might read: good publishers give players what they want right now by working with players to define the now.

Viral situations

Throughout this ethnography, I describe the reciprocal relationship between big publishers and their player-audiences as viral capitalism. I understand viral capitalism as an approach to generating money, social recognition, and periodic attachments to goods that is historically and geographically situated in LA's entertainment industry, but which

also continually moves beyond its geographic boundaries. Specifically, I argue that videogame virality emerged in the aftermath of the North American videogame market crash of 1983, which signaled the collapse of prior demand patterns along with many companies that attempted to propagate them.[24] Before 1983, commercial videogames in the United States largely fit one of three competing visions: 1. Games as electro-mechanical amusement cabinets, epitomized by the early "arcade" machines of Chicago-based manufacturers like Stern Electronics, Midway Games, and Bally[25]; 2. Games as children's toy or fad, such as Mattel's *Football (1977)*, Parker Brothers' *Merlin (1978)*, and Milton Bradley's *Simon (1978)*[26]; 3. Games as technological hardware marvels akin to earlier home electronics like the radio or television, including most pre-crash videogame consoles made by Bay Area companies such as Magnavox's Odyssey (1972), Fairchild's Channel F (1976), and Atari's VCS/2600 (1977)[27]. In the aftermath of the 1983 market crash, nearly all of

[24] Wolf, Mark J. P., Ed. 2008. *The Video Game Explosion: A History from PONG to PlayStation and Beyond*. Westport: Greenwood Press.
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[27] Verhulst, Roger. 1977. "The future—playing now on your TV." *Chicago Tribune*: March 16.
Kilgore, Margaret A. 1977. "Tennis Everyone? Hottest Game on TV Nor for Watching but Playing." *Los Angeles Times*: January 9.
Verhust, Roger. 1979. "Home video game players turn on to sophistication." *Chicago Tribune*: March 14.
Montfort, Nick and Ian Bogost. 2009. *Racing the Beam: The Atari Video Computer System*. Cambridge: The MIT Press.
Berlin, Leslie. 2017. "The Inside Story of *Pong* and the Early Days of Atari." *Wired.com*: November 15.

these companies either declared bankruptcy, or else cut their losses by exiting the videogames sector entirely.[28] The pre-crash games sector was devastated, with global revenue dropping from its high point of $16B in 1982 to just under $6B in 1985, a 63% tumble in current dollars.[29] Games as amusement cabinets, as fad toys, and as tech marvels were no longer viable visions of the future; they were relics of the past.

As the post-crash videogame industry recovered and grew, rising Western publishers increasingly framed videogames as popular entertainment media akin to Hollywood films. This convergence of games and films occurred largely from the 1990s onwards, as major Western publishers adopted organizational structures from Hollywood studios, licensed Hollywood's intellectual properties, hired Hollywood personnel, and invested in high-budget game titles whose production quality and broad-based appeal could rival that of Hollywood films (see Chapter 1).[30] The result was that big videogame publishers began to

[28] Schrage, Michael. 1984. "Atari Announces Major Corporate Restructuring." *The Washington Post*: January 24.
Jones, Alex S. 1984. "Rival Gets Milton Bradley." *New York Times*: May 5.
Hollie, Pamela G. 1984. "The Risk Business of Toys: A Fading Fad Can Be Costly." *New York Times:* June 27.
Winter, Christine. 1984. "New Atari owner not playing games: The cuts come quickly." *Chicago Tribune:* July 8.
Davis, Bob. 1985. "Coleco Abandons Its Adam Computer, Will Post Big Losses for Quarter, Year." *Wall Street Journal*: January 3.
Storch, Charles. 1985. "BIG TILT AWAY FROM GAMES ZAPS CHICAGO COMPANIES." *Chicago Tribune*: January 13.
"Japanese Firm Agrees To Buy Unit of Warner Communications Inc." 1985. *Wall Street Journal*: February 6.
Franklin, Stephen. 1994. "Pinball Power Puts Money into the Slots." *Chicago Tribune:* May 9, B9.
Herman, Leonard. 1994 [2016]. *Pheonix IV: The History of the Videogame Industry*. Springfield: Rolenta Press.
"WMS, Industries, Inc." 2003. *International Directory of Company Histories*, Vol. 53. St. James Press.
Brumfiel, Geoff. 2017. "Total Failure: The World's Worst Video Game." *All Things Considered:* May 31. NPR.
[29] Nakamura, Yuji. 2019. "Peak Video Game? Top Analyst Sees Industry Slumping in 2019." *Bloomberg.com*: January 23.
[30] Fuller, Michale R. 1994. "Hollywood Goes Interactive: Licensing Problems Associated with Re-Purposing Motion Pictures into Interactive Multimedia Videogames." *Loyola of Los Angeles Entertainment Law Review* 15: 599-624.
Ahmad-Taylor, Ty. 1995. "Studios Look to Interactive Games." *New York Times*: August 28.
Miller, Greg. 1997. "Myst Opportunities; Game Makers Narrow Their Focus to Search for the Next Blockbuster." *Los Angeles Times*: March 3, D1.
Eller, Claudia and James Bates. 1997. "Ambitions Still Intact, Studio Copes with Industry Changes." *Los Angeles Times*: September 19, 1.
Harmon, Amy. 1995. "Help wanted: Talent's rare, experience short on interactive frontier." *Los Angeles Times*: March 24, 1.

pursue strategies for engaging, captivating, and monetizing audiences that derived from long histories of practice in LA's entertainment industry. I detail this history in Chapter 1, showing how the arts of inciting viral demand emerged gradually in the LA region as films moved from nickelodeon novelties to genre-based formulas to proprietary franchises. I describe this process as the growth of a *viral logic*, one that made it seem reasonable that demand for blockbuster films should be contagious, short-lived, and focused on familiar formulas or properties that can be recycled and resold endlessly. In the field, I regularly saw this viral logic being applied by big videogame publishers, who were keenly focused on the potential of well-known franchises, characters, and gameplay formulas to spark the rapid distribution of new titles. In such efforts, entertainment spectacles like BlizzCon became critical vectors of viral distribution, designed to gather potential audience members together and energize them to share their excitement with both their online colleagues as well as personal friends and family. Below, I suggest that it is not surprising that a great many of these videogame spectacles were physically situated in the greater Los Angeles area. Just as LA has played host to Hollywood spectacle for decades, it has recently become a prime place for videogame businesses to stage and incite viral demands.

Living, commuting, and performing fieldwork in LA, I came to understand how LA's status as "Entertainment Capital of the World" was written into the composition of the city itself. The entertainment industry seemed impossible to escape while traveling the city. As I took the Metro bus to the XPG office or other locations around LA, I often saw Netflix and network TV shows featured on bus stop shelters. Announcements for upcoming films

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Poole, Steven. 2004. *Trigger Happy: Videogames and the Entertainment Revolution*. New York: Arcade Publishing.
Brookey, Robert Alan. 2010. *Hollywood Gamers: Digital Convergence in the Film and Video Game Industries.* Indiana University Press.

loomed over city streets, encompassing the sides of entire buildings like commercial murals. As I inched along the 405 highway, I saw multiple billboards throughout the year where movie characters commented on the state of traffic. One sign for *The Grinch* had its titular character sneering at me: "I could watch you crawl down the 405 all day." Similar ads adorned the outside of Metro buses. During the late spring and summer—the leadup to the Emmy Awards—I witnessed LA's billboards fill up with a variety of ads for TV shows targeted to Emmy voters, "For your consideration."

The ever-present procession of public TV and film ads were not the only way I experienced LA as an entertainment city. Visiting popular destinations in and around the city, I saw buses with names like "Starline" wheeling tourists from one Hollywood-based attraction to another. When I lived in Westwood for a summer of preliminary fieldwork, my path to groceries was sometimes blocked by crowds, security, and city police officers, marking a cordoned-off area near the Fox Village Theater during its exclusive, "world's first" showings of films. During major Hollywood awards nights, entire sections of the city are shut down to commuters, only available for guests of the event. And of course, the major studio campuses are part of the architecture of the city, occupying entire blocks, boasting entrances befitting Hollywood grandeur, and always accepting movie fans in constant streams of studio tours and live audience visits. These everyday occurrences reminded me that the work of Hollywood entertainment is not a direct, simple transmission from the studio set to the movie screen; rather, it frequently spills out into LA's streets, parks, and promenades, making entertainment a public spectacle whose power derives from the sense that "everyone" experiences it, knows about it, is invested in it, and is looking forward to what's next. Being literally surrounded by entertainment

spectacle in LA made virality seem almost inevitable, not a question of *whether* the industry's shows would draw in huge audiences and acclaim, but rather *which ones* would make it, and which would fail.

For me, the most striking part of this entertainment environment was how seamlessly videogames fit into LA's cityscape. Billboards or building-sized ads that one day were filled with Hollywood films would be replaced the next by videogames. Driving on the 405, I saw a *Just Cause 4 (2018)* ad plastered across three faces of a building, looking very much like an action film with its scowling, masculine, gun-wielding protagonist jumping from a plane. The Westfield Culver City mall's corner billboard seemed especially videogame-friendly: at different points I saw *Kingdom Hearts III (2019)*, *NBA 2K19 (2018)*, *Middle Earth: Shadow of War (2017)*, and *Deus Ex: Mankind Divided (2016)* advertised there. I also saw a few building-side ads for films based on videogames, including *Rampage (2018)*, *Tomb Raider (2018)*, and *Pixels (2015)*. Such ads demonstrate the extent to which Hollywood entertainment and mass-market videogames have become almost interchangeable versions of LA spectacle, mirror images that reflect from one building-side to another.

Echoes of Hollywood are not confined to ads and videogame-based movies. Like old Hollywood studios, several major game companies have large city-block campuses in greater LA. These campuses are designed to project that they are places of creativity and passion, their common areas studded with videogame-related art, statues, and wall-mounted TVs showing Twitch streams, eSports events, or cinematic videos of their games. Some of these campuses even allow members of the public to book tours, mirroring the popular Hollywood studio tours.[31] Even if public tours are not available, journalists, gaming

[31] Tours FAQ. 2018. *Blizzard Entertainment*. http://us.blizzard.com/en-us/company/about/tours-faq.html.

influencers, and partner companies often get private tours of these elite spaces, some of which are then posted to YouTube.[32] Gaming-related tourism has also picked up in LA due to two major eSports venues in the area: the Blizzard Arena (for *Overwatch*) and the NA LCS Studio (for *League of Legends*). Representing a blend of traditional sports and live-taped studio TV, these leagues gather professional players weekly in front of LA audiences, beaming out the competition to viewers worldwide. When I attended ticketed eSports events at each arena, I heard fans indicating that they had travelled across the United States to attend, or in some cases across the world, coming from countries such as Australia, South Korea, or Germany. When major gaming events like E3 or BlizzCon take place, tens of thousands of gamers make long pilgrimages to attend, filling up nearby hotels, occupying rideshare services, and converting event venues into gaming meccas.[33] These gamer tourist-traps are beginning to make LA into a gaming city, creating a new public mythology for videogame-creation and competition that fits easily alongside older Hollywood landmarks.

Among these landmark venues is the Microsoft Theater in downtown LA, a building whose events typify the ways in which major investors are envisioning LA as a home for videogame spectacles that rival traditional Hollywood. Sitting just next door to the LA Convention Center, the Microsoft Theater is a staple of E3, the videogame industry's biggest

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Tours FAQ. 2017. *Riot Games.* https://www.riotgames.com/en/tours/tours-faq

[32] MrDalekJD. 2015. "TREYARCH STUDIO TOUR! – Call of Duty: Black Ops 3 (Black Ops 3 Treyarch VLOG)." *YouTube:* April 27. https://youtu.be/OlNK9wzyFIY

TmarTn. 2016. "BEHIND THE SCENES AT INFINITY WARD!" *YouTube:* June 30. https://youtu.be/exc-zFZCHoI

PlayStation - News & Trailers! 2018. "Cory Barlog Exclusive Tour of Santa Monica Studio." *YouTube:* April 23. https://youtu.be/LPbapnm9GX0

[33] Lemon, Marshall. 2018. "E3 attendance was highest since 2005." *VG247.com:* June 15.

Faller, Patrick. 2018. "BlizzCon 2018 Expected To Be The Biggest Yet, Exceeding Last Year's 35K Attendees." *Gamespot:* September 4.

trade show of the year. The venue held all of Microsoft's Xbox exhibits during E3 2018,[34] and in prior years was the primary site for Nintendo's E3 presentations.[35] The Microsoft Theater is also slated to be the new home for *Overwatch* eSports in 2020 due to its higher capacity and central location.[36] In 2018, this same building hosted The Game Awards, a glitzy, media-friendly industry event which declared the best videogames, studios, and artists of the year in different categories like Game of the Year, Best Narrative, and Best Art Direction.[37] Watching The Game Awards on Twitch, I couldn't escape how much it looked and felt like the Emmys or the Oscars.[38] It featured the usual fare of acceptance speeches, orchestral performances, and "world premiere" trailers of upcoming titles. Award winners were presented with trophies in the shape of gleaming metallic angels. Special guests included Hollywood stars Jonah Hill and the Russo Brothers, whose appearance on the stage was bookended by games-industry notables Jeff Kaplan and Phil Spencer, as well as popular videogame streamers like Ninja. The Game Awards 2018 boasted a global viewership of 26.2 million,[39] not far off from the Oscars' 26.5 million viewers in the same year,[40] but more than double the 10.2 million viewers garnered by the Emmys.[41] Further indicating connections between the gaming world and the film world, The Game Awards trophies were designed and built by the Weta Workshop, a New Zealand based special effects company whose models and props have been used in films ranging from *The Lord of*

[34] Cantisano, Timi. 2018. "A visual tour of the Xbox Experience at E3 2018." *Neowin.net:* June 14.
[35] "Nintendo at E3." 2018. *IGN.com*: June 6. https://www.ign.com/wikis/e3/Nintendo_at_E3
[36] Bencomo, Brian. 2019. "L.A. Valiant of Overwatch League introduced to L.A. Kings fans." *ESPN.com:* Jan 11.
[37] The Game Awards Ticket Prices. 2018. *Microsoft Theater*. Microsofttheater.com.
[38] thegameawards. 2018. "The Game Awards 2018 Official Stream – God of War, Mortal Kombat 11, And More!" *YouTube:* Dec 6. https://youtu.be/SHt3FyE-VIQ
[39] The Game Awards. 2018. "The Game Awards Doubles Viewership in 2018." *TheGameAwards.com*: Dec 29.
[40] Huddleston, Tom, Jr. 2018. "Why the Oscar's TV Ratings Have Hit a Potential All-Time Low." *Fortune.com:* March 5.
[41] Otterson, Joe. 2018. "TV Ratings: Emmy Awards Hit New Viewership Low, Drop 11% From 2017." *Variety.com:* September 18.

the Rings trilogy to *Avatar* to *Mad Max: Fury Road*.[42] While E3 and The Game Awards make Microsoft Theater a prime locale for world premieres of videogames, the venue also frequently hosts red carpet nights for Hollywood films, speaking to the fact that a shared physical and professional infrastructure supports both film and videogame-based spectacles.

Just as LA has traditionally been a city of film and TV stars, it is now becoming a significant crossroads for digital content influencers and gamer-celebrities.[43] The greater Los Angeles area is home to the Twitch headquarters, the YouTube LA office, as well as YouTube Space LA. Aspiring YouTube and Twitch stars flock to LA for networking opportunities, collaborations, as well as the hope of getting hooked into a professional video-production company. Notable videogame-related YouTubers and Twitch streamers living in the Los Angeles area include Markiplier, GameGrumps, Tfue, JennaJulien, Shroud, DrDisRespect, Mang0, D1, CaptainSparklez, Scarra, Pokimane, Reynad, Trihex and Sky Williams. This concentration of gaming talent in LA makes them especially accessible to LA-based videogame companies, who use influencers to help promote certain titles, appear at public gaming events, or compete in gaming tournaments. Within the last decade, many eSports organizations began buying or leasing gaming mansions for their teams in upscale LA neighborhoods, creating places for their players to live, practice, stream, and compete.[44]

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[42] Crecente, Brian. 2018. "How Weta Designs, Welds Game Awards Trophy." *Variety.com:* November 27.
Weta Workshop. 2019. "The History of Weta Workshop." *WetaWorkshop.com*.
https://www.wetaworkshop.com/about-us/history/

[43] Lanning, Carly. 2016. "Do aspiring YouTube stars need to pack up and move to L.A.?" *The Daily Dot:* May 10.
Kim, Queena. 2014. "L.A.'s the place for YouTube stars seeking wider fame." *Marketplace:* November 19.

[44] Gaudiosi, John. 2012. "Brandon 'Saintvicious' DiMarco Talks Curse Beverly Hills Gaming House, League of Legends." *Forbes.com:* July 27.
Perez, Matt. 2018. "TSM Owner Andy Dinh On Building The Yankees Of Esports Teams." *Forbes.com:* September 7.

These purchases have spawned an entire genre of gaming "house tours" where players show off these LA mansions, allowing fans a window into their newfound lifestyles among the rich and famous.[45] Successful eSports athletes are expected to maintain their brands and gain followers just as much as they are expected to win events. As a concession to this celebrity-centric attitude, many eSports events I've attended included meet-and-greets, where I saw long lines form to take photos with eSports athletes, shake their hands, and obtain signatures on controllers, jerseys, hats, and other merchandise. Like Hollywood stars, LA's eSports athletes and other influencers are a class of celebrities whose practices tangibly demonstrate viral demand in action as their broadcasted opinions, recommendations, and gameplay reverberate across social networks and propel short-term cycles of engagement with particular titles. On a wider scale, the existence of gamer-celebrities signals to publishers and players alike that videogames have "made it" as a popular medium, such that the gaming scene and its celebrities have become a topic of interest in their own right, rivalling the glamorous allure of Hollywood stardom.

The connections between mass-market gaming and mass-market films are dense and thickly woven, but often go unspoken. Since both industries are especially concentrated in the greater Los Angeles area, their mutual entanglement becomes noticeable in LA's entertainment venues, is major industry events, and its rising generation of digital stars—the types of examples I have provided thus far, but which hardly scratch the surface.

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[45] TSM. 2015. "TSM House Tour." *YouTube:* April 8. https://youtu.be/AI35kjZUufU
HyperX. 2015. "Team Liquid LoL HyperX Gaming House Tour." *YouTube:* March 23. https://youtu.be/-x9VzuwWdDs
HyperX. 2017. "Cloud9 CS:GO HyperX Gaming House Tour." *YouTube:* January 19. https://youtu.be/DES6F3XVwMk
100 Thieves. 2018. "100 Thieves – Rocket Mortgage Team House Tour." *YouTube:* January 19. https://youtu.be/MJrA4k0WelQ

Attending to these entanglements, this text represents an ethnography of Los Angeles and the entertainment complex centered there, showing how the videogame industry is rooted in LA even as it continually extends beyond the literal cityscape. Accordingly, I approach LA as a multiplicity: a physical infrastructure for staging encounters between games companies and their audiences, a symbolic terrain for representing the videogame scene, and a hub for professional business networks that stretch across the globe. The recent convergence of videogaming with Hollywood speaks to the contingency of the medium itself: how it continues to be reshaped and redefined by game-makers and game-players alike. After all, the blockbuster videogame was not inevitable, nor will it necessarily be a permanent fixture of videogaming moving forward, despite its importance in the present moment. The vast gulf between today's Hollywood-style videogames and the pre-1983 visions of game-makers attests to how relations of demand may shift rapidly and unexpectedly, opening up new ways of putting together products, companies, and audiences. On the other hand, the gradual growth of viral capitalism within the film industry shows how changes may also be slow and incremental. In either case, the development of viral capitalism does not proceed according to an internal logic, but rather shifts somewhat-haphazardly as the contexts of its emergence change, as companies experiment with new strategies for engaging audiences, and as audience-members' attachments change over time. The promise of attending to demand, then, lies in exploring the underpinnings of how we approach each other as capitalist subjects, and how such approaches coalesce into shared patterns for living our lives—viral or otherwise.

Methodology

In order to understand how videogame publishers recognized their audiences' demands, I sited my fieldwork in the crossroads of demand—a consumer data firm—focusing on how analysts prompted, collected, analyzed, and conveyed consumer responses to their corporate clients. My approach here takes inspiration from classic workplace ethnographies in which anthropologists have studied organizational dynamics, work practices, and the everyday experiences of employees in situ.[46] As is typical for workplace ethnographies, gaining access required me to take on a working position at the company—which in my case meant becoming an intern analyst on the Games Team at XPG. Accordingly, I was present at XPG's LA offices in a full-time capacity for an entire calendar year, observing, conversing, and working alongside Games Team members as they managed their contracted research projects. I additionally spent several summers of preliminary fieldwork at XPG, where I was trained in on-the-job tasks and carried out initial field interviews. In my time at XPG, I examined and worked on more than 100 distinct consumer research projects for games industry clients, sat in on scores of internal meetings at XPG, attended dozens of conference calls and presentations between XPG analysts and their clients, visited several client offices, and attended the games industry

[46] Burawoy, Michael. 1979. *Manufacturing consent: Changes in the labor process under monopoly capitalism.* University of Chicago Press.
Ong, Aihwa. 1987. *Spirits of Resistance and Capitalist Discipline: Factory Women in Malaysia*. SUNY Press.
Kondo, Dorinne K. 1990. *Crafting selves: Power, gender, and discourses of identity in a Japanese workplace.* University of Chicago Press.
Kunda, Gideon. 1992. *Engineering culture: Control and commitment in a high-tech corporation.* Temple University Press.
Orr, Julian E. 1996. *Talking about machines: An ethnography of a modern job.* Cornell University Press.
Helmreich, Stefan. 1998. *Silicon Second Nature: Culturing Artificial Life in a Digital World.* University of California Press.
Salzinger, Leslie. 2003. *Genders in Production: Making Workers in Mexico's Global Factories*. University of California Press.
Dunn, Elizabeth C. 2004. *Privatizing Poland: Baby food, big business, and the remaking of labor.* Cornell University Press.
Seaver, Nick. 2018. "What should an anthropology of algorithms do?". *Cultural Anthropology*: 33(3), 375-385.

trade show E3. I also visited three remote offices of XPG located in other cities, conducted interviews with over a dozen XPG employees, and followed up with XPG analysts who had left the firm early in my fieldwork. While embedded in the field, I was able to observe the mentoring process through which new recruits learn to become analysts, as well as the everyday tasks that constitute the work of consumer research on videogames. This included participation in company outings, lunches, and after-hours socialization such as holiday parties. When the Games Team conducted qualitative research away from LA, I sometimes travelled to these cities alongside moderators and other analysts to watch the groups in-person. When the Games Team conducted quantitative research, I was given access to the online portals, network drives, and files through which consumer data was collected, stored, and processed. I was also privy to digital communications such as work email threads and corporate Slack/Skype channels. My role as an intern meant that I was frequently passed between teams conducting separate projects and utilizing distinct methodologies, allowing me to observe the full range of the firm's research operations. Thankfully, XPG's management and my fellow analysts were willing to accommodate my anthropological research, such that I was allowed to take field notes in all meetings, whenever I travelled, and throughout the course of a regular workday.

There is a trippy kind of recursion here that must be addressed in applying social scientific methods to study a group of people who might themselves be described as social scientists, albeit ones steeped in the corporate world instead of academia. The fact that my fieldwork consisted of performing research on researchers was a frequent topic of dry jokes by XPG analysts, who were quick to apply jargon from market research to describe my project in a tongue-in-cheek fashion. Indeed, as a young adult degree-holder in the

social sciences from a distinguished university, the basic outlines of my background were shared by quite a few XPG employees. Some analysts had even majored in cultural anthropology, meaning that they were conversant in ethnographic methods and anthropological theory. Others held master's degrees in social scientific disciplines like Consumer Science or Applied Psychology. Working as an intern analyst, I discovered that many skills from my anthropological training crossed over easily: I was already well-equipped to put together proposals for research, parse qualitative data, write interview guides, plan out research methodologies, observe groups, analyze descriptive statistics, weave together narratives from disparate sources, and perform many of the other work tasks required of me. Much has been made in anthropology of the imperative to "study up,"[47] but my fieldwork was more like *studying across*: XPG analysts were professional experts, knowledge-gatherers, and storytellers much like cultural anthropologists. Their challenges and practical workarounds shed light on methodological questions that anthropologists have mulled for decades: How do you weigh what people say against what they do? To what extent can you scale the results of one study to explain a larger population, system, or process? What right do we have to represent others, and what is the proper balance between respondents' voices and the researcher's authorial voice? This ethnography does not address such questions directly, but they still lurk in the background of each chapter, pointing to points of convergence and difference between academic and

[47] Nader, Laura. 1972. "Up the Anthropologist: perspectives gained from studying up," in *Reinventing Anthropology*: 284-311, Ed. Dell Hymes. *Pantheon Books.*
Knorr-Cetina, Karin. 1981. *The manufacture of knowledge: An essay on the constructivist and contextual nature of science.* Pergamon Press.
Gusterson, Hugh. 1997. "Studying up revisited." *Political and Legal Anthropology Review* 20 (1): 114-119.
Ortner, Sherry B. 2010. "Access: Reflections on studying up in Hollywood." *Ethnography* 11 (2): 211-233.
Ho, Karen. 2016. "'Studying up' Wall Street: Reflections on theory and methodology," in *Researching Amongst* Elites: 45-64. Routledge.

corporate research regimes. XPG analysts have tended to work out different answers to these questions than academic anthropologists, so following their internal dialogues opens up potential avenues to reconsider the discipline's own basic principles and commitments.

This text follows observations, insights, and concerns that XPG analysts themselves recognize, approaching consumer analysts as "para-ethnographers"[48] who are professionally committed to understanding certain aspects of social life. Accordingly, I insist on treating expert data analysis as a livelihood rather than a rational technique.[49] Not only does games market data emerge from particular working relationships between analysts, clients, and study respondents, but the interpretation of said data is grounded in both analysts' on-the-clock conversations, as well as their after-hours engagements with entertainment media. This stance aligns my work with that of other scholars who have stressed the situatedness, performativity, and contingency of expert knowledge production.[50] Complementing past studies of scientific[51] and economic[52] fact construction,

[48] Holmes, Douglas and George Marcus. 2006. "Para-ethnography and the rise of the symbolic analyst," in *Frontiers of capital: ethnographic reflections on the new economy*: 33-57. Melissa Fisher and Greg Downey, Eds. Duke University Press.
[49] Boyer, Dominic. 2008. "Thinking through the Anthropology of Experts." *Anthropology in Action* 15 (2): 38-46.
[50] Goodwin, Charles. 1994. "Professional vision." *American anthropologist* 96 (3): 606-633.
Mol, Annemarie. 2002. *The Body Multiple: Ontology in medical practice.* Durham: Duke University Press.
Boyer, Dominic. 2005. "The corporeality of expertise." *Ethnos* 70 (2): 243-266.
Carr, E. Summerson. 2010. "Enactments of expertise." *Annual Review of Anthropology* 39: 17-32.
Choy, Timothy. 2011. *Ecologies of Comparison: An Ethnography of Endangerment in Hong Kong.* Duke University Press.
[51] Latour, Bruno. 1987. *Science in action: How to follow scientists and engineers through society.* Cambridge: Harvard University Press.
Haraway, Donna. 1988. "Situated knowledges: The science question in feminism and the privilege of partial perspective." *Feminist studies* 14 (3): 575-599.
Shapin, Steven. 1988. "The house of experiment in seventeenth-century England." *Isis*: 373-404.
Callon, Michel. 1984. "Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay." *The Sociological Review* 32 (S1): 196-233.
[52] Poovey, Mary. 1998. "Accommodating Merchants: Double-Entry Bookkeeping, Mercantile Expertise, and the Effect of Accuracy," in *A history of the modern fact: Problems of knowledge in the sciences of wealth and society*. University of Chicago Press.
Callon, Michel. 1998. "Introduction: the embeddedness of economic markets in economics." *The Sociological Review* 46 (S1): 1-57.

this study recognizes consumer data as a repository of corporate facts, the elaboration of which shapes how companies understand consumers' demands in the past, present, and potential future. The conclusions that I reach in this ethnography will likely not surprise XPG analysts. In many instances, I am merely re-presenting, reinterpreting, and repackaging comments that they themselves have made. This is a practice that was intimately familiar to XPG analysts. After all, they made a living from re-presenting, reinterpreting, and repackaging participants' feedback in the corporate research projects they conduct.

This does not mean that my work and their work collapse into one another and become indistinguishable, however. As will become clear throughout the course of this text, XPG analysts had quite different stakes, emphases, and methodological standards than myself as a cultural anthropologist. Whereas XPG analysts' outputs were evaluated in terms of their pragmatic usefulness for specific capitalist operations, anthropological works (such as this one) are judged more by their novelty, imaginativeness, and contribution to ongoing conversations in the discipline. XPG analysts were beholden to private clients with whom they have long-term relationships, but the audience for my research is as yet indeterminate because its circulation is not limited by contract. The methods of XPG analysts and cultural anthropologists also differ quite strikingly because XPG analysts derive consumer data almost entirely from self-reporting in limited-time scenarios: surveys, focus groups, playtests, in-home interviews, and the like. It seemed neither practical nor desirable for XPG analysts to conduct the kind of long-term, ambling, solitary participant-observation

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MacKenzie, Donald and Yuval Millo. 2003. "Constructing a Market, Performing Theory: The Historical Sociology of a Financial Derivatives Exchange." *American Journal of Sociology* 109 (1): 107-145.
Mitchell, Timothy. 2008. "Rethinking economy." *Geoforum* 39(3): 1116-1121.

that characterizes anthropological fieldwork—even if they were quite aware of this methodology. Contrasting with the figure of the lone anthropologist deeply embedded in their field site, XPG analysts conducted every project without exception as part of a team, and each individual juggled multiple projects at once. Consequently, XPG analysts were concerned with methodological issues that cultural anthropologists typically gloss over: statistical representativeness, comparability of data, lying respondents, bias, proper compensation for respondents' time, and so on. Topics that my anthropological training held dear—power dynamics between researchers and subjects, unspoken attitudes and behaviors, context-specific practices, the gradual building of rapport until the researcher becomes almost invisible, and the like—were granted by XPG analysts as not germane to their work, or at least as boundary conditions that spoke to necessary imperfections imposed by the limited budgets, timelines, and resources they had available for any given project. And of course, XPG analysts are more narrowly focused on understanding people in their capacity as consumers of entertainment. All of this is to say that it's best to think of cultural anthropology and corporate research as parallel disciplines sharing a commitment to understanding certain groups in the present, but arising from different conditions and resulting in quite different end products. The strange, fun-house mirror effect of comparing the corporate study of people to its academic cousin thus offers unique opportunities for cross-cutting interrogations and insights, which I hope the reader will consider throughout this work.

One of the biggest points of distinction I found was the importance of secrecy for XPG analysts and their corporate clients. The gaming industry is an industry of secrecy. It often takes years to develop a mass-market videogame, yet many publishers prevent even basic

information from reaching the general public until the time is deemed right. The industry officially backs up its secrecy norm with the Non-Disclosure Agreement (NDA), a ubiquitous form which states that the signee may not reveal any proprietary or sensitive information without express permission by the publisher. When NDA breaches or "leaks" occur, perpetrators are dealt with harshly: they may be sued, fired, or blackballed from the industry completely. While many industries are secretive in order to keep information out of the hands of competitors, the games industry additionally deploys secrecy as part of its demand-inciting strategy; details about upcoming titles are doled out gradually in the years and months preceding the launch date, ideally maintaining a speculative tension that surrounds the game and increases the audience's interest over time. This means that leaks are understood to have a direct impact on the company's bottom line, as they potentially ruin the careful orchestration of announcements that incites viral demand. Such an intensive focus on secrecy makes data work especially sensitive because data workers are often tasked with projecting and optimizing the future performance of games that have not yet been released (and in some cases, may not even be announced publicly). And because consumer data work requires gathering responses from the public—a public which is not supposed to know about these products—XPG analysts were in a tricky position, often forced to consider additional security measures that might safeguard against leaks over and above the NDA.

The importance of secrecy in the gaming industry makes it impossible for me to provide a full accounting of my own fieldwork, as divulging specific details about projects might not only put me in legal jeopardy, but more importantly would violate the trust placed in me by my interlocutors to uphold the industry's norm of secrecy. As a result, there is a degree of

self-censorship in my accounts, boundaries I cannot cross. And while it is typical in anthropology to relate specific events from the field with as much detail as possible, these very details that are so prized as elements to share in anthropological works are the very same details that might be considered secret in the gaming industry. As a result, I have taken cues from the security practices that XPG analysts use in their public surveys, introducing obfuscation and abstraction to my writings in proportion to the sensitivity of the underlying subject matter. Specifically, whenever I touch on anything potentially related to confidential or sensitive information, I have endeavored to reorganize my tales from the field as a series of allegories. While anthropologists coming out of the so-called "reflexive turn"[53] have noted that all ethnographic texts include elements of allegory alongside other literary techniques,[54] my evocation of allegory here embraces this necessity and makes it even more direct: many field recollections and observances recorded in this ethnography are not literal or exact representations of past events, but they do contain a true message or meaning about the world that I experienced. In some cases, I changed names and details to create pastiche characters, products, or companies that don't quite exist. In other cases, I have more radically altered the flow of events, the outcomes, or the actors involved. In any event, this ethnography never relies on specific events or pieces of confidential information related to any one publisher or product. Rather, my goal is to illuminate the mundane, everyday practices and encounters that occurred consistently across XPG's projects with big publishers. The shape and character of

[53] Rubinstein, Robert A. 1991. "Introduction: Reflection and Reflexivity in Anthropology." *Fieldwork: the Correspondence of Robert Redfield & Sol Tax*: 1-35. Boulder: Westview Press.
[54] Clifford, James. 1986. "On ethnographic allegory," in *Writing culture: The poetics and politics of ethnography*: 98-121. University of California Press.
Geertz, Clifford. 1988. *Works and lives: The anthropologist as author*. Stanford University Press.
Marcus, George. 1998. *Ethnography Through Thick and Thin*. Princeton University Press.

such encounters matters much more than the situational details, yet I have often opted to keep false details over no details at all. My hope is that even false details will aid the reader by counteracting the dullness and flattening that so often occurs when abstract or vague description is implemented. If I have succeeded, the games industry should be graspable even to those who have never been behind the closed doors of a publisher's studio or a marketing firm's office space. Among these allegories, I also mix in stories from the industry that are publicly available, allowing them to stand in for particular, confidential events that I observed during fieldwork. In both cases, I use such vignettes tactically in order to illuminate the warp and weft of my field site without violating its norms of corporate secrecy and confidentiality.

Mapping the terrain

This ethnography oscillates between three layers of experience, which are also distinct zones of encounters: 1. The professional business world of XPG and its videogame industry clients, including private sites of consumer engagement like focus group facilities and online survey links; 2. The cityscape of Los Angeles, both present and past; 3. The online spaces in which public discourse emerges regarding the games scene and its titles. My primary interlocutors are third-party data analysts at XPG—whose voice remains the through-line of each chapter—but I also present the perspectives of games publishers and game-players, as well as my personal experiences as a long-time gamer and entertainment consumer. By engaging all three layers in turn, I seek to show how multiple relations of demand take form and shape the fortunes of businesses, the development of new entertainment products, and the entertainment atmospheres that surround us.

The first chapter further defines and analyzes *virality*, the particular demand relationship that animates the Western games industry. I show how large videogame publishers are involved in a Hollywood-style business of popular entertainment in which games must go viral or bust. The development of Hollywood and the Los Angeles region is treated at length here, showing how the mass-market videogame industry is informed by this history and critically involved in the ongoing mutation of viral logics of capitalism.

The second chapter covers *conversation*, concretizing the concept of popular demand by showing how data analysts construct the "voice of the consumer" from their datasets. Here, I challenge the cold, individualistic, rationally calculative image of corporate data regimes conjured up by popular accounts of corporate surveillance, arguing that this picture misses an entire branch of data work that involves the artisan, by-hand crafting of group representation. I close the chapter by meditating on the democratic rhetoric that suffuses consumer research, which frames how publishers interpret certain players' demands by assigning them either the status of popular "majority" or activist "fringe."

The third chapter covers *modularity*, showing how data analysts break down national consumers into elemental modules, and how large game publishers use insights around the differential prevalence of these modules to pursue global capitalist strategies of localization. This chapter highlights the apparent dissolution of the dream of globalization—even among "global" capitalists—showing instead how publishers take advantage of national distinctions and disjunctures in order to sell products tailored to each market's modularized demands. Modular production often goes unnoticed when carried out properly because the end product simply fits seamlessly into our lives, but this

chapter shows how such practices may create extended zones of inclusion, exclusion, and distinction when engaged at a multinational scale.

The fourth chapter covers *experiential imprints*, showing how data analysts uncover and compare the various after-effects that entertainment media products leave on people, and revealing how shared entertainment experiences form enduring cultural landscapes in which gamers live, socialize, and buy. This chapter complicates our understandings of the social impacts of media, revealing how entertainment products can create intangible affective links between people without the need for social interaction, a sense of group identity, or even conscious thought. One of my driving concerns here is how experiential imprints from certain games last beyond the scope of our conscious attention, involving lingering attachments that may remain submerged within us for months or years until called forth by the right conditions. Finally, I illuminate how producers activate our experiential impressions by making them the starting points for viral pathways, inciting popular demands by hooking them into latent attachments, connections, and feelings that are shared across dispersed pluralities.

CHAPTER 1: CATCHING THE VIRUS

Situated gaming

As I reached the Los Angeles Convention Center, the first things that caught my eye were the huge, building-sized advertisements for *Rage 2*, *Hitman 2*, and *Assassin's Creed Odyssey*. These larger-than-life videogame ads spanned the walkway over Pico Boulevard, which was where my rideshare stopped to let me out into a balmy, mid-June LA day. Along with tens of thousands of other attendees, I was at E3 2018 (the Electronic Entertainment Expo), the largest videogame industry event of the year. All the major industry players were there, and each had set up sprawling exhibits showcasing their biggest and best upcoming titles.

Walking through the crowded showroom floor of E3, one word kept dancing through my head: wow. Nintendo dominated the West Hall with a giant banner of *Super Smash Bros. Ultimate*'s 70+ character roster, declaring "Everyone is here!" The queue to demo *Ultimate* snaked like a line for a theme park ride, having gamers wait hours to get just a few minutes of exclusive play time. Right next door, Sony had set up demo stations for *Spider-Man (2018)*, housed in a faux New York set complete with fake skyscrapers and billboards. In the South Hall, Ubisoft's space featured Instagram-ready scenery: photo-seekers manned the captain's wheel for *Skull & Bones* and sat at the President's desk for *The Division 2*, all while movie-sized screens played cinematic depictions of gameplay and world lore just around the corner. The newest gaming sensation, *Fortnite*, occupied its own area in the South Hall. Not only were dozens of machines running the game, ready for attendees to hop on and play, but Epic Games had set up a *Fortnite*-themed bull ride along with green screen camera booths for gamers to pretend they were paragliding down into the map of the game world. Around these, dozens of other exhibits vied for attention with their own bright colors, edited footage, oversized logos, and exclusive demo stations for upcoming releases.

After walking in a daze through this gallery of glitz, I finally decided to join a line myself. I chose the line for *Jurassic World: Evolution*. The exhibit had island-jungle set design that looked like it could have been at home on the *Jurassic Park* ride of Hollywood's Universal Studios: leafy vines, faux distressed metal, a camo Jeep, and a klaxon-red warning sign noting "RESTRICTED AREA" that line-waiters shuffled calmly by. My group snaked along the queue until we entered a theater where we were invited to be seated. An actor dressed like a cross between a scientist and colonial explorer greeted us, pausing for laughs every now and then in her rehearsed speech about the history of the island we were about to explore and the nature of our mission ("should we choose to accept it"). The speech finished and we were ushered into the final room with demo stations for *Jurassic World: Evolution*, contained in a space meant to look like a rusty jungle bunker. During the 10 minutes in which I was permitted to play, I had built a pen for my T-Rex, another one for my Triceratops, and was just contemplating knocking down the wall between the two. At that point I was tapped on the shoulder and told to move on. I re-emerged back onto the crowded,

dark showroom floor, the *Jurassic Park* theme still in my head, and old movie scenes playing in my mind's eye.

When we think of videogames, it's easy to imagine that they exist nowhere—or maybe everywhere. After all, gaming takes place in "virtual space," its players traversing digital environments that sometimes look very much like a "real" locale, and other times look more like the stuff of dreams. "Western" gaming is regularly made into Japan's foil,[55] but it's unclear where exactly "the West" resides. Major game-development studios and publishers are distributed across the United States and Europe, and game companies' presence is typically felt more online than in-person. With so many games requiring Internet access, game companies increasingly maintain a direct line to their players, their messages and actions reaching the screens of individuals no matter where they physically reside. It is this online no-space and every-space that makes gaming companies seem unbound by geography in a world where so many people carry Internet-capable devices in their pocket.

When I arrived at E3, I was reminded that there are certain places where the gaming industry comes together in person, places like Los Angeles. Indeed, throughout my fieldwork at XPG (pseudonym)—an LA-based data firm that specializes in videogames and tech—I saw how the city was a desirable, routine meeting-grounds for people who make games, finance games, market games, stream games, and analyze games for a living. Games industry work regularly circulates through LA, whether in the form of stakeholder meetings, focus groups, presentations of corporate strategy, public media events, or

[55] Kohler, Chris. 2016 [2005]. *Power-Up: How Japanese Video Games Gave the World an Extra Life.* Mineola: Dover Publications.
Ryan, Jeff. 2011. *Super Mario: How Nintendo Conquered America.* London: Portfolio / Penguin.
Sheff, David. 1994. *Game Over: How Nintendo Conquered the World.*
Herman, Leonard. 2016 [1994]. *Pheonix IV: The History of the Videogame Industry*. Springfield: Rolenta Press.
Tobin, Joseph. 2004. *Pikachu's Global Adventure: The Rise and Fall of Pokémon.* Durham: Duke University Press.

conventions for players (see Introduction). LA's role as host of E3 simply acknowledges that the city is already a de facto capital of videogames throughout the rest of the year, hosting some of the world's most influential games publishers, developers, digital celebrities, eSports leagues, and other public events. In this chapter, I approach Los Angeles as an important hub of the gaming industry, and not just because it is home to hundreds of gaming companies and a frequent haunt for hundreds more. Rather, I identify a specifically Angeleno approach to the business of videogames, one particularly tied up in Hollywood styles of branding and popular fantasy. According to this interpretation, the spectacle, the glamor, and the mediagenic features of E3 exhibits are not merely incidental; rather, they point to the high degree to which gaming today is entangled with Hollywood as conceptual and physical space.

The *Jurassic World: Evolution* exhibit represents the extreme end of this type of entanglement: its logo, music, visuals, world design, narrative framing, and set design were all cribbed from Hollywood's *Jurassic World* franchise. But even beyond the exchange of specific features or properties, I suggest that there are deeper resonances between the games industry and the film industry. In particular, I argue that big Hollywood film publishers and big videogame publishers are engaged in parallel capitalist projects, sinking major investments into making entertainment products in the hopes that they become blockbusters which rapidly generate massive audiences. To understand how this way of doing business emerged, I trace the development of LA's entertainment industry from real estate boosterism of the 1880s, to the pursuit of Hollywood formula films beginning in the 1920s, to the production of blockbuster franchises in the 1970s and onward.

I argue that this history represents the development of *viral capitalism*, a distinct mode of doing business governed by making unique creative products that spread rapidly, capture the public imagination, and then get replaced by the next product just as rapidly. My use of the term "viral" derives from my field site in LA's entertainment industry, where "viral marketing" and "viral videos" are emic terms used to describe techniques for rapidly reaching online audiences and leaving impressions that "stick." Even beyond this narrow, explicit usage of the viral metaphor, my interlocutors regularly relied on quasi-biological framings to explain what happens when mass-market games release to the public. Games publishers asked XPG analysts to uncover the "triggers" that motivated people to play and purchase games, and to measure the "reach" that each game had. In reports, analysts depicted how game sales spread contagiously through "word of mouth," describing a kind of transmission process from "early adopters" to their friends, family, and peers. Game franchises were also compared in terms of their "core brand DNA," which big publishers were anxious to identify and then "evolve" to keep up with the times. In conference calls, publishers expressed concerns regarding whether certain titles, brands, themes, or game features could "catch on," or whether they were "dead." These phrases evoked publishers' sense that videogames are more than their individual elements; rather they envisioned each videogame as a living set of feelings, experiences, and associations, a public dreamworld that catches the mind and inspires consumers to play, share, and buy. At one meeting, an executive for a big games publisher laid out his company's situation: "We're just waiting to see whether the game goes hockey stick at launch." This reference to the shape of a hockey stick—flat and then shooting up all at once—speaks to an industry in

which new videogames are expected to do more than succeed; they should reach epidemic status.

Stepping through the history of Los Angeles, I show how the peculiar logic of viral capitalism developed and was subsequently adopted by the games industry. This history reveals how four critical pieces to the viral equation emerged and changed over time in LA: 1. *Contagion*, representing the goal of making a product that captures the mind through fantasy and spreads from person to person; 2. *Inoculation*, representing the notion that the same product can never be sold twice to the same people; 3. *Mutation*, representing the creative strategy of making iterative changes to a successful product in order to re-sell it and get around the problem of inoculation; and 4. *Immortality*, representing the ideal pursuit of a product that never dies, a product which can be sold in perpetuity to the masses through endless mutation.

The notion of grounding videogames broadly in the history of Los Angeles may initially seem strange. Popular discourse on videogames tends to treat games as relatively singular, with critics and journalists approaching titles on an individual basis to unpack their specific features, mechanics, and narratives. Games are usually framed as personal experiences between the player and the game-object, sucking the player into a self-contained design space that they explore and judge. When game companies are acknowledged in popular discourse, again this tends to be on the individual level, leading to discussions about specific design or business decisions with respect to the game in question. As a result, there is relatively little precedent for thinking about exactly what kind of business gaming companies are pursuing beyond a vague sense that they want to "make good games," or, cynically, that they just want to "make money" and "sell copies." These are true statements,

but they beg the question: What is a "good" product? How should you make money? Who should you sell to, and why? This chapter's approach shows how entertainment capitalists in Los Angeles have grappled with these questions over time, and how they converged on a coherent set of answers by drawing on nearby conditions and imaginaries.

The notion that games are self-contained worlds is also foundational for scholars of play, dating back to Johan Huizinga's seminal 1938 work, *Homo Ludens*. Huizinga's much-cited notion of the "magic circle" describes how play creates a limited space wherein the regular social order, rules of conduct, and meanings of actions or words can be temporarily ignored. Instead, games create their own new stakes, procedures, and meanings that make little sense to outsiders.[56] While Huizinga wrote *Homo Ludens* before the advent of videogames, the idea of the magic circle has been readily applied to this medium, with scholars pointing out how videogames literally construct virtual worlds in which players follow encoded rules, try out new virtual identities, and divide "play" from "real life."[57] On the other hand, anthropologists have complicated the notion of the magic circle, showing how in practice players frequently transgress supposed boundaries of play, how "real" world social identities like gender and race often impinge on "virtual" worlds, and how actions within "virtual" worlds may have "real" world consequences.[58] Anthropologists

[56] Huizinga, Johann. 2003 [1938]. *Homo Ludens: A Study of the Play-Element in Culture*. London: Routledge.
[57] Salen, Katie and Eric Zimmerman. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge: MIT Press.
Juul, Jesper. 2005 *Half-Real: Video Games between Real Rules and Fictional Worlds.* Cambridge: MIT Press.
Marinka, Copier. 2005. "Connecting Worlds: Fantasy Role-Playing Games, Ritual Acts and the Magic Circle." *DiGRA '05*: vol. 3.
[58] Taylor, T.L. 2006. *Play Between Worlds: Exploring Online Game Culture*. Cambridge: MIT Press.
Boellstorff, Tom. 2008. *Coming of age in Second Life: An anthropologist explores the virtually human.* Princeton University Press.
Consalvo, Mia. 2009. "There is No Magic Circle." *Games and Culture*: 4(4), 408–417.
Nardi, Bonnie. 2010. *My Life as a Night Elf Priest.* Ann Arbor: The University of Michigan Press.
Shaw, Adrienne. 2014. *Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture.* University of Minnesota Press.

thus show how games are only *relatively contained* spaces because they are necessarily situated in the broader lives and social contexts of players. This chapter affirms the importance of a situated approach, but looks at games from a different angle, focusing on their situated production rather than their consumption. A production-focused approach reveals the other side of the "magic circle." While games may at times be experienced by players as relatively contained worlds, these same worlds look quite different from the perspective of their capitalist backers. Specifically, I show how videogame capitalists have a vested interest in proliferating games as enticing circles that disclose a dream-like reality, pursuing the creation of unique domains that seem to not follow the rules of "normal" life. This chapter thus traces the emergence of a situated capitalist logic involving the art of drawing people in, capturing their imaginations, and hooking them for years to come. By attending to this history, I reveal how the magic part of this circle takes on the distinctive character of "Hollywood magic," a promise of wonder and enjoyment that awaits you as soon as you pay the entry fee and step inside.

Viral logics

Surprised Pikachu. Tide Pod Challenges. Change My Mind. ASMR. Dabbing. Ice Bucket Challenges. Double rainbows. Cat pictures. We live in a viral age, full of viral videos, viral images, viral memes, viral challenges, and other things that go viral online. This seemingly-endless font of viral moments speaks to a new sense of digital connectedness, where the rapid sharing of jokes, images, videos, opinions, statements, and ideas spreads at the press of a finger. While the viral designation is widespread today, the term harks back to marketing techniques first developed during the dot com bubble of the 1990s, where

unusual media stunts hyped up the release of new products by creating public controversy or intrigue.[59] One of the earliest uses of "viral" in a business context was by LA-based ad agency Chiat/Day in 1995, which deployed what it referred to as an "underground, viral approach" to market the original PlayStation console. [60] This involved surreptitiously reaching out to influencers to promote the console, leaking PlayStation gaming "secrets" on the Internet, and hiding PlayStation references in traditional ads. Since then, videogame publishers have regularly deployed viral marketing tactics to sell games or systems, embracing the sense of spectacle created by such campaigns. Publishers have built cryptic websites for unannounced titles,[61] funded rock concerts for games,[62] tied copies of games to weather balloons,[63] staged fake protests, [64] announced worldwide treasure hunts,[65] and even given prizes to families who named their newborn children after videogame characters.[66]

These campaigns show how the videogame industry has long been keenly interested in the proliferation of viral messages and moments. Virality here simply denotes the rapid sharing of something until it seems to be everywhere. This typically involves travel along existing social and material networks, such that the virus becomes part of one's everyday experience, showing up regularly in news media, in social media, in conversations with friends and family, or even one's physical environment. In this way, a successful virus

[59] Kirby, Justin and Paul Marsden, Eds. 2006. *Connected Marketing: The Viral, Buzz, and Word of Mouth Revolution.* Oxford: Elsevier.
[60] Fitzgerald, Kate. 1996. "THE MARKETING 100; SONY PLAYSTATION JIM WHIMS." *Ad Age*: June 24.
[61] Rougeau, Mike. 2016. "The 'Destiny' ARG's the Latest in a Long Line of Experiments." *Inverse.com*: September 20.
[62] "Call of Duty XP adds Kanye West performance." 2011. *Gamespot*: August 24.
[63] Shaw, Patrick. 2012. "Mass Effect 3 Space Disc Lands in Earth Tree." *WIRED.com*: February 24.
[64] Fritz, Ben. 2009. "E3: Protesters target Dante's Inferno game." *Los Angeles Times*: June 3.
[65] Ashcraft, Brian. 2009. "Not All Fake Body Parts Returned." *Kotaku.com*: March 12.
[66] Purchese, Robert. 2011. "Bethesda's Skyrim challenge accepted: parents name baby Dovahkiin." *Eurogamer.net*: November 17.

captures the public's imagination until it reaches its peak, fades, and the next virus takes hold. While virality commonly designates a kind of random, grassroots, unstable growth, this chapter looks at forms of *planned virality* that entertainment companies have been encouraging, measuring, and tinkering with long before the dawn of our current internet age. For companies who aim to profit from virality, their products must reliably catch on, grow, and generate an audience before they miss their moment.

While viral marketing is one means to achieve peak public interest in a short time frame, it was by no means the only method I observed in the field. At XPG, I learned about the pursuit of virality from the games publishers that were XPG's clients. Time and again, I saw how the types of corporate research projects they pursued asked questions about virality: Who is our audience? What do they want next? How do we drive higher awareness, higher engagement, higher intent to purchase, higher brand affinity, higher satisfaction, higher rate of conversion, and more? The answers to these sorts of questions informed not only the marketing of videogames, but also their design, their financing, their monetization, and their internal perception, shaping big-budget videogames into viral products that could rapidly pull together sizable gaming audiences. Behind closed doors, videogame publishers were constantly discussing and measuring games' virality, debating indicators like public status, name recognition, fan enthusiasm, and rate of growth that different titles had achieved or were projected to achieve. In this environment, titles that had gone viral commanded a great deal of respect and attention, with publishers constantly asking how they can learn from breakaway successes, steal ideas, and start the next big craze.

The pursuit of virality is not unique to videogame publishers. Hollywood films, TV shows, YouTube videos, eSports broadcasts, and podcasts are all different kinds of viral

products designed to snare the imagination, grow, and gather monetizable audiences. LA is a city of virality, a place where viral entertainment content is generated and consumed continually. I have already described above how LA's status as "Entertainment Capital" not only attracts talented hopefuls to the city, but spurs investments in highly visible venues, events, and advertisements that infuse the city with a sense of glamor and urgency around fresh content (see Introduction). LA is a place where the bottom-up virality of rising stars meets the capitalist machinery of well-heeled entertainment companies like Hollywood studios and videogame publishers. While the "viral" descriptor is a 1990s neologism, LA-based capitalists have been in the business of virality for a long time. This chapter shows how the pursuit of virality is deeply rooted in the histories of LA's Hollywood studios, real-estate magnates, and other big entertainment franchise owners. I argue that by the 1990s, Hollywood studios had developed a complex, situated logic of *viral capitalism* involving the conversion of money into viral entertainment content, which in turn generates more money for reinvestment in more viral content. This logic then hopped from Hollywood to videogames, paving the way for a contemporary gaming landscape which is dominated by blockbuster releases, big-budget franchises, and spectacular mass-marketing.

As we will see, this situated logic bears little resemblance to what might be considered the "universal" or "rational" logic of capitalism, instead emerging through the unique opportunities and predicaments of LA's entertainment industry over the past hundred or so years. My approach here takes cues from Max Weber's iconic treatise, *The Protestant Ethic and the Spirit of Capitalism*.[67] In this work, Weber recognizes that the seemingly-

[67] Weber, Max. 1905 [1992]. Trans. Talcott Parsons. *The Protestant Ethic and the Spirit of Capitalism*. London: Routledge.

rational practices of modern capitalist labor—saving money, refraining from enjoyable expenditures, working extra hours—are in fact peculiar and historically unprecedented. Weber explains how these practices are rooted in the history of the Protestant Reformation, wherein labor began to be viewed as not just necessary to survive, but as a "calling" from God. Protestant workers reassured themselves of their status among God's elect by exhibiting extreme self-control and denial of worldly pleasures, but also by pursuing work as a duty.[68] Protestantism thus lent moral weight to secular business, paving the way for modern capitalism. Subsequently, anthropologists of capitalism have used Weber's work as a touchstone for analyzing the importance of history and culture in capitalist processes, pushing back against the formalism of neo-Marxist approaches.[69] Just as Weber situates modern capitalism in the history of Protestantism, this chapter situates viral capitalism in the history of LA, showing how ideas, attitudes, proclivities, and logics that developed here still resonate in today's entertainment landscape even beyond the geographic limits of the city.

Although Weber is a primary point of inspiration, this chapter diverges from his theses in a major respect. Namely, I join recent anthropologists of global capitalism who argue that capitalism is not a singular, monolithic, determinative force.[70] Rather, they point to the

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[68] Ibid.

[69] Dirlik, Arif. 1995. "Confucius in the Borderlands: Global Capitalism and the Reinvention of Confucianism." *Boundary 2* 22(3): 229-273.
Blim, Michael. 2000. "Capitalisms in Late Modernity." *Annual Review of Anthropology* 29: 25-38.
Keyes, Charles. 2002. "Weber and Anthropology." *Annual Review of Anthropology* 31: 233-255.
Collier, Stephen and Aihwa Ong. 2005. "Global Assemblages, Anthropological Problems." *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*, Eds. Aihwa Ong and Stephen Collier. Blackwell.

[70] Dunn, Elizabeth. 2004. *Privatizing Poland: Baby food, big business, and the remaking of labor.* Cornell University Press.
Rofel, Lisa. 2007. *Desiring China: Experiments in neoliberalism, sexuality, and public culture.* Duke University Press.
Mitchell, Timothy. 2008. "Rethinking economy." *Geoforum* 39.3: 1116-1121.
Ho, Karen. 2009. *Liquidated: an ethnography of Wall Street.* Duke University Press.

heterogeneity of capitalist projects and lifeways, suggesting that capitalism is not one thing as much as it is a confluence of diverse "productive powers."[71] Doing fieldwork on the corporate side of LA's entertainment industry, I similarly found that these businesses do not follow a singular capitalist logic, nor do their histories match with broad designations like modern/postmodern, Keynesian/neoliberal, or early/late capitalism. Instead, entertainment publishers are driven by peculiar "sentiments"—to borrow a phrase from Sylvia Yanagisako[72]—associated with LA's past, present, and imagined futures. This approach disagrees with Weber's framing of modern capitalism as an "iron cage," a construct that has escaped the moorings of its Protestant past and become a unifying force unto itself.[73] Instead, I suggest that viral capitalism is itself continually evolving and mutating, rejecting the solidity, rigidity, and permanency implied by the iron cage metaphor. While videogame capitalists are borrowing logics and practices developed in LA's past, they are also twisting these logics, refashioning them, repurposing them, and even discarding them at times as they pursue their own unique projects.

By tracing the development of *situated logics* of capitalism, I make room for a middle ground between the seemingly-endless heterogeneity of "productive powers" and the rigid uniformity of Weber's "iron cage" of rationalism. By situated logics, I mean particular ways of doing and thinking capitalism that emerge from shared historical conditions. This

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Bear, Laura. 2015. *Navigating austerity: currents of debt along a South Asian river.* Stanford University Press.
Tsing, Anna. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton University Press.
Zhan, Mei. 2015. "Tales of Physics and Cosmographies of Capitalism." Theorizing the Contemporary, *Fieldsights*, March 30.

[71] Bear, Laura, Karen Ho, Anna Lowenhaupt Tsing, and Sylvia Yanagisako. 2015. "Gens: A Feminist Manifesto for the Study of Capitalism." Theorizing the Contemporary, *Fieldsights*: March 30.
[72] Yanagisako, Sylvia. 2002. *Producing Culture and Capital: Family Firms in Italy*. Princeton University Press.
[73] Weber, Max. 1905 [1992]. Trans. Talcott Parsons. *The Protestant Ethic and the Spirit of Capitalism.* London: Routledge.

approach joins anthropologists' insistence on capitalist diversity and mutability with Weber's recognition that even seemingly-distant historical conditions can create shared capitalist logics and motivations. I articulate the logic of viral capitalism below as a kind of rough equation: a conversion process that begins with several inputs (money, talent, expertise) and predictably yields certain outputs (viral products, publicity, monetizable audiences). This equation is not static—certain pieces of the viral equation have been added and mutated over time—but it does represent how viral capitalists anticipate and calculate certain outcomes for their products from the early stages of their financing and conceptualization, applying the logic of virality to dream of a future in which a nascent product will be finished, capture the public, and go viral.

My use of logic here is purposeful: it speaks first to the quality of axiomatic sensibility, or the way in which certain fundamental principles go largely unquestioned because they seem perfectly reasonable and coherent to those who hold them. In the genealogy below, I present several basic axioms regarding the business of entertainment, axioms which encapsulate a unique set of values, goals, and sensibilities. In fact, I chose to highlight these axioms and moments in the history of LA because they represent principles that nearly all of my games industry informants took for granted as necessary for making successful videogames. I also saw how individual corporate strategies, practices, and projects were continually built on top of these axioms, representing corollaries that companies actively tested out with research before going to market. My position at XPG—a firm who dealt with nearly all the major Western games publishers—thus enabled me to understand the great extent to which these capitalists shared fundamental principles about how to reliably make games that were both profitable and good.

Second, my use of logic speaks to the portability of business strategies, principles, and practices which can be transferred and translated from one project to another, from one company to another, and even from one industry to another. This results in an interconnected web of businesses who share much of the same ideas, goals, and techniques, even as they take steps to innovate and alter this status quo. Portability is also an important precondition for understanding the specifics of LA's history, in which Hollywood's viral logics get transferred over to videogames. The translation process was especially evident at XPG; research reports regularly engaged in cross-comparison of the client's product with market competitors and other exemplars, producing portable strategies that travelled from one publisher to another.

Before going any further, it is important to note that the genealogy I present here is an incomplete and messy one. The emergence of viral logics in LA was neither necessary nor inevitable, nor did it follow a straightforward path of progression. While I highlight four particular axioms that connect gaming today with the history of LA—contagion, inoculation, mutation, and immortality—other terms and moments could have easily been chosen. Therefore, my goal is not to define viral capitalism once and for all—this would be futile anyways—but to provide a sense of how certain business principles and sentiments have grown up in LA over time, and how they continue to shape the production of videogames. Accordingly, I approach LA as both a practical and cultural center of gaming, but not the only center. Much like Hollywood, Silicon Valley, or Wall Street, LA's gaming scene should be understood here as simultaneously a geographic location, a public symbol, a network of interconnected individuals, and a social milieu defined by a rough set of shared principles, values, and logics that those in the scene alternately follow, contest, or at

least navigate their way through.[74] This approach recognizes that LA moves beyond its geographic boundaries easily and continually. To speak of LA's gaming scene is to speak of a rich set of interconnections, histories, and pathways that span the globe. These paths sometimes begin in LA, sometimes end there, and sometimes they just pass through or are connected to LA at a few degrees of removal. Geography is merely a handy device for visualizing something as dispersed and seemingly-insubstantial as the gaming industry, for one can always find places in LA where these threads congeal thickly.

Booster dreaming & the logic of contagion

Los Angeles is a relatively young metropolitan area. In 1850, Los Angeles County had around 3,500 residents,[75] whereas estimates today put LA County's population at over 10 million,[76] and the greater LA area at over 13 million.[77] The LA region was originally home to the Tongva and the Chumash Indians, many of whom were put into forced labor and conversion, fled, or were killed by Spanish missionaries, soldiers and colonists beginning with the construction of the Mission San Gabriel Arcángel in 1771. The Spanish colonized the LA region using its standard tripartite imperial strategy of coastal occupation: Catholic missions, military presidios, and resident pueblos. The Pueblo Los Angeles was founded in 1781, followed swiftly by the Santa Barbara Presidio in 1782. Outside of these occupations, the majority of the LA region was held in latifundia, or large landholdings worked by low-

[74] Ornter, Sherry B. 2013. *Not Hollywood: Independent Film at the Twilight of the American Dream.* Durham: Duke University Press.
Ho, Karen. 2009. *Liquidated: An Ethnography of Wall Street.* Durham: Duke University Press.
English-Lueck, J.A. 2003. *cultures@siliconvalley*. Stanford: Stanford University Press.
[75] U.S. Census Bureau. 2019. "Historical General Population City & County of Los Angeles, 1850 to 2010." *LAAlmanac.com*. http://www.laalmanac.com/population/po02.php
[76] County of Los Angeles. 2019. "Statistics". *LACounty.gov*.
[77] Romero, Dennis. 2014. "News Flash: L.A. Is Actually Bigger Than New York." *LAWeekly.com*: October 3.

payed, contract, or even slave laborers.[78] Spanish royal officials granted huge tracts of land to nobles, military leaders, and other faithful servants of the crown, carving up the Californian landscape into large ranchos on paper that in practice were sparsely populated by Spanish peoples. In the LA region, the Spanish crown granted such landholdings to military officials and Alta California governors like Pedro Fages, Diego de Borica, and José Joaquín de Arrillaga. The latifundia system persisted even after California passed from Spain to Mexico, a result of the Mexican War of Independence in 1821. The Mexican government continued issuing rancho grants in Alta California through the mid-1800s, including a notable rise in grant disbursement after the secularization of the missions in 1834, which led to mission properties being broken up and sold off to prominent Mexican families. As a result, the LA region was split among a new generation of wealthy Mexican Californios—including governors like Pío Pico, Juan Bautista Alvarado, and José Figueroa—who constituted an elite class of large landholders.[79]

The future for these Californios—and for their latifundia system—was entirely unclear when Mexico ceded Alta California to the United States by ratifying the Treaty of Guadalupe Hidalgo in 1848. The Treaty signaled the end of a Mexican-American war that had largely been waged outside of California, with John Frémont's rebel Bear Flaggers taking some symbolic victories, and the U.S. army engaging only a few minor skirmishes in the province. In 1850, California was admitted to the Union as a free state, although in practice the enslavement and state-sanctioned killings of Native Americans continued for decades. For

[78] Hackel, S. W. 1997. "Land, labor, and production: the colonial economy of Spanish and Mexican California." *California History*, 76(2/3), 111-146.
[79] Starr, K. 1973. *Americans and the California dream, 1850-1915.* Oxford University Press.
Nugent, W. 2001. *Into the West: The Story of Its People*. Vintage.
Starr, K. 2005. *California: A History.* Random House.
Hine, R. V., & Faragher, J. M. 2007. *Frontiers: A Short History of the American West.* Yale University Press.

the Californios who owned the majority of arable lands and fields in California, the U.S. victory was ruinous, initiating a complicated series of legal and extra-legal struggles to maintain their landholdings. Many ended up either dispossessed or forced to sell off their lands at rock bottom prices, transferring the tracts into the hands of wealthy American land speculators.[80]

At the time of these transfers, Los Angeles was a small pueblo surrounded by expansive cattle ranches, providing beef to feed the growing San Francisco population through the gold rush. As these ranches slowly shifted ownership to wealthy Anglo-Americans, the vestiges of the latifundia system established LA as a place of mass-market real estate, not frontier homesteading. Greater LA's land speculators carved up their new holdings into tiny, individual housing units to be rented or sold to scores of newcomers. These land speculators became realty kingpins, using a specialized form of regional promotion that historians call "boosterism" to sell the dream of California living to Americans in the East and Midwest.[81] Boosterism helped initiate LA's first real estate boom in the 1880s, and another even bigger boom in the 1920s and 30s. LA County's population exploded, growing from 33,000 to 101,000 in the 1880s, and reaching a whopping 2.8 million residents in 1940.[82] Private boosters worked hand-in-hand with the Los Angeles Chamber of Commerce, which funded the nationwide distribution of pamphlets, promoted books about

[80] Ibid.
[81] Orsi, Richard. 1973. *Selling the golden state: A study of boosterism in nineteenth-century California*. Vol. 1. University of Wisconsin-Madison.
Gish, Todd. "Growing and Selling Los Angeles: The All-Year Club of Southern California, 1921-1941." *Southern California Quarterly*: 89(4): 391-415.
Hernandez, Kim. 2010. "The 'Bungalow Boom': The Working-Class Housing Industry and the Development and Promotion of Early Twentieth-Century Los Angeles." *Southern California Quarterly*: 92(4), 351-392.
Stalls, Clay. 2015. "'Sharp Practice': Land Speculation in Gilded Age Los Angeles." *California History:* 92(4), 24-47.
[82] U.S. Census Bureau. 2019. "Historical General Population City & County of Los Angeles, 1850 to 2010." *LAAlmanac.com*. http://www.laalmanac.com/population/po02.php

LA, financed exhibits and fairs, and worked with Hollywood in later years to produce flattering movies about the LA region. Historian Tom Zimmerman quotes one Chamber official as stating that "the Chamber sleeps not when it comes to keeping the country informed that Los Angeles occupies a most advantageous spot on the map of the United States."[83] Boosters packaged the California Dream as a burgeoning suburban paradise, stressing factors like the salubrious climate, recreational amenities, and escape from the constraints of judmental Midwestern communities. The booster dream that brought migrants to Southern California was multifaceted, but a recurrent feature was the image of life as a constant vacation, a place where jobs were almost secondary to soaking up the sun, tasting citrus fruits, watching palm trees sway, and then retreating to one's own quiet bungalow.[84] If the Midwestern dream consisted of hard work, economic independence, and land ownership, the LA region offered a mirror image of a life of leisure, easy attainment, and escape from monotony.

Real-estate boosters multiplied their fortunes by commercializing Southern California as a fantasy paradise landscape, but the Mediterranean Paradise was not the only fantastic register employed to sell the LA region to the nation. Media studies scholar Vincent Brook writes of the fascination with LA's "Spanish Fantasy Past," in which the region's Spanish colonial period is reread as a picturesque, romantic, noble era.[85] The Spanish Fantasy Past is largely a construct of Anglo-American tourists and newcomers, who saw in California's mission ruins and open vistas a bygone era of idyllic missions, padres, and rancheros.

[83] Zimmerman, T. 1985. "Paradise Promoted: Boosterism and the Los Angeles Chamber of Commerce." *California History*: 64(1), 22-33.
[84] Spooner, D. S. (1997). "A New Perspective on the Dream: Midwestern Images of Southern California in the Post-World War II Decades." *California History*: 76(1), 44-57.
[85] Brook, V. 2013. Land of Smoke and Mirrors: A Cultural History of Los Angeles. Rutgers University Press.

Brook traces this fantasy's origin to an 1884 novel by Helen Hunt Jackson, titled *Ramona: A Story*. Although the novel was written to critique both Spanish treatment of Native Americans, as well as the greed of American land prospectors, Jackson's moving descriptions of the pastoral landscape and the romantic Spanish colonial lifestyle ended up making a deeper impression on readers. Most saw the novel as a reaffirmation of Manifest Destiny, in which the displacement of Hispanic livelihoods by Anglo-Americans was sad but inevitable. Historian Glen Gendzel confirms that *Ramona* was an exceedingly popular book, driving tourism to Southern California and securing a sense of regional heritage, even as newcomers continued to aggressively develop and modernize the area.[86] Using a term first developed by anthropologist Renato Rosaldo, Gendzel identifies this paradox as a form of "imperialist nostalgia"[87] which allowed Anglo-Americans to celebrate and mourn the region's past while ignoring problems facing Hispanic residents in the present. Notably, the Spanish Fantasy Past quickly became a commercial product, selling tickets on newly-built rail lines like the Southern Pacific and the Santa Fe. Concurring with the height of *Ramona'*s popularity, both of these lines were fully hooked into LA's rail system by 1887, bringing mission-bound tourists and permanent migrants into the county at astonishingly cheap prices. In the 1900s, the book was reprinted more than 300 times,[88] several real-world locations rebranded themselves as the "Home of Ramona," "Ramona's Birthplace," and "Ramona's Marriage Place," hundreds of postcard designs were issued featuring Southern California as "Ramona Country," and Hollywood published five distinct screenplay versions

[86] Gendzel, G. 2001. "Pioneers and Padres: Competing Mythologies in Northern and Southern California, 1850–1930." *Western Historical Quarterly*: 32(1), 55-79.
[87] Rosaldo, R. 1989. "Imperialist nostalgia." *Representations*: 26, 107-122.
[88] Crawford, R. 1990. "True to Life: 'Ramona,' Reprinted 300 Times, Is Based on Actual Incident." *Los Angeles Time*s: August 30.

of *Ramona*.[89] The *Ramona* phenomenon helped to fuse the real-estate industry with the entertainment industry in LA, selling the area as paradise lost and paradise found.

While this history might seem distant, it is important to note that the booster dream of LA fed directly into the formation of Hollywood. Hollywood as a neighborhood is the product of a real estate tycoon, H.J. Whitley, who turned ranch-lands into genteel plots that he marketed to well-off white settlers.[90] Hollywood's now-iconic hillside letters are themselves a booster relic, originally conceived as a way of advertising the housing development. More broadly, boosterism spurred the growth of LA at a critical time for the Hollywood film industry, making the area an attractive place for financiers, film directors, silver screen stars, and other talent to put down roots. LA's realty magnates—many of whom were also railway tycoons—ensured that LA was well-connected, working to keep a high volume of trains running at low rates, shipping passengers from the Midwest and Eastern states to the city. They wielded significant political influence in the late 19th and early 20th centuries, and secured government support for regional aqueducts, the development of LA's port, and the construction of oil wells.[91] These investments created the conditions for Hollywood's success on a practical level, helping grow the city's population, securing housing and local infrastructure for Hollywood workers, and developing the national infrastructure for the delivery of film reels from coast to coast.

Moreover, LA boosterism contributed to the cultural conditions for Hollywood's public image as a land of glamour, escape, and entertainment. LA realty boosters worked hand-in-

[89] McWilliams, C. 1946. *Southern California: An island on the land.* Gibbs Smith.
[90] Keith, Gaelyn Whitley. 2010. *The Father of Hollywood.* Tate Publishing &* Enterprises.
[91] Nugent, W. 2001. *Into the West: The Story of Its People*. Vintage.
Starr, K. 2005. *California: A History.* Random House.

hand with Hollywood stars, who headlined opening events for different subdivisions and colonies.[92] Hollywood films and media accounts played up the region's mythic status as both Spanish Fantasy Past and Mediterranean Paradise. The first film shot in Hollywood was a silent flick called *In Old California (1910)*, a melodrama set in the Spanish mission period. Historian Richard Kagan recounts an array of Spanish romance films coming from early Hollywood, such as *Ramona (1910)*, *Ramona's Father (1911)*, *The Mission Father (1912)*, *Ramona (1916)*, and *The Mark of Zorro (1920)*.[93] As filmic entertainment gained purchase on the American public's imagination, Hollywood itself became a topic of film, spawning a genre of flicks depicting young actresses breaking into the business. Such titles include *Souls for Sale (1923)*, *Show People (1928)*, *Free and Easy (1930)*, and *It Happened in Hollywood (1937)*. These films combined with famous memoirs and media tell-all articles to fix Hollywood stars in the public consciousness, especially dramatizing the careers of Hollywood actresses as risky, glamourous adventures wherein they achieved a kind of independence from traditional social pressures and duties.[94] In the early 20th century, Hollywood stars came to be prime exemplars of the LA booster's vision: living an apparent life of ease, escape from social norms, unanticipated success, and sunshine.

While boosterism helped to create the initial image of LA as a fantasy land, this booster dream continued to develop beyond the early real estate booms of the 1880s and 1920s. In fact, Hollywood itself brought a second face to the booster dream. Hollywood seemed not to follow the rules of mainstream or polite society, gaining associations with promiscuity,

[92] Robinson, W. W. 1942. "The Southern California Real Estate Boom of the Twenties." *The Quarterly: Historical Society of Southern California*: 24(1): 25-30.
[93] Kagan, Richard. 2019. *The Spanish Craze: America's Fascination with the Hispanic World, 1779-1939*. University of Nebraska Press.
[94] Hallett, H. A. 2011. "Based on a true story: New Western women and the birth of Hollywood." *Pacific Historical Review*: 80(2), 177-210.

drug use, vanity, and unearned wealth. Moralistic tales of Hollywood—including media scandals and film noir—layered the fantasies of danger and sin onto the typical booster image of LA as carefree paradise.[95] In the postwar era, California also became an important nexus for counter-cultural movements: the beat generation, the hippie movement, the New Age movement, Zen culture, surfer culture, skater culture, and more.[96] These movements resonated with many of the old themes of LA boosterism: negation of traditional social norms, an emphasis on outdoor recreation, rejection of drudge work, revisionist nostalgia for earlier times, and the substitution of the American dream of hard work in favor of a coastal dream of ease. The through-line of LA boosterism thus emerges not so much as an escape *out of* reality, but an escape *into* a new reality, promising a better, more beautiful, more carefree world where the old rules, the grind, and the strict social norms of the past no longer seem to apply.

This idea of escaping *into* a better reality forms the basis of LA's entertainment industry, where executives pursue profit via the mass-distribution of fantasy experiences. Like realty boosters of old, LA's entertainment executives distribute promises of escape *from* one's everyday life and *into* new worlds, worlds of glamorous excitement filled with nostalgic appreciation of the past. This type of business venture represents the first piece of the viral equation, governed by the axiom of *contagion*: the more appealing the fantasy, and the more people it reaches, the more money can be made. In other words, LA boosterism helped inspire and reinforce a rising class of entertainment capitalists who would take up this art of fantasy creation and turn it to a new purpose: selling tickets. Even

[95] Brook, V. 2013. Land of Smoke and Mirrors: A Cultural History of Los Angeles. Rutgers University Press.
[96] Heath, Joseph, and Andrew Potter. 2004. *Nation of Rebels: Why Counterculture Became Consumer Culture.* HarperBusiness.

early on, Hollywood studios' booster-inflected logic of contagion was quite distinct from a factory-based logic of mass production. The goal of early Hollywood studios was not to produce useful items quicker and cheaper, but to capture the public imagination by presenting fictional scenes that elaborated on already-available fantasies, such as the Spanish Fantasy Past or the Mediterranean Paradise.

One innovation of the LA entertainment industry today is that it has made such fantasies much more accessible. One need not put up with the hassle of physical travel; partaking of these new booster dreams is as simple as consuming Hollywood films, television shows, and videogames from the comfort of your home. Another innovation is that entertainment products' fantasy offerings are unmoored from one particular geographic location. The topics of fantasy imaginings and nostalgic experiences multiply from the Mediterranean Paradise and the Spanish Fantasy Past to a seemingly-infinite variety of alternatives: pirate voyages, outer space adventures, zombie apocalypses, super hero metropolises, the Wild West, Greek mythology, Norse mythology, World War II, small-town America, and much more. These modern fantasies capture the public consciousness much like prior visions of paradise LA and glittering Hollywood. But unlike LA-based visions, entertainment fantasies are treated explicitly *as* fantasies by both their producers and consumers: they present fictional glimpses of fictional worlds. Entertainment boosterism thus plays down the promise of opportunity, but plays up the promises of novelty, escape, and excitement. Nonetheless, the primary allure of the fantasy remains one of experience: seeing a different world, sharing it with others, getting to know its important people and their stories, and imagining what else might be. Given this formulation, it should come as no surprise that videogames have become an important entertainment

medium in LA. If the LA dream is selling a fantasy world that one could experience, videogames deliver this fantasy in a novel, compelling, and interactive way. Videogame worlds can be traversed, explored, and manipulated using methods that are impossible for the film medium to express.[97] While videogames—like film itself—are a flexible medium that could in theory be put to a number of purposes, the primary focus in the gaming industry on presenting a fantasy world indicates their close relationship with Hollywood's brand of the booster dream.

Booster themes also appear readily in LA game companies' stories about themselves, tying into the broader aspiration of working in gaming as a "dream job." The Jobs page on Obsidian Entertainment's website boasts that "Southern California is the definition of easy living," and "you'll never have to scrape snow off your car."[98] The About page for Dice Los Angeles' website features a picture of a pool surrounded by palm trees, promising that employees enjoy "ocean views and sunsets on a daily basis," but that they also benefit from working in a city known for its "entertainment culture."[99] In an IGN profile of Sony Santa Monica, the founder of the studio describes how he chose the location in order to "break out" of the corporate Sony business group.[100] In a Polygon interview, Naughty Dog's co-founders relate a story about their cross-country drive to get to LA, having been offered a space to work on Universal's backlot, where they saw "celebrities everywhere," and often

[97] Murray, J. H. 1997. *Hamlet on the holodeck: The future of narrative in cyberspace.* MIT press.
Frasca, G. 1999. "Ludology meets narratology: Similitude and differences between (video) games and narrative." *Ludology. org*.
Juul, J. 2005. *Half-real: Video games between real rules and fictional worlds*. MIT press.
Bogost, I. 2006. *Unit operations: An approach to videogame criticism.* MIT press.
[98] Obsidian Entertainment. 2019. "Life at Obsidian." *Obsidian.net*. https://www.obsidian.net/jobs/life-at-obsidian
[99] Dice Los Angeles. 2019. "About DICE Los Angeles." *Dice.se*. *http://www.dice.se/about/los-angeles/*
[100] Moriarty, Colin. 2012. "The House that God of War Built: Sony Santa Monica." *IGN.com*: March 21.

talked about "what Hollywood would do to video games."[101] These new forms of boosterism remain active in LA's gaming scene, building up the region's reputation by associating it with a particular lifestyle, one in which labor becomes creative and exciting, the lines between work and play are blurred, and entertainment is highly valued—in both the monetary and cultural sense.

Talking with videogame analysts at XPG, many had woven these themes into their own personal narratives about why they had come to LA, and why they plan to stay there. Most were migrants to LA, their stories fitting a familiar pattern of making their journey from a small town to the big city, a move that finally put them in a place where "things are always happening, and the weather is always nice." XPG analysts were deeply embedded in LA's entertainment culture; while a majority played videogames, they also watched the hottest Netflix or HBO shows, saw blockbuster movies at theaters, attended local concerts, listened to podcasts, and had favorite YouTubers. As a form of office bonding, analysts frequently discussed and recommended entertainment products to each other. They also postulated about the "business side" of these products, drawing on their experience working with entertainment companies at XPG. In such narratives, videogames figure as merely one type of entertainment among other similar offerings. These types of narratives show how booster dreams continue to draw people to LA, pitching the LA region not only as a sunshiny paradise, but as the heart of American entertainment and popular culture. The principle of contagion implies that entertainment products should be maximally enticing to the public in order to capture large audiences, but analysts' preoccupation with entertainment suggests that contagion also works on the entertainment industry itself,

[101] Hester, Blake. 2017. "Crash Bandicoot: An oral history." *Polygon.com*: June 22.

forming an active part of workers' identities and motivations. As a result, entertainment boosterism should largely not be seen as a cynical endeavor to just maximize profit, but rather as an earnest effort to make compelling fantasies that people want to escape into, experience, discuss, and share. After all, games industry workers that I observed were as much consumers of these fantasies as they were their purveyors.

Hollywood grinds & the logics of inoculation and mutation

One of the biggest twists that Hollywood capitalists applied to the booster formula is that they positioned their products as relatively disposable fantasies along the lines of earlier media like kinetoscope clips or dime-store novels. This was in stark contrast to LA realty kingpins, who worked to build an enduring image of LA as a specific type of paradise, a place worth knowing and living in permanently. They used multiple channels of public promotion in successive layers over years, creating a stable set of positive associations with the region so that they could sell the same LA dream to multiple generations of migrants. Meanwhile, Hollywood studios were entering the business of selling products with a vanishingly short shelf life: aiming to fill seats in large, freshly-constructed movie palaces, these studios continually produced new films that could reinvigorate the imagination and attract the middle classes back to the theater again and again. Even today, major films and videogames tend to make a lion's share of their profits in the first few months of release, such that entertainment companies are always churning out new products that crowd out and replace old ones. If the first piece of the viral equation is mass contagion, the second piece is *inoculation*. Inoculation follows its own viral axiom: the same thing cannot catch on twice with the same people, so new strands must be generated

constantly to activate the process of contagion, meaning that novelty is a driver of profit. The principle of inoculation helped justify the constant drive toward "progress" in filmic technologies and representation. As "talkies," color film, advanced special effects, and CGI developed over the decades, it seemed impossible for films to turn back the clock and sell the same movie twice, unless in "remade" or "remastered" form. Hollywood studios' pursuit of breakthrough technologies to wow the public lent the filmic medium a kind of forward-looking momentum through the 1900s, one which would be subsequently picked up by the videogame industry as game-makers repeatedly hyped up "never-before-seen" graphical capabilities, mechanics, and special effects in their games. The principle of inoculation thus informed the creation of an entertainment market focused on the new, a market in which old products did not simply go out of fashion, but literally were viewed as obsolete from a professional and technical standpoint.

On the other hand, inoculation represented a pragmatic problem that Hollywood studios had to solve early on: how does one continually create brand-new, never-before-seen products in a predictably profitable manner? Novelty may have been exciting to audiences, but straying too far in that direction risked ending up with a product that was overly niche, costly, or perplexing. Even in early Hollywood, wholly innovative films were not only expensive and difficult to conceive, but their appeal was unknown, given that they had never been shown before. The answer that early Hollywood studios came up with was the formula film.[102]

[102] Wagner, Robert W. 1955. "The formula film." *Audiovisual communication review:* 3(1): 53-57.
Gans, Herbert J. 1963. "The Rise of the Problem-Film: An Analysis of Changes in Hollywood Films and the American Audience." *Social Problems* 11: 327.
Moniot, Drew. 1976. "James Bond and America in the Sixties: An Investigation of the Formula Film in Popular Culture." *Journal of the University Film Association*: 28(3): 25-33.

Historians of film show how formulas arose in the silent film era and continued to take shape in feature film talkies.[103] Early filmmakers like Charlie Chaplin, Mary Pickford, and D.W. Griffith produced scores of films with strikingly repetitive narrative structures, recurrent character types, and reusable props, sets, and costumes. These filmmakers were prolific, iterating on formulas rapidly; film studies scholar Scott Simmon recounts much of this work as "sausage-grinding," rapidly churning out nickelodeon shorts with little preparation, using whatever was at hand.[104] For example, Simmon tallies D.W. Griffith's lifetime filmography at 495 titles, with 61 of those occurring in 1912 alone. However, formulas really began to take shape during Hollywood's "Golden Age"—roughly 1917 to 1960—when production levels scaled up along with typical film run times, resulting in a greater number of feature films with long-form narratives. Typical formulas during this time include screwball comedies, horror films, film noir, gangster films, and the Western.[105] In her 1950 ethnography of Hollywood, anthropologist Hortense Powdermaker depicts the industry as obsessed with formulas. She describes this obsession as indicative of Hollywood's "big business" organization, turning films into "large-scale mass production" governed by a strong "desire for uniformity."[106] While Powdermaker lambasts Hollywood executives for their staleness and for interfering with the creative process, she downplays the creative efforts invested into generating successful formulas over time. Indeed,

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Smith, Evan. 1999. "Thread Structure: Rewriting the Hollywood formula." *Journal of Film and Video:* 51(3/4): 88-96.

[103] Schatz, Thomas. 1981. *Hollywood Genres: Formulas, Filmmaking, and The Studio System.* McGraw-Hill.
Balio, Tino (Ed.). 1985 [1976]. *The American Film Industry*. University of Wisconsin Press.
Thomson, David. 2004. *The Whole Equation: A History of Hollywood*. Vintage Books.

[104] Simmon, Scott. 1993. *The Films of D.W. Griffith.* Cambridge University Press.

[105] Schatz, Thomas. 2010 [1996]. *The genius of the system: Hollywood filmmaking in the studio era.* University of Minnesota Press.

[106] Powdermaker, H. 1950. *Hollywood, the dream factory: An anthropologist looks at the movie makers.* Boston: Little, Brown.

entertainment formulas are important business innovations, ones which Hollywood will continue to develop throughout the 20th century, and which will be subsequently taken up by the videogame industry.

No formula of golden Hollywood is more iconic than the Western. Between 1900 and 1960, Historian Richard Hine recounts that fully one in three American films were Westerns.[107] Westerns have been described by film studies scholars as "the first fully articulated film genre,"[108] "the most significant of film formulas,"[109] as "essentially similar"[110] in structure, and as having a "notoriously limited repertoire."[111] Westerns have in fact been deemed so similar that they have been the subject of multiple structuralist analyses, such as Will Wright's classic *Six Guns and Society*.[112] Not only did classic Westerns feature a recurrent cast of character types like "the White Cowboy," "the Noble Indian," "the Lecherous Mexican," and "the City Slicker,"[113] but they also took full advantage of Hollywood's Californian landscapes and climate, resulting in the continual reuse of specific shooting locales like Lone Pine.[114] Westerns liberally applied stock characters, settings, and plots, facilitating the mass production of profitable dreams through continuous recycling, rehashing, and iteration. On the other hand, film studies scholars have emphasized that

[107] Hine, R. V., & Faragher, J. M. 2007. *Frontiers: A Short History of the American West.* Yale University Press.
[108] Stanfield, P. 1987. The Western 1909-14: A Cast of Villains. *Film history*: 1(2), 97-112.
[109] Lenihan, John H. 1985 [1980]. *Showdown: Confronting Modern America in Western Film*. Chicago: University of Illinois Press.
[110] Wright, Will. 1977. *Sixguns and Society: A Structural Study of the Western.* Berkeley: University of California Press.
[111] Simmon, Scott. 2003. *The Invention of the Western Film: A Cultural History of the Genre's First Half-Century*. Cambridge University Press.
[112] Calder, Jenni. *There Must Be a Lone Ranger: The American West in Film and in Reality*. Taplinger Publishing.
Wright, Will. 1977. *Sixguns and Society: A Structural Study of the Western.* Berkeley: University of California Press.
French, Philip. 1977. *Westerns: Aspects of a Movie Genre*. Oxford University Press.
[113] Stanfield, P. 1987. The Western 1909-14: A Cast of Villains. *Film history*: 1(2), 97-112.
[114] Frost, Warwick. 2004. "Reshaping the Destination to Fit the Film Image: Western Films and Tourism at Lone Pine, California." *International Tourism and Media Conference Proceedings:* Nov 24-26, 61-68.

Westerns contained a good deal of variation despite their similarities, showing how the genre evolved over time, includes examples that defy its tropes, and can be divided into distinct sub-genres with their own sets of themes and characters.[115] Taking both perspectives together, classic Westerns appear as simultaneously formulaic and diverse. Westerns gave audiences the familiar with a twist.

As each Western film was produced, perceptions of novelty and conventionality emerged in reference to an evolving genre standard. *The Great Train Robbery (1903)* is widely considered the first Western, a short silent film featuring a robbery, a horse chase, and a shoot-out, ending with the outlaw pointing his gun at the camera and firing several times from a close distance.[116] Successive Westerns built on these features, added new ones, and subtracted others, such that by the time *High Noon (1952)* released, it was considered ground-breaking—and even scandalous by some critics—because it eschewed the typical action sequences and ended with the heroine shooting the villain, saving the hero.[117] In other words, classic Westerns offered Hollywood filmmakers a series of conventional devices and constraints which they alternately picked up, reconfigured, or tossed aside as part of their creative process. The result was an entertainment product that satisfied the desire to make something new, while also being familiar enough to inspire confidence in its mass appeal.

This type of iterative creation of unique products with familiar elements represents a third piece of Hollywood's viral equation, *mutation.* Mutation has its own viral axiom: the

[115] Lenihan, John H. 1985 [1980]. *Showdown: Confronting Modern America in Western Film*. Chicago: University of Illinois Press.
[116] Porter, Edwin S. 1903. *The Great Train Robbery*. Edison Manufacturing Company, Kleine Optical Company.
[117] Zinnemann, Fred. 1952. *High Noon*. Stanley Kramer Productions, United Artists.
Frankel, Glenn. 2017. *High Noon: The Hollywood Blacklist and the Making of an American Classic.* Bloomsbury.

best way to activate mass appeal is to re-activate it, channeling a prior success by mixing tested elements with novel ones, yielding an experience that is at once familiar and new. Today, Hollywood studios are still refining and evolving their formulas, continuing to produce new films that alternately push boundaries and fit into predictable, familiar genre molds.

While Hollywood blockbusters are often criticized for being formulaic, top videogames today present even more extensive evidence of formulism. Videogame creators, consumers, and critics alike recognize that any notable release usually fits into an established videogame genre, yielding a set of traditional gameplay formulas and providing a comparative framework for the title's reception. Like film producers, videogame publishers typically set out to make new games within given genres, although in practice classification may be tricky or contested. Some popular genres today are holdovers from the arcade era—like "Fighting Games" and "Racing Games"—whereas others rose to prominence in videogame consoles of the 1980s and 90s, such as "Role Playing Games" and "Platformers." Still others are of recent origin, like "Battle Royale Games." Within these broad categories, there are also plenty of examples of narrow formulas with well-defined and much-recycled features, much like classic Hollywood Westerns. For example, the release of *DOOM (1993)* in the early 1990s was likened to a "religious phenomenon,"[118] becoming so successful that it spawned hordes of "DOOM clones" as other game studios copied basic gameplay elements such as its first-person perspective, boxy level design, and range of lethal weapons.[119] This formula-copying even extended to some esoteric features like "gibbing," a

[118] Kushner, David. 2004. *Masters of DOOM: How Two Guys Created an Empire and Transformed Pop Culture*. Random House.
[119] Schneider, Steven. 2016. "The 5 Best 'Doom' Clones Ever Released." *TechTimes.com*: May 4.

particularly gruesome animation where a bullet turns an enemy into an exploding pile of organs, flesh, and blood.[120] Some hobbyists list over 75 "Doom clones" released between 1993 and 2000,[121] and many game critics now credit DOOM as a pivotal step to the modern First-Person Shooter genre.[122] The rise of "DOOM clones" exemplifies the videogame industry's pursuit of the viral axiom of mutation, showing how game makers keep a close eye on hit titles, deconstruct them into essential elements, and then inject these elements into new titles as the basis of profitable formulas. This is a technique that Hollywood film makers had been practicing for decades, but which ended up fitting games exceptionally well due to the ability to appropriate popular game mechanics on top of formulaic themes, settings, and plots. The result is that games become assemblages of formulaic gameplay mechanics and features, able to be redeployed again and again in attempts to re-activate their appeal.

Franchise worlds & the logic of immortality

I have already discussed above the great extent to which game companies keep tabs on each other and look to appropriate successful strategies and mechanics for their own titles, but the logic of mutation is just as easily applied internally when companies iterate on their own prior successes. Seriation was already popular in print-based entertainment by the advent of the 1900s, but early Hollywood borrowed this mutational tactic sparingly:

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[120] Ahoy. 2014. "A Brief History of Gore." *YouTube:* February 2. https://youtu.be/NRXigbgqtOc
[121] Doomkid. 2014. "Full list of Doom clones/similar games?" *Doomworld.com*: May 11.
[122] Takahashi, Dean. "After 20 years, Doom co-creator John Romero looks back on the impact of a seminal (and Satanic) game (interview)." *VentureBeat:* December 11.
Lawrence, Nathan. 2016. "Doom vs. Quake: Which Has the Greater Legacy?" *IGN.com:* January 1.
Ahoy. 2016. "RetroAhoy: Doom." *YouTube:* January 24. https://youtu.be/6A4-SVUHQYI
MojoPlays. 2018. "History of DOOM – The Franchise That Defined the First Person Shooter." *YouTube:* May 16. https://youtu.be/Thw9ZcOVzmM

Ramona (1910), *The Birth of a Nation (1915)*, *The Jazz Singer (1927)*, *Frankenstein (1931),* and *King Kong (1933)* all had notable sequels, to name a few examples. However, it was not until the 1970s that seriation became commonplace in Hollywood, owing partially to the high-profile successes of sequels like *The Godfather Part II (1974)* and *Rocky II (1979)*.[123] As the post-crash videogame industry took shape in the 1980s, the burgeoning videogame industry took this tactic of profitable seriation to the extreme. At this time, Japanese companies like Nintendo, Konami, and Square began publishing some of gaming's most iconic series: *Super Mario Bros. (1985)*, *The Legend of Zelda (1986)*, *Castlevania (1986)*, *Final Fantasy (1987)*, and more. These series largely avoided the pattern of "diminishing returns" exhibited by Hollywood sequels, with new titles sometimes gaining even more acclaim and interest than their predecessors. Especially in the case of Nintendo, series were almost always tied to specific gaming platforms, part of a tactic to help sell new consoles since these were the only way to play the series' latest title. For example, after the broad popularity of *Super Mario Bros. (1985)*, *Super Mario Bros. 2 (1988)*, and *Super Mario Bros. 3 (1988)* on the NES, Nintendo released *Super Mario World (1990)* as an exclusive title for their next-generation console, the SNES. The title was critically lauded and considered a "system seller" for the SNES, racking up 20.6 million in lifetime sales out of 49.1 million SNES systems sold.[124] The *Super Mario* series is currently on its twentieth unique game,

[123] Henderson, Stuart. 2014. *The Hollywood Sequel: History & Form, 1911-2010*. London: British Film Institute.
Loock, Kathleen. 2017. "The Sequel Paradox: Repetition, Innovation, and Hollywood's Hit Film Formula." *Film Studies* 17.1: 92-110.
Jess-Cooke, Carolyn and Constantine Verevis, Eds. 2010. *Second Takes: Critical Approaches to the Film Sequel*. SUNY Press.
[124] O Malley, James. 2015. "30 Best-Selling Super Mario Games of All Time on the Plumber's 30th Birthday." *Gizmodo.com*: September 11.
Nintendo. 2018. "Dedicated Videogame Sales Units." https://www.nintendo.co.jp/ir/en/finance/hard_soft/

with *Super Mario Odyssey (2018)* serving the same "system seller" role for the Nintendo Switch.[125]

American game companies approached seriation quite differently due the fact that there were no major American console makers left after the crash of 1983 (see Introduction). In California, games publishers like EA and Activision were instrumental in demonstrating the success of "third party" publishing, creating notable videogame series like *Madden NFL*, *FIFA*, *Guitar Hero*, and *Call of Duty* that were best-sellers while also remaining platform-agnostic. In 1988, EA released *John Madden Football (1988)* for the Apple II personal computer, but by 1989 the game was also available on the Commodore 64, the Commodore 128, and any computer utilizing MS-DOS. In 1990, EA released a new version of *John Madden Football (1990)* for the Sega Genesis, porting this version over to the SNES and the Commodore Amiga in 1991 and 1992, respectively. Since then, new versions of *Madden* have been released on a regular yearly schedule across nearly all available gaming platforms, with EA boasting over 130 million lifetime units sold in the franchise by 2018.[126] With the breakout success of *Madden* and other multi-platform game series, American gaming companies have adopted seriation as a dominant mutational tactic. In 2018, only one of NPD's top ten US best-sellers list does not belong to an established videogame series.[127] At XPG, many of the projects I observed helped guide the development and marketing of seriated titles. Applying mutational logics, these projects attempted to identify both the "core DNA" of the series as well as desired changes to its

[125] Coberly, Cohen. 2018. "Over 50 percent of Switch users own Super Mario Odyssey, Mario Kart 8, and Breath of the Wild." *Techspot.com*: December 13.
[126] Taylor, Hayden. 2018. "Madden NFL franchise reaches 130m lifetime sales." *Gamesindustry.biz*: August 14.
[127] Webb, Kevin. 2019. "'Red Dead Redemption 2' beat out 'Call of Duty' to become 2018's best-seller — these were the 20 best-selling games of the year." *Business Insider*: January 23.

formula. In other words, games publishers used consumer data to grapple with a key mutational paradox: how to make a product feel simultaneously fresh and familiar.

However, the most profitable entertainment formulas today are not genres or even series, but rather enduring franchises. Hollywood franchises represent the apogee of formulaic creative business, boiling down an entertainment product into its most recognizable characters, settings, themes, or stylistic features, which are then recombined, reshaped, and put into new contexts in order to re-activate mass market appeal. Walt Disney is frequently credited for pioneering franchising of film properties like *Felix the Cat* and *Mickey Mouse* as early as the 1920s, creating a business model of sequels, spinoff products, and licensing deals that would culminate with the construction of Disneyland Park in Orange County.[128] When Disneyland Park first opened its doors to the public in 1955, it featured several rides based on Disney franchises, such as "Snow White's Adventures," "Peter Pan's Flight," and "Mad Tea Party" (*Alice in Wonderland*). Moreover, the park was divided into areas with names like "Mainstreet, U.S.A.," "Frontierland," "Fantasyland," and "Tomorrowland," packaging broader Hollywood formulas and public myths into places that one could visit and experience in-person.[129] Beyond Disney, Hollywood franchises really hit their stride in the 1970s and 1980s, when heavy-hitters like *Star Wars*, *Indiana Jones*, *Superman*, *Star Trek*, *Aliens*, *Rocky*, and *E.T.* made their debuts. These franchises spawned prosperous lines of branded toys, figurines, calendars, posters, plushies, clothing, bedsheets, branded snacks, spin-off television series, books, comics,

[128] Gabler, Neal. 2006. *Walt Disney: The Triumph of American Imagination*. New York: Alfred A. Knopf.
[129] Wallace, David. 2008. "14 Original Disneyland Attractions That Are Still Around Today." *Disneyorama.com*: November 20.

board games, card games, videogames, and more.[130] Hollywood franchises take the principle of mutation to its extreme, squeezing a property for the maximum amount of value via sequels, medium hopping, and nostalgic re-releases. In her treatise on *The Lord of the Rings* franchise, film theorist Kristin Thompson notes that "the franchise is often the star"[131] in today's Hollywood, showing how massive amounts of effort went into not just making *The Lord of the Rings* trilogy into successful box office releases, but in building *The Lord of the Rings* brand and creating merchandise and spin-off products based on the specific imagery, aesthetics, and plot focuses that the movie established. *The Lord of the Rings* even has its own equivalent to Disney's Park—the Hobbiton Movie Set in New Zealand—which includes frequent tours, a visitor center, a café, and, of course, a gift shop stocked with *Rings* merchandise.

The franchising phenomenon reveals a fourth piece to the viral equation, centered on the axiom of *immortality*: the ideal product is a fantasy, a brand, an idea, or an essence which lives forever via continual adaptation and growth, securing profitability into an unlimited future. Film and videogame franchise now endure for decades, meaning that consumers literally grow up with them and share them with their children. The multigenerational potential of these fantasy worlds recalls the original boosterism of LA, where the paradise city was sold to successive waves of migrants, but there is one critical difference here. Franchise immortality is not achieved by stable imagery, but rather is accomplished by a kind of perpetual motion. A franchise can only persist if it is willing to change, to mutate and thus become a hybrid of new and old. Franchises like *Star Wars* and

[130] Thompson, Kristin. 2007. *The Frodo Franchise: The Lord of the Rings and Modern Hollywood.* University of California Press.
[131] Ibid.

Indiana Jones enact this mutation by passing the baton to new generations of characters, such as in *Star Wars: The Force Awakens (2015)* which positions a grey-headed Han Solo and General Leia as supporting characters to new, young protagonists such as Rey and Finn. While videogames need not trade out their primary characters in this fashion, videogame franchises have nevertheless seen significant changes over the years. At E3 2018, I saw this perpetual motion firsthand: an exhibit for *Mega Man*'s 30th anniversary showed a wall-sized timeline of franchise releases peppered with changing Mega Man sprites as the character was reconceived at multiple points in his 30-year lifespan. *Mega Man* is just one example of the remarkable level of experimentation that game publishers exhibit regarding their franchises, overhauling character designs, shifting art styles, changing out core mechanics, adding and subtracting main characters, introducing new settings, enacting tone shifts, and even changing fundamental gameplay objectives at times.

Given the close relationship of Hollywood and LA gaming, it makes sense that videogames are a frequent target of Hollywood franchise spinoffs. In fact, every single Hollywood franchise mentioned thus far in this chapter has included at least one videogame spin-off, reaching toward immortality by hopping to a new medium. These spin-off deals are especially convenient when the parent company that owns the franchise brand is both a film producer and a videogame producer. Such is the case with Warner Bros., which publishes games under the aegis of Warner Bros. Interactive Entertainment—including a major *Lord of the Rings* spin-off game series, of which the latest iteration was *Middle-Earth: Shadow of War (2017)*. Of course, videogames are not solely relegated to fleshing out film franchises. Big games publishers have adopted the franchising tactic from Hollywood and developed many of their own hit properties, such as *Angry Birds*, *Assassin's*

Creed, *Call of Duty*, *Fallout*, *League of Legends*, *The Legend of Zelda*, *Mario*, *Minecraft*, *Pokémon*, and *Warcraft*. Much like Hollywood, big game publishers use their iconic properties to extend their entertainment fantasies into new mediums, systems, and markets: pumping out sequels, selling merchandise, creating spin-off properties, and engaging in nostalgic re-releases in the form of "game of the year editions," "classics collections," and "HD remasters." These franchises move beyond even the inevitable cycle of sequels; they represent flexible brands whose characters, iconography, worlds, and lore may be attached to any number of alternate, non-videogame revenue streams. This emphasis on free-floating brands does not mean that publishers invest less time, money, or attention in making the core product; to the contrary, in discussions I observed with publishers at XPG, they consistently related the opinion that the value of their franchise was tied to the reception of its recent mainline videogames. The result is that game makers become more concentrated on their flagship franchises' games, hanging secondary business projects off the long-term success of mainline videogame development. Under the viral logic of immortality, entertainment capitalists are thus able to join the pursuit of short-term gains with long-term gains. While spin-offs and medium-hopping may allow them to cash in rapidly on franchise status, their efforts are largely oriented to a limitless profit horizon where long-term, "golden goose" investments in core products and branding can yield recurring dividends.

Gaming turns to Hollywood – adopting the viral equation

This Hollywood-style world of big-budget fantasies, durable formulas, and mass-market entertainment franchises is a relatively new one for gaming. The first decade of commercial

videogames had little to do with Hollywood practices or principles. Instead, American games companies from the 1970s broadly pursued three disparate visions of their product: 1. Games as amusement cabinets; 2. Games as children's toys; and 3. Games as technical hardware (see Introduction). When the American videogame market crashed in 1983, the scope of these visions dwindled as the companies behind them either folded, exited the videogame business, or were bought out by third parties. 1983 thus represented a paradigm shift for the games industry. Most games studies scholars articulate this shift in terms of the ascendancy of Japanese gaming companies[132]—who didn't suffer a similar crash—but this shift also heavily impacted the American games landscape, clearing the market of nearly all American-made gaming consoles. American videogame companies in the post-crash era would adapt by becoming "third party" content-producers rather than "first party" platform or hardware owners, making games that could be played on Japanese consoles or on PCs released by tech companies.

In other words, after 1983 American videogame companies' situation was analogous to Hollywood studios. Both were entertainment content producers who profited from a wide distribution of their content, but who also had no formal control over the infrastructure that hosted their content—although of course in practice Hollywood studios regularly negotiated with theaters, just as American gaming companies negotiated with gaming console-makers. This structural similarity created the conditions for American gaming companies to adopt viral business models and logics, such that from the 1990s onward the American gaming industry would look increasingly like Hollywood, engaging in the kinds of

[132] Kohler, Chris. 2016 [2005]. *Power-Up: How Japanese Video Games Gave the World an Extra Life.* Mineola: Dover Publications.
Ryan, Jeff. 2011. *Super Mario: How Nintendo Conquered America*. London: Portfolio / Penguin.

practices that have been discussed above: increasing budgets dramatically to create blockbuster hits; following genre formulas to ensure stable returns; seriating titles to achieve repeat success; franchising videogame characters to gain additional revenue streams; and deploying viral marketing to reach broader audiences. Whereas gaming in the 1970s and 1980s was a fringe, "nerd" hobby, these tactics helped bring gaming to the mainstream, making games into mass-market entertainment on the level of Hollywood movies[133]: according to a recent industry report, 6 in 10 Americans play videogames on a daily basis, and Americans spent $29 billion on videogame content in 2018[134] (for reference, Hollywood's American box office sales in 2018 represented only $12 billion[135]).

The rise of viral logics in gaming coincided with the emergence of LA as a major gaming center. Before the 1983 crash, Mattel was the only large videogame-maker operating in the LA region, although there were also a few smaller gaming companies like Entex, Datasoft, and Interplay Productions.[136] Of these four, only Interplay was still making videogames after the crash.[137] After a quiet period in the late 1980s, LA's gaming scene began taking off in the 1990s. Blizzard was founded in 1991 by three UCLA graduates, originally named Silicon & Synapse;[138] Atlus USA was founded in 1991;[139] Activision moved to Santa Monica in 1992;[140] Naughty Dog moved to LA in 1994;[141] Insomniac Games was founded in 1995,

[133] Juul, Jesper. 2009. *A Casual Revolution: Reinventing Video Games and Their Players.* Cambridge: MIT Press.
[134] Entertainment Software Association. 2018. "Essential Facts about the Computer and Video Game Industry."
[135] McClintock, Pamela. 2019. "2018 Box Office Revenue Soars to Record $11.9B in the U.S., Hits $42B Globally." *The Hollywood Reporter*: January 2.
[136] "Entex Handheld Games." 2019. *HandheldMuseum.com*.
"Interplay Entertainment Corp." 2019. *Giantbomb.com.*
"Datasoft, Inc." 2019. *Mobygames.com*.
[137] Tipps, Seth. 2012. "Interplay: A troubled history." *MCVUK.com*: September 14.
[138] Clayman, David. 2010. "The History of Blizzard." *IGN.com*: October 21.
[139] "History." 2017. *Atlus.com*. https://atlus.com/company/
[140] Fleming, Jeffrey. 2007. "The History of Activision." *Gamasutra*: July 30.
[141] "30 Years Naughty Dog." 2014. *NaughtyDog.com*. https://www.naughtydog.com/timeline/

originally named Xtreme Software;[142] Treyarch was founded in 1996;[143] and Sony Santa Monica was founded in 1999.[144] The first E3 conference was held at the Los Angeles Convention Center in 1995, where several upstart LA-based developers shared floor space with the year's biggest names in gaming: Nintendo, Sega, Electronic Arts, Capcom, and Crystal Dynamics.[145] This confluence of events established LA as a new center of gaming in the 1990s, and Hollywood studios began to take notice.

Nearly all of LA's major movie producers would venture into videogaming in the 1990s: Disney Interactive, Universal Interactive, Fox Interactive, MGM Interactive, Paramount Interactive, Dream Works Interactive, Sony Interactive Studios America, and Warner Bros. Interactive Entertainment were all founded in this period.[146] These companies allowed Hollywood studios to fold videogames into their existing business models, pumping major investments into marketing and production for creative studios that were either wholly-owned subsidiaries or licensees of their IPs.[147] While most failed to reach the high ambitions of Hollywood investors, they helped re-imagine LA as a city for "interactive entertainment," paving the way for continued movie/game crossovers.[148] Immersed in LA's entertainment landscape, LA-based gaming companies not only took inspiration from Hollywood, but increased their staffing to make room for positions that were already common in Hollywood studios—employing writers, directors, artists and animators, sound

[142] Moriarty, Colin. 2012. "Always Independent: The Story of Insomniac Games." *IGN.com*: September 28.
[143] "Treyarch." 2019. *Giantbomb.com*.
[144] "Our Story." 2019. *SMS.PlayStation.com*.
[145] "E3 1995." 2012. *IGN.com*: June 8. https://www.ign.com/wikis/e3/E3_1995
[146] Ahmad-Taylor, Ty. 1995. "Studios Look to Interactive Games." *New York Times*: August 28.
[147] Miller, Greg. 1997. "Myst Opportunities; Game Makers Narrow Their Focus to Search for the Next Blockbuster." *Los Angeles Times*: March 3, D1.
[148] Eller, Claudia and James Bates. 1997. "Ambitions Still Intact, Studio Copes with Industry Changes." *Los Angeles Times*: September 19, 1.

engineers, voice actors, special effects teams, product managers, marketers, market researchers, and more, many of whom were hired due to their experience with Hollywood films.[149] Successful gaming company founders and CEOs also began to enter the ranks of LA elites, rubbing elbows with Hollywood producers, directors, and stars.[150] The transfer of viral logics from film to gaming in LA was thus realized by multiple avenues as Hollywood and LA-based games companies exchanged talent, executives, intellectual properties, organizational structures, market strategies, and more.

One LA-based company serves as a prime example of how viral capitalism transferred from Hollywood to videogames: Activision Blizzard. Headquartered in Santa Monica, Activision Blizzard today has the highest revenue of any third-party game publisher in the world, driven by key intellectual properties like *Call of Duty*, *World of Warcraft*, and *Candy Crush*.[151] Rivalling even the most successful Hollywood franchises, *Call of Duty* has released a new $60 title each year for the past 14 years. This annual cycle has been largely successful; *Call of Duty* titles are consistent contenders for the year's global best-seller.[152] Activision Blizzard today operates as a viral capitalist juggernaut, regularly producing contagious fantasy experiences that reach huge audiences and secure repeat engagement via mutational tactics like seriation and franchising. In the words of Activision Blizzard's long-time CEO, Bobby Kotick, his primary goal is "to make interactive entertainment a true

[149] Harmon, Amy. 1995. "Help wanted: Talent's rare, experience short on interactive frontier." *Los Angeles Times*: March 24, 1.
[150] Beller, Peter. 2009. "Guitar Hero." *Forbes.com*: February 6.
Good, Owen. 2011. "Hooray! Now We Know Why Bobby Kotick is in that Brad Pitt Movie." *Kotaku.com*: August 6.
[151] Gibson, Alex. 2018. "The 10 Highest Earning Video Game Publishers in Fiscal 2018." *Twinfinite*: August 1.
[152] "2017 Annual Report." 2017. Activision Blizzard. https://investor.activision.com/static-files/ace1c2fc-c2c8-4461-b9fe-157d7fd1e9c2

mainstream form of entertainment."[153] Drawing inspiration from Hollywood icons, Kotick explicitly compares himself to Walt Disney, seeing himself as a visionary creating "entirely new ways of entertaining people." [154] In another interview, he relates that he pays close attention to Hollywood properties like *Star Wars* and *Star Trek*, seeing these as "great examples of sustainable entertainment franchises" that he considers analogous to *Call of Duty*.[155] As the primary mouth-piece for Activision Blizzard, Kotick publicly embodies the rhetoric and principles of Hollywood's brand of viral capitalism, declaring his company's allegiance to the endless, mass-market reproduction of fantasy experiences.

Activision's origins were far humbler. The company was founded in 1979 by the "Gang of Four"—David Crane, Larry Kaplan, Alan Miller, and Bob Whitehead—a group of disgruntled Atari programmers who wanted more credit and compensation for the games they were developing. Activision was thus the first third-party developer of videogames, releasing its own cartridges for the Atari VCS/2600 and other leading game consoles.[156] The company gained clout with a few hit titles like *Pitfall! (1982)* and *River Raid (1982)*, but the crash of 1983 hit them hard. By 1988, the company's founders had all left, and the remaining leadership rebranded it as Mediagenic, attempting to move away from games and into business software applications like *Paintworks* and *Reports*. This strategy floundered, and the company was deep in the red by 1991, which was when Bobby Kotick acquired it. In Kotick's telling, the money he raised to buy out Activision was second-hand from Hollywood, coming from casino-mogul Steve Wynn, who himself made his fortune in

[153] Crecente, Brian. 2010. "A Delightful Chat With the Most Hated Man in Video Games." *Kotaku*: June 14.
[154] Parnell, David J. 2016. "Bobby Kotick, CEO Of Activision Blizzard, On Creating A Culture Of Innovation For 25 Years." *Forbes.com*: October 6
[155] Ibid.
[156] Fleming, Jeffrey. 2007. "The History of Activision." *Gamasutra.com*: July 30.

Vegas after securing backing from LA billionaire film producer Howard Hughes.[157] Kotick made moves early on to situate the reborn Activision within LA's entertainment industry. In 1992, he closed its Bay Area offices, fired nearly all its employees, opened new headquarters in Los Angeles, and began rehiring with an exclusive focus on games.

Throughout the 1990s, Activision deployed a viral strategy of producing master collections and sequels of games from its classic library, such as: *The Lost Treasures of Infocom (1991)*, *Return to Zork (1993)*, *Pitfall: The Mayan Adventure (1994)*, *Activision's Atari 2600 Action Pack (1995)*, and *Pitfall 3D (1998)*. Beginning in 1999 and continuing through the next decade, the company became a reliable partner for Hollywood franchising, publishing videogames based on *A Bug's Life*, *Toy Story*, *Tarzan*, *The Lion King*, *101 Dalmatians*, *Spider-Man*, *Star Trek*, *X-Men*, *Jackie Chan Adventures*, *Stuart Little*, *Minority Report*, *Star Wars*, *Shark Tale*, *Shrek*, *Madagascar*, *The Fantastic Four*, *Kung Fu Panda*, *Ice Age*, and more. At the same time, Activision was venturing into its own blockbuster videogame franchises in the form of the *Tony Hawk Pro Skater* series, the *Guitar Hero* series, and the *Call of Duty* series. These series were wildly successful, fueling additional investment and allowing Activision to acquire over a dozen developers in the early 2000s. In 2008, the company merged with Irvine-based publisher Blizzard, forming the parent company Activision Blizzard which persists to this day.[158]

Activision's LA rebirth exemplifies how gaming publishers began in the 1990s to operate as viral capitalists in the mold of Hollywood. The new Activision was founded at a critical time when Hollywood executives were reimagining games as "interactive

[157] Crecente, Brian. 2010. "A Delightful Chat With the Most Hated Man in Video Games." *Kotaku*: June 14.
[158] Alexander, Leigh. 2008. "Activision Blizzard Merger Official." *Kotaku.com*: July 8.

entertainment," applying traditional Hollywood business structures and principles to videogames. While the wholesale Hollywood takeover of games was never quite achieved, these efforts helped build enduring bridges that represent the continuing entanglement of the film and videogames in LA. Activision's history also represents a common pattern for successful, big gaming publishers today: 1. Post-crash floundering; 2. Adoption of Hollywood cross-overs; 3. Pursuit of their own mass-market blockbusters; 4. Acquisition of developers and doubling down on cornerstone franchises. Today, this pattern is detectable in a variety of games publishers beyond LA, showing how viral logics have caught on far beyond the geographic limits of the region.

Even for a CEO of a large company, Bobby Kotick has gained an exceptionally bad reputation among gamers. Searching his name on Google yields a succession of photoshopped images where his smiling face is placed in front of a wall of flames, or he is given a pair of red devil horns, or his eyes are replaced by a pair of dollar signs.[159] The caricature of Kotick as a smiling devil matches up with certain critiques of capitalism that reduce capitalist motivation to the pure pursuit of profit, a drive which can be alternately called "rational" or "greedy" depending on one's perspective. While gaming companies are certainly capitalist organizations that seek to make a return on their investments, the history presented in this chapter demonstrates how entertainment capitalists in LA have long been interested in much more than the pursuit of profit for its own sake. Indeed, Kotick's self-branding as a digital-age Walt Disney reveals his preoccupation with old

[159] PacoDG. 2009. "Bobby Kotick, CEO of Activision, is… the Devil." *Gameprep.com*: June 25.
Hodkurtz. 2010. "Activision CEO Bobby Kotick Thinks You're a Moron." *Giantbomb.com*: Forums.
MaximusPaynicus. 2010. "Bobby Kotick is the Devil." *N4G.com*.
Good, Owen. 2012. "Please Quit Photoshopping Horns Onto Bobby Kotick. It's Bad for His Dating Life." *Kotaku*: December 16.

Hollywood goals of capturing the imagination, delighting the masses, and being known as an entertainment pioneer. The importance of such goals reveals how the "logic of capitalism" is not a simple, abstract drive to profit maximization. What this history instead discloses is a variety of situated logics—in this case, viral logics—that propose certain pathways to profit. Profit may be the final destination for these logics, but it is by no means the most important. Rather, a variety of intermediate ends *intervene* as capitalists attempt to work out exactly *what kind* of profitable things they want to make, *how* they are going to make them, and *what other ends* they might want to achieve with the business. For viral capitalism, these intermediate ends commonly involve building enticing public fantasies (contagion), avoiding stagnation (inoculation), iterating on past work (mutation), and extending owned fantasies into a limitless future (immortality). In the case of videogame publishers, this means making games that are compelling, popular, iterative, and enduring.

This does not mean that the games produced by viral capitalists are always "consumer friendly." Viral principles are fully compatible with exploitation, price-gouging, deceit, derivativeness, cash grabs, bugs, and other sins commonly laid at the feet of videogame publishers. But the assumption that such issues are due to the drive for profit misses the point. Viral capitalism is not a system designed solely for profit maximization; there are quicker, easier, less risky, and more lucrative ways to multiply money. Rather, it is a system that primarily aims to reproduce and distribute fantasy experiences, a system that dreams of a future when everyone shares these experiences across all time and space. Tinkering to maximize profit might occur at the margins, especially when viral capitalists recognize that a particular product is falling short of this dream, but the goal of virality remains at the center of this mode of capitalism, searching for a product that might be the next big thing,

kicking off a chain reaction of mutational offshoots that will propel the company into the conceivable future.

Entertainment frontiers & evolving logics

> Having gotten used to the typical E3 fare of flashy signs, evocative set designs, high-budget videos, and long theme-park-style queues for demos, the unassuming exhibit for the National Videogame Museum looked immediately out of place. The exhibit had a lone, boxy, white sign hanging from the ceiling above, declaring the mission of the NVM: "Preserving the history of the videogame industry since before it WAS history." I saw a handful of arcade cabinets, an IntelliVision console, a SNES, and some other old consoles hooked up to computer monitors. Attendees ambled through the uncrowded exhibit freely, occasionally pausing to look at cartridges or memorabilia in glass cases, or briefly picking up a controller from one of the working displays to play for a few minutes. The distance between this vintage world and the gleaming E3 of the present was shocking. Looking at those who paused at the exhibit, many seemed older than the average attendee. I wondered how many of them had played these games before. After all, I saw a couple arcade machines that I had played growing up—Ms. Pacman, EA's PGA Tour—as well as some consoles I used to own, like the NES and the N64. If the gaming industry had changed so much in its nearly fifty years, what would it be like in fifty more?

For much of my lifetime, gaming has seemed to be on the frontier of technological and artistic advancement. The first videogame I have strong memories of owning is *Pokémon Blue (1993)*, an 8-bit game which was just 1MB in size. Over time, I saw videogames break into three-dimensional space, move from blocky polygons to hyper-realism, develop sophisticated online capabilities, experiment with motion-activated control schemes, find new homes on smartphones, and begin to explore virtual reality. Videogames have become larger, more complex, and more technically demanding each year, but also run faster on smaller devices. This sense of continuous progress was reinforced by the magazines that I read religiously as a youth—Nintendo Power and EGM—which regularly trumpeted the design innovations, graphical advancements, and feats of engineering found in new videogames. Even if the pace of technological change seems to be slowing, the cutting edge

is still highly valued today: in Microsoft's 2017 E3 conference, the company highlighted the Xbox One X's ability to render at 4K resolution, calling it "the most powerful console ever made."[160] The frontier sensibility also remains strong in eSports and VR, which seem to have the biggest potential in gaming business, but also represent the most unexplored territory.

Just as I've witnessed videogame technology and artistry transform radically, I have also seen remarkable changes in videogames as a product over the course of my life. My childhood in the 1990s and early 2000s was a time when blockbuster series like *Sonic the Hedgehog* and *Grand Theft Auto* dominated the market, one-time releases in the form of cartridges or discs that I paid for up front and then played through as-is, for better or worse. As I grew up, the videogame industry diversified these singular, one-time releases with innovations like pre-order bonuses, high-end collectors' editions, and expansion packs. When I was in high school, *World of Warcraft* demonstrated the viability of a subscription model, with millions of gamers paying Blizzard for monthly access to the game. In college, notable "free to play" games like *League of Legends* and *Hearthstone* showed that companies could make incredible profits without requiring players to pay up front for their gaming experiences (or to pay at all in some cases). As a graduate student, I saw games companies lean further into "micro-transactions," or small in-game purchases of items, characters, cosmetics, or limited-time boosts. Such remarkable changes represent how viral capitalism continues to evolve over time, developing new logics and tactics as gaming companies experiment with new products, business models, and offerings.

[160] Gameslice. 2017. "Xbox One X Global Reveal Live at E3 2017." *YouTube*: June 11. https://youtu.be/MEfTe5Y5Hm8

These newer business models seem normal now, but it is important to recall just how radical they were at first in order to understand the way in which capitalist logics evolve—not a linear progression, but an unpredictable path that merely seems inevitable in hindsight. For instance, the notion of micro-transactions was patently ridiculous as recently as a decade ago, especially for single-player games where players were already paying their $60 up-front fee. In 2006, Bethesda announced downloadable content (DLC) for *The Elder Scrolls IV: Oblivion (2006)* which included cosmetic "Horse Armor" purchasable for $2.50. This decision generated considerable backlash and derision among gamers, such that the term "horse armor" became a gamer inside-joke, synonymous with trying to sell something useless and overpriced.[161] Nowadays, gamers happily pay small fees to unlock individual outfits, dances, vehicles, pets, and weapon skins. While the well-received *Assassin's Creed Origins (2017)* does not have literal horse armor for sale, the shop does include an armored camel that one can purchase for $5.[162] The same micro-transaction model which made headlines in 2006 barely registered in 2017. Micro-transactions are simply part of games today. If one applies this same thought exercise to the blockbuster franchise, it is easy to see how the games industry's adoption of Hollywood logics was also neither inevitable nor straightforward. Rather, this present entanglement represents the situational pull of LA, contingent on the region's history, its reputation, and the efforts of individuals to bridge film and games starting in the 1990s. And this is a history that is still active, feeding further evolutions of gaming's viral logics.

[161] Ransom-Wiley, James. 2006. "Bethesda responds to Oblivion backlash." *Engadget.com*: April 4.
Sinclair, Brendan. 2016. "Oblivion's Horse Armor was ahead of its time." *Gamesindustry.biz*: April 6.
[162] Totilo, Stephen. 2017. "Assassin's Creed Origins' Microtransactions (Mostly) Just Get You Things You Can Earn While Playing, Ubisoft Says." *Kotaku.com*: October 26.

One of the most notable recent evolutions is the ascendancy of "games as a service" (GaaS), meaning the notion that games should be living platforms that are regularly updated, changed, and expanded by their developers over time, and which ask players to spend their money continually instead of just once per product.[163] Rather than a discrete creative work that one that one experiences like a film, GaaS games present a continual work-in-progress that players adapt with and return to month after month. While the GaaS modality has not replaced Hollywood-style blockbuster titles, it is making space for new ways of selling blockbusters, for new ways of relating to games, and for alternative business principles that do not quite fit the traditional Hollywood mold. GaaS represents a twist on the viral capitalist equation, shifting the focus of viral acquisition away from the geographic dimension of building the largest audience possible, and toward the temporal dimension of building the longest-lasting and most-engaged audience possible. In this new modality, contagion is understood to unfold on a much longer time frame than a single launch date. Inoculation is understood as a creeping "staleness" that comes from playing a game that doesn't receive frequent changes. Mutation occurs through patches, DLC, and expansions that allow a game to iterate on its successes and adopt ideas from other games on the fly. And immortality is achieved by making a game into a "ship of Theseus," replacing its components bit by bit rather than obsoleting it all-at-once with a sequel.

While it is uncertain whether the GaaS modality will continue to grow or diminish in importance, it does signal the notion that gaming is as much a business frontier as it is an

[163] Schreier, Jason. 2017. "Top Video Game Companies Won't Stop Talking About 'Games As A Service'" *Kotaku*: May 30.
Taylor, Haydn. 2017. "Games as a service has 'tripled the industry's value.'" *Gamesindustry.biz*: October 10.
Bagga, Atul.2011. "Emerging Trends In Games-as-a-Service." *Game Developers Conference 11*: October 10-13.

entertainment frontier. Viral capitalism does not stand still: its principles are continually being creatively reworked, refined, and redefined as companies strive to make their products more enticing. Data work is important for navigating such shifting waters. When I began fieldwork at XPG, I realized that this feeling of being on the cutting edge of technology, of society, and of entertainment is not just part of being a gamer—it suffuses the American games industry itself. At XPG, videogame data work maintains an aura of originality, of coolness, and of excitement lacking in other forms of data work. XPG analysts on the videogame team pride themselves as being creative problem-solvers, able to craft innovative research projects that fit the innovative gaming market. XPG positions itself as well-apprised of industry trends, able to consult on how companies should move to stay ahead of the curve, or at least keep up with the pack. The following chapter looks more closely at the practices and processes of data work at XPG. This kind of data work operationalizes viral capitalist principles, evaluating the viral potential of different tactics that big games publishers cook up.

This chapter has shown the ways in which gaming's peculiar capitalist logics are situated in the histories of LA and Hollywood, shaping games into mass-market fantasies that are at once durable and pliable. By and large, data workers at XPG share these peculiar logics, not only because they are aligned with the desires of big games publishers who are their clients, but also because they themselves are immersed in LA-based entertainment. Consequently, the following chapter does not show how the application of data "rationalizes" the desires of viral capitalists, but rather reveals how data workers have worked out ways to represent virality that makes particular viral strategies appear legible, sensible, persuasive, and even beautiful to their clients.

CHAPTER 2: SPEAKING IN DATA

Corporate data regimes

On April 10, 2018, Facebook CEO Mark Zuckerberg gave congressional testimony for six hours, live on camera.[164] At the time, Facebook was facing criticism for its handling of user data, specifically how its lax security policies allowed political data agency Cambridge Analytical to harvest the private information of over 50 million users.[165] This revelation set off a media firestorm, prompting numerous stories about privacy (or the lack thereof) on Facebook, the extent of Facebook's personal user data collection, and the micro-targeted nature of Facebook ads.[166] The controversy not only put pressure on congressional representatives to respond, but resulted in a widespread public campaign to "#deletefacebook."[167]

As testimony wore on, Senator Richard Durbin asked whether Zuckerberg would be "comfortable sharing" the hotel he stayed in last night, or a list of all the people that he messaged in the past week. A seemingly-stunned Zuckerberg answered that no, he wouldn't share these things. Durbin responded that this answer hits at the crux of the issue: "your right to privacy…and how much you give away in modern America."[168] As senators continued to question Zuckerberg, many framed their concerns in a similar manner—focusing less Facebook's particular actions in this case, and more on their general sense of unease regarding the internet, smartphones, and social media. Facebook merely appeared as the symbol of a new age of ubiquitous corporate data gathering, where our every move is tracked and exploited.

I watched Zuckerberg's testimony from my assigned desk at XPG, surrounded by analysts who made a living by creating, managing, and processing consumer data for

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[164] Washington Post. 2018. "Mark Zuckerberg testifies on Capitol Hill (full Senate hearing)." *YouTube*: April 10. https://youtu.be/6ValJMOpt7s

[165] Rosenberg, Matthew. 2018. "How Trump Consultants Exploited the Facebook Data of Millions." *The New York Times*: March 17.
Cadwalladr, Carole and Emma Graham-Harrison. 2018. "Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach." *The Guardian*: March 17.

[166] CBS. 2018. "Can Facebook restore public trust after Cambridge Analytica scandal?" *CBS NEWS*: March 24.
Ingram, David and Eric Auchard. 2018. "Americans less likely to trust Facebook than rivals on personal data." *Reuters*: March 25.
Editorial Board. 2018. "Facebook Is Not the Problem. Lax Privacy Rules Are." *The New York Times*: April 1.
Whittaker, Zack. 2018. "On Facebook, Zuckerberg gets privacy and you get nothing." *ZDNet*: April 10.
Hindman, Matthew. 2018. "How Cambridge Analytica's Facebook Targeting Model Really Worked – According to the Person who Built It." *Independent*: April 13.
Seetharaman, Deepa and Katherine Bindley. 2018. "Facebook Controversy: What to Know About Cambridge Analytica and Your Data." *The Wall Street Journal*: June 6.

[167] Mack, Eric. 2018. "'Delete Facebook' hashtag trends as social users fume." *Cnet.com*: March 20.
Gilbert, Ben. 2018. "The #DeleteFacebook movement has reached a fever pitch, as former Facebook insiders turn on the company." *Business Insider*: March 21.

[168] Testimony of Mark Zuckerberg, Chairman and Chief Executive Officer, Facebook. Hearing before the United States Senate Committee on the Judiciary and the United States Senate Committee on Commerce, Science and Transportation. Senate, 115th Congress, April 10, 2018.

> corporations. As Zuckerberg wrapped up his opening statement, I dragged the video feed over to my secondary, right-hand screen, and turned my attention to the dataset on my left-hand screen. The screen showed row after row of information gathered from PC gamers. The testimony ran in the background as I checked the data in front of me for inconsistencies, running my eyes down the array of responses. At one point, I reached out to the analyst beside me to get her take on the testimony. I asked whether she was ever concerned about what XPG was doing with people's data, given the recent news about Facebook. Her reply registered her surprise: "Of course not! We don't have *that* kind of data." As I asked around the office, other analysts agreed, making the message clear: Facebook's data was different not just in magnitude, but different in kind from XPG's data. The two worlds didn't meet.

Why do online companies want your data? What kinds of data are they gathering? And what do they do with it once they have it? The popular image of corporate data collection largely relies on the idioms of "spying," "hoarding," and "mining." Online companies are generally understood to be building treasure troves of personal information on users which they can store indefinitely, delve into at any time, use to target you personally, or simply sell off to others as they please. While it is now common knowledge that web platforms like Facebook and Google track your online behavior, reports of new home products that integrate cameras and voice recorders with online connectivity regularly engender concerns that companies may be watching your every move without your knowledge. Recent media stories about hacking and corporate data breaches—Cambridge Analytica,[169] Equifax,[170] Huawei[171] and ZTE[172] phone backdoors—explore some of the unintended consequences of this type of information hoarding. Such stories conjure up the specter of threat regarding how shadowy, rogue agents might gain access to these informational goldmines and use them to steal your identity, track your activities, and target you with

[169] Rosenberg, Matthew. 2018. "How Trump Consultants Exploited the Facebook Data of Millions." *The New York Times*: March 17.
[170] O'Brien, Sara Ashley. 2017. "Giant Equifax data breach: 143 million people could be affected." *CNN Business*: September 8.
[171] Lepido, Daniele. 2019. "Vodafone Found Hidden Backdoor Huawei Equipment." *Bloomberg*: April 29.\
[172] Lee, Michael. 2012. "Backdoor found in ZTE Android phones." *ZDNET*: May 15.

personalized scams or blackmail. Anyone that covers their laptop's camera lens with a sticky note has been touched by these concerns on some level.

The social scientific scholarship on corporate data has similarly been focused on online companies which purportedly keep gigantic personal databases—Facebook, Twitter, Google, Apple, and so on. Echoing popular concerns, scholars utilize the rhetoric of surveillance to describe these companies' activities.[173] Foucault's panopticon metaphor looms large here: a planned-but-never-built prison wherein each cell would lie exposed to a central guard tower, but prisoners themselves could never tell in which direction the guards in the tower were looking (if indeed they were actively watching at all).[174] This disciplinary arrangement—total visibility of the disciplined, total invisibility of the disciplinarian—is likened to the situation of corporations with respect to user data.[175] Many websites and apps continually maintain records of users' actions, yet most people have little means for knowing what is being tracked, whether they are being tracked personally, and to what ends. Rather than identifying danger in external sources like hackers, scholars usually point to the companies themselves—the supposed "custodians" of your data—as the problematic actors. They argue that the all-seeing eye of data giants is alarming precisely because our digital lives seem so utterly exposed to corporate data

[173] Albrechtslund, Anders. 2008. "Online social networking as participatory surveillance." *First Monday* 13 (3): March 3.
Ball, Kirstie. 2010. "Workplace surveillance: an overview." *Labor History* 51 (1): 87-106.
Fuchs, Christian, Kees Boersma, Anders Albrechtslund, and Marisol Sandoval, Eds. 2012. *Internet and Surveillance: The Challenges of Web 2.0 and Social Media*. New York: Routledge.
Marwick, Alice. 2012. "The Public Domain: Surveillance in Everyday Life." *Surveillance & Society* 9 (4): 378-393.
Trottier, Daniel. 2012. *Social Media as Surveillance: Rethinking Visibility in a Converging World*. Burlington: Ashgate Publishing.
[174] Foucault, Michel. 1975 [1977]. *Discipline & Punish: The birth of the prison*. Trans. Alan Sheridan. New York: Pantheon Books.
[175] Campbell, John Edward, and Matt Carlson. 2002. "Panopticon.com: Online Surveillance and the Commodification of Privacy." *Journal of Broadcasting & Electronic Media* 46(4): 586-606.
Lyon, David (ed.). 2006. *Theorizing Surveillance: The panopticon and beyond.* Portland: Willan Publishing.

tracking technologies, yet we seem powerless to stop companies from gathering more and more information about us in order to use it, sell it, or store it indefinitely. Focusing on the power of "big data," scholars highlight how companies build surprisingly individualized and personal data files on users,[176] how tracking is often subtle or hidden from users,[177] and how big data feeds into algorithms that powerfully shape users' experiences online.[178] These analyses show how online surveillance is ceding ever-greater amounts of control to big corporations.

During my fieldwork at XPG, I gained a markedly different perspective on how companies use data, and how they think about their use of data. Even though XPG is a company solely dedicated to gathering and analyzing consumer data, their operations scarcely resemble the surveillant regime described above by social theorists of corporate data. Nor does the idiom of "spying" accurately convey what XPG's data collection looks like in practice. As a small firm, XPG lacks the technical means and resources to surveil consumers at the scale of "big data," but more importantly, it lacks the will to move in that direction. Instead, XPG presents itself as a purveyor of consumers' interior thoughts and feelings, and as a test lab for gauging the potential of nascent products that may not even be publicly announced. These are purposes for which surveillance is blind; it cannot pierce the hidden heart of the consumer, and it cannot measure that which is not already part of

[176] Los, Maria. 2006. "Looking into the future: surveillance, globalization, and the totalitarian potential." *Theorizing Surveillance*. Ed. David Lyon. Portland: Willan Publishing.
[177] Cumbley, Richard and Peter Church. 2013. "Is 'Big Data' creepy?" *Computer Law & Security Review* 29 (5): 601-609.
Peacock, Sylvia E. 2014. "How web tracking changes user agency in the age of Big Data: The used user." *Big Data & Society* 1 (2).
[178] Seaver, Nick 2014. "Knowing algorithms." *digitalSTS: A Field Guide for Science & Technology Studies*. Eds. Janet Vertesi & David Ribes. Princeton: Princeton University Press.
Dourish, Paul. 2016. "Algorithms and their others: Algorithmic culture in context." *Big Data & Society* 3 (2): 1-11.
Beer, David. 2017. "The social power of algorithms." *Information, Communication & Society* 20 (1): 1-13.
Seaver, Nick 2018. "Captivating algorithms: Recommender systems as traps." *Journal of Material Culture*.

people's lives. This is not to say that corporate surveillance does not exist, only that I never observed it as any kind of driving force in the viral capitalist practices I encountered at XPG. I suggest that new idioms and analytics need to be developed to help understand how companies like XPG gather data, process data, and use it to influence viral capitalist projects like the production of videogames.

This chapter presents two such idioms. In the first section below, I describe corporate data by using the idiom of *voice*. Specifically, I examine how XPG analysts consider themselves the "voice of the consumer," tasked with speaking their interior truths to big organizations like games publishers, even if this truth is at times inconvenient or unwelcome. In the second section below, I switch to engaging with corporate data by using the idiom of *craft*. Here, I describe how XPG analysts make and shape data by hand, aiming to create beautiful reports that present findings in ways that are intuitive and persuasive to clients. In the final section, I bring both idioms together under a democratic framing, showing how analysts prioritize the "voice of the consumer" that emerges from well-crafted data by positioning it as a popular majority with a political mandate. I then apply this analysis to explain why companies seem to pay relatively little attention to the opinions of players in online forums or other gamer venues. Throughout the course of the chapter, I argue that XPG represents a *conversant data regime* whose means and aims differ vastly from the surveillant data regimes of tech giants like Facebook. As I detail below, conversant data is not about targeting individual consumers or building personalized files, but rather about convincingly vocalizing audiences' popular demands with respect to viral goods.

The dream (or nightmare) of surveillant data is being able to track everyone, everything, all the time. The implications and possible social consequences of total data collection have been well explored not only in the scholarship on big data, but in popular media: *1984*, *Gattaca*, *The Matrix*, *The Dark Knight*, *Minority Report*, *Watch Dogs*, and more. Corporate uses of small, conversant datasets—to which this chapter is devoted—have received much less attention, perhaps because they are less dramatic than the idea of Big Brother, but also because they are more representative of our past than of a dystopic future. The drama of ubiquitous surveillance is electrified by a feeling of inevitability as cameras become smaller and cheaper, the internet becomes more prevalent, and smartphones become just another part of ourselves. By contrast, conversant data collection is antique: talking to people and recording the results requires nothing more than pencil and paper. XPG made ample use of phones, computers, and the internet to facilitate data collection and processing, but it is difficult to conclude that these technologies are leading to some inevitable future society. As a result, there seems to be a lack of public vocabulary or imagery to describe what companies are up to when they conduct conversant data projects. This chapter represents an attempt to build such a vernacular.

Representative data & the idiom of voice

When I first came into contact with XPG, I was expecting to find a sociotechnical apparatus of vision, a robust system through which companies "saw" their consumers and then acted based on what they could see. I imagined XPG as the keepers of this high-tech apparatus, tinkering with the lenses and adjusting the focus so that everyday consumers showed up clearly to big capitalist organizations like videogame companies. This

expectation was shattered rather quickly when I sat down for the first time with Jonathan, a verbose, unabashedly cynical, and somewhat eccentric senior data analyst at XPG. Jonathan was sitting at his "battle station," a desk with three monitors lined up side-by-side. He offered to take me through some recent projects his team had completed, rapidly clicking through a labyrinth of folders to pull out some files. In the middle screen, Jonathan tapped through a glossy PowerPoint filled with charts, images, and figures. He explained that the premise of this particular project was a "post-mortem" of Company X's recently released title, trying to understand what people thought of the game, and why it underperformed the company's projections. At points, he stopped to explain some of the slides—seemingly at random to me—talking about what *this* result meant to the client, or how *that* finding was surprising, or how he personally discounted *this other* statistic. As he went through the report, Jonathan wove a convincing story about the title's failings, concluding that it didn't stand up to the audience's expectation of the genre, that it was a late-comer to the market, and that the general awareness of the title was low, among other things. At this point, he paused and looked at me expectantly, as if to ask whether I was satisfied with this explanation.

I thought that perhaps Jonathan hadn't heard me correctly. This polished, pictoral, narrative object in front of me couldn't be it. The report seemed entirely focused on the game's performance, but it barely covered any direct information on gamers' lives, online behaviors, or prior purchases. Where was the data itself? As I asked this question, Jonathan pulled up an Excel file with rows and rows of numbers in neat grids, which seemed to satisfy my naïve desire to "see the data." He started scrolling through the file, and an entry regarding how many hours gamers play each week caught my eye. I asked him how they

got these numbers: Did they have access to first-party data on platform usage? Did they use cookies or other tracking software? I imagined there was a Terms of Service agreement somewhere with text outlining how users were signing their privacy rights away in teeny, tiny font. I thought XPG must be taking advantage of something like that. Jonathan corrected my misperception rather quickly: "We ask questions, and they give us answers. That's all it is." Jonathan showed me the survey questionnaire for the study, pointing out the question where respondents were asked how many hours they spend on each gaming device. He then scrolled through page after page of similar questions, explaining that the data I was seeing in the Excel file simply consisted of tallies showing how participants responded to each question. Jonathan explained that this is "not big brother:" by and large, XPG only knows what participants tell them directly and consciously, which could very well include misrepresentations. As we turned to the next report, he continued his tour of the findings, explaining how he didn't like the way they asked *this* question, or how he thought *that* result must have some liars skewing the answers, but how *these parts* were really great and interesting.

Jonathan's whirlwind tour would stick in my mind as I assumed the role of intern junior analyst at XPG, learning to do the work of being an analyst while also performing participant-observation as an anthropologist. I realized over time that—at least at this firm—there were no surveillant devices being installed, no big data troves, and no personal files on gamers. Instead, there were between 25 and 50 people who made a living designing, administering, and reporting on limited-time surveys, interviews, focus groups, and playtests. All these methods represented different ways of prompting people to talk, and XPG's role was to repackage this speech into bite-sized, actionable "insights" for its

clients. XPG was a small firm, but its clients included nearly all the gaming industry's biggest names in publishing, as well as several major tech companies, online platforms, and Hollywood studios. This meant that even the most well-heeled, technologically capable companies in the world routinely relied on this type of "self-reported" data. In fact, at times I observed that multi-million-dollar decisions hinged (at least in part) on the results of XPG's studies. Jonathan's simplification of his job into a pattern of question-and-answer speaks to the basic premise of this type of data collection: it is a practice of *conversing*, not of watching, spying, mining, or scraping. XPG did not watch gamers, but it did frequently ask them batteries of questions to see what they would say.

This resulted in a different social dynamic than the kind Foucault describes between the disciplined and the disciplinarian—in which the invisible all-seeing eye exerts control over the targets of its vision.[179] Instead, analysts and respondents regularly engaged in *structured conversations* where respondents were asked a given set of questions (online, on the phone, or in-person), and provided answers in the available format (survey response, short answer, group discussion, etc.). This was a social transaction first, and a monetary transaction second. Respondents expected that their answers would improve something they cared about or interacted with (videogames), but they were also paid for their time. In these conversations, respondents were asked to disclose their personal thoughts, feelings, and behaviors, but analysts did not believe that they would always be truthful, candid, or forthcoming. Analysts at XPG spent a good deal of time planning for these conversations to

[179] Foucault, Michel. 1975 [1977]. *Discipline & Punish: The birth of the prison*. Trans. Alan Sheridan. New York: Pantheon Books.

occur, debating the best way to ask questions, and anticipating the potential for misunderstandings, omissions, or lies.

As an intern, I was tasked with learning from experienced analysts which sorts of techniques worked best for asking different sorts of questions. These techniques were taught in the typical way for XPG: through direct, on-the-fly mentorship while working on active projects. As a result, I ended up with a provisional, messy set of unwritten rules for structuring speech with respondents. These included things like: 1. Don't overload the respondent with too much information at once; 2. Simplify your language as much as possible; 3. Don't allow respondents to give answers that are inconsistent with what they told you previously; 4. Assume that roughly 10% of respondents are irredeemable liars; 5. When feasible, mask your client's game/brand/name by hiding it in a list with other similar items; and so on. Good data collection was understood as applying the proper techniques of asking, resulting in answers that would appear sensible, consistent, and persuasive. Indeed, this art of asking formed a core part of analysts' claims to expertise: while gaming clients would typically provide analysts with their key research questions, it was up to analysts to re-articulate these questions in ways that respondents could understand and would answer as forthrightly as possible.

The centrality of conversation was not limited to the data collection process, but rather extended into all aspects of data analysts' work at XPG. XPG's office was a noisy, chatty environment. Analysts were constantly discussing questionnaires aloud, wheeling their rolling chairs to each other's desks to debate different data points, testing their conclusions by committee, or airing issues in front of tiny audiences of co-workers. Conversations also veered off from strictly work-related topics, with analysts gathering round in common

areas to discuss the latest videogames, films, political news, or odd pieces of science trivia they happened across lately. Due to the office's open floor plan, analyst chatter travelled readily across the space, drawing in additional co-workers who felt compelled to add their takes. I came to understand even these off-topic conversations as productive in at least two ways. First, they created an environment of camaraderie among analysts that facilitated on-task conversations. The general chattiness of the office made it easier to speak to co-workers when necessary, especially those in the same physical office space, since communication channels seemed perpetually open. Second, off-topic conversations established some shared cultural reference points, including judgments on the state of entertainment media that served as the "common sense" backdrop to what consumers were saying in studies. In casual conversations, analysts practiced articulating what they themselves felt and thought about different entertainment brands, products, and companies, unconsciously preparing for formal questionnaires or interviews where some of these same questions might be turned around and asked to study participants.

At first, I listened avidly to these conversations but was hesitant to participate personally, seeing this as an anthropological opportunity to unobtrusively gain insights into analysts' lives. But during week two of the internship, my reticence had been noticed by Jonathan. He called me over to his desk and asked me to act as his "rubber duck" for a few minutes. Jonathan explained that he had heard that when programmers were trying to debug a difficult bit of code, they sometimes resorted to speaking to an inanimate object (like a rubber duck) which they put next to their monitors. Apparently, they recognized not only that the simple act of talking through their code allowed them to find errors, but that the presentational mode of talking *to* another "person" (duck) was even more fruitful,

putting them in the correct state of mind for careful verbal cogitation. In his typical matter-of-fact way, Jonathan explained that I was better than a rubber duck because I could talk back and contribute to the conversation. He then asked my thoughts on a "non-work" topic that he and another analyst had been discussing earlier that morning, reinforcing the idea that productive back-and-forth conversation included both "on-task" and "off-task" topics. Jonathan was not the only analyst to relate the rubber duck analogy to me, each time revealing a similar lesson about the value of vocalized thought. In fact, the oxymoronic image of a "human rubber duck" sitting by a computer screen aptly depicts the way in which analysts at XPG made each other into captive audiences when working through data (or even non-data topics), reliably shifting from monologue to dialogue when they hit snags or unresolved questions. Solutions were found through a collaborative, verbal process of sense-making. Listening to analysts talk incessantly, I began to recognize how XPG's data regime represented successive layers of speech: conversations preparing for conversations, conversations reflecting on conversations, conversations summarizing conversations, and so on.

All this conversational work gets stripped away during the reporting phase, when the "voice of the consumer" appears to stand alone, seemingly self-evident in the final PowerPoint document, known in XPG's corporate lingo as "the deliverable." When creating quantitative reports, analysts displayed the data of participants' responses in bright graphs and charts, but shoved the survey questions into small text at the bottom of the slide, or they hid them away in slide notes. As for qualitative reports, certain participant quotes would be selected and reproduced, but the slides consistently left out the questions that prompted these quotes. While each project generated manifold conversations and debates

among analysts, such informal musings drifted into the ether the moment they were uttered; analysts only wrote up a small portion of their dialogues, concretizing them into written conclusions or "key findings" in slide text. The voice that emerged from consumer data was crisp and distinct, but this was a careful construction. The data shown in any report was merely a disconnected part of a whole, a clipped response in a complex, structured practice of call-and-response, and response-to-response.

This construction of the "voice of the consumer" involves processes familiar to scholars in the field of Science and Technology Studies (STS). STS writers have demonstrated that scientific "facts" are careful constructions that achieve objective status via a social process of closure whereby challenging them becomes costly, either socially or materially.[180] Scientists make facts by following socially-approved conventions,[181] marshalling testimony from laboratory or field devices,[182] claiming disciplinary expertise,[183] and professing an adherence to objectivity that sets their statements apart from supposedly-inferior "beliefs" or "superstitions."[184] Despite the common notion that scientists are merely observers of nature, anthropologists have highlighted the extent to which that scientists' vision is

[180] Latour, Bruno. 1987. *Science in Action.* Cambridge: Harvard University Press.
[181] Shapin, Steven and Simon Schaffer. 1985. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life.* Princeton: Princeton University Press.
[182] Knorr-Cetina, Karin. 1981. *The manufacture of knowledge: An essay on the constructivist and contextual nature of science*. Oxford: Pergamon Press.
Pinch, Trevor J. and Wiebe Bijker. 1984. "The social construction of facts and artefacts: Or how the sociology of science and the sociology of technology might benefit each other." *Social studies of science* 14 (3): 399-441.
[183] Gieryn, Thomas. 1983. "Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists." *American Sociological Review* 48 (6): 781-795.
Kohler, Robert E. 2002. *Landscapes and labscapes: Exploring the lab-field border in biology.* Chicago: University of Chicago Press.
[184] Merton, Robert. 1942 [1973]. "The Normative Structure of Science." *The Sociology of Science: Theoretical and Empirical Investigations:* 267-278. Chicago: University of Chicago Press.
Traweek, Sharon. 1989. *Beamtimes and lifetimes: The world of high energy physicists*. Cambridge: Harvard University Press.
Daston, Lorraine, and Peter Galison. 1992. "The image of objectivity." *Representations* 40: 81-128.

necessarily "situated,"[185] arguing that cultural contexts and processes play a significant role in how scientific theories are developed and pursued, which are taken seriously, and how they are articulated to the public.[186] Even though XPG's data analysts never purported to disclose "objective" truth or laws of nature, their reports nevertheless outlined a distinct reality on the basis of which games publishers acted. Just as scientists construct facts, XPG analysts constructed the "voice of the consumer" via the meticulous work of structured conversation, meta-conversation, and reporting described above. In short, rather than agents of surveillance, XPG analysts were much closer to scientists, albeit scientists without the commitment to publishing or strict objectivity. XPG thus represents a powerful class of corporate knowledge-brokers whose findings are secretive, privately owned, and highly valued by companies attempting to make informed business decisions. Traditional scientists do not hold a monopoly on the production of legitimate knowledge, especially in capitalist processes where private knowledge-work can shape how companies understand their consumers, evaluate their own products, and anticipate future markets.

Beyond knowledge construction, STS offers an additional analytic that is relevant for characterizing non-surveillant data regimes: translation.[187] This analytic suggests that STS

[185] Haraway, Donna. 1988. "Situated knowledges: The science question in feminism and the privilege of partial perspective." *Feminist studies* 14 (3): 575-599.

[186] Martin, Emily. 1994. *Flexible bodies: Tracking immunity in American culture from the days of polio to the age of AIDS.* Beacon Press.
Gusterson, Hugh. 1996. *Nuclear rites: A weapons laboratory at the end of the Cold War*. University of California Press.
Helmreich, Stefan. 1998. *Silicon Second Nature: Culturing Artificial Life in a Digital World.* University of California Press.
Mol, Anne Marie. 2002. *The Body Multiple: Ontology in medical practice.* Duke University Press.
Choy, Timothy. 2011. *Ecologies of Comparison: An Ethnography of Endangerment in Hong Kong.* Duke University Press.

[187] Callon, Michel. 1980. "Struggles and Negotiations to Define What is Problematic and What is Not: The Socio-logic of Translation." *The Social Process of Scientific Investigation. Sociology of the Sciences, Volume IV*: 197-219. Eds. Karin Knorr, Roger Krohn, and Richard Whitley. D. Reidel Publishing Company.

scholars have long been deploying vocal idioms to describe knowledge-production, preceding my own focus on consumer data work as structured conversation. Michel Callon famously applied the notion of translation to French marine biologists in 1986, showing how these biologists came to "speak for" both scallops and local fishermen by articulating a scientific experiment of riverbed engineering whereby both groups might benefit.[188] In this article, Callon argues that scientific translation necessarily involves *displacement*, which can roughly be split into two forms: 1. Displacement of interests, meaning that actors are invited to find new interests, or at least to route their old interests through scientific projects; 2. Displacement of representation, meaning that actors now show up primarily through scientific accounts (charts, papers, illustrations) rather than however they appeared before.[189]

I observed both forms of displacement occurring regularly at XPG. Conversant data projects brought gamer-consumers and game makers together, but in the process each of their interests had to pass through a third party, the firm itself. Gamer-consumers might begin with interests in playing good videogames, or giving feedback to game makers, or just earning some cash. Data analysts at XPG then translated these desires into a specific interest in taking their surveys, sitting for their focus groups, participating in their playtests, and so on. Similarly, game companies might be interested in releasing popular

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Callon, Michel, John Law, and Arie Rip, Eds. 1986. *Mapping the Dynamics of Science and Technology*. London: Macmillan Press.
Latour, Bruno. 1987. *Science in Action.* Cambridge: Harvard University Press.
Fujimura, Joan H. 1992. "Crafting science: Standardized packages, boundary objects, and 'translation'." *Science as practice and culture* 168: 168-211.
Freeman, Richard. 2009. "What is 'translation'?" *Evidence & Policy: A Journal of Research, Debate and Practice* 5 (4): 429-447.
[188] Callon, Michel. 1984. "Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay." *The Sociological Review* 32.S1: 196-233.
[189] Ibid.

videogames, or building on their franchises, or just making a profit. XPG's analysts also translated these desires into a specific interest in buying their services, reading their reports, deciphering their data, and so on. Successful analysts at XPG were praised for their abilities to skillfully displace both parties: excelling in both "client service" that made game companies "realize the value" of XPG's studies, as well as smooth "recruiting" that filled these studies with gamer-consumers' response data in a timely, neat fashion. Furthermore, XPG's reports enacted representational displacement of gamer-consumers; rather than being heard on their own terms, gamer-consumers only appeared to videogame companies through analysts' accounts or devices (written analysis, graphs, images, data files). This process required both gamer-consumers and game makers to become conversant in the language of data. Gamer-consumers would have to learn to speak in the aggregate as data, while game makers would have to learn how to listen to the data in order to hear their consumers. XPG's translational work thus involved setting the terms of the conversation, instructing each party on proper modes of speech, and re-interpreting the intentions of each with respect to the other. As a result, XPG became an "obligatory passage point" between game companies and gamers, representing each to the other.

The classic image of scientific translation involves scientists representing a mute object to a public audience—marine biologists become mouthpieces for scallops, environmental scientists become mouthpieces for the Earth, physicists become mouthpieces for atoms, and so on. But at XPG, data analysts were translating *both ways*, conveying companies' questions to consumers then conveying consumers' opinions back to the companies. This process was never straightforward because analysts actively intervened in both directions. Companies' questions had to be rephrased, reformatted, fleshed out, and then organized in

well-defined series. Consumers' answers similarly had to be provoked, structured, cut, and then exhibited in well-fashioned reports. The vast amount of work that goes into this two-way translation process highlights the gulf between large games publishers and their consumers, such that analysts' careful mediation of their speech seems necessary. The analytic of translation thus reveals how data firms like XPG are working to monopolize their hold on "representative" and "evidence-based" accounts of gamers-consumers. Indeed, unlike big data operations which attempt to track all users, XPG claimed to gather "representative" datasets that were orders of magnitude smaller than the groups they represented. In this way, the power of conversant data is not total vision of consumers, but legitimate authority to interpret and speak for consumers' feelings, interests, and demands (see the final section of this chapter for more).

However, XPG analysts did not describe themselves as translators. Even when I suggested this metaphor to them, they generally disagreed that it adequately captured their role in the games industry. Over lunch, a senior analyst named Parker explained to me what he felt his job was like instead. We were discussing a project that was in its final stages at the time, and Parker admitted that he was nervous about the results. The client had already determined that their idea—a high-end gamer chair featuring rumbling vibrations that synchronized with gameplay—was a winner, and just wanted XPG to make sure they were on the right path. As Parker interpreted the data, there were two problems with this idea. First, "nobody" was looking for a high-end gamer chair. And second, people with high-end gamer chairs found the idea of rumbling "annoying." Between sips of tea, Parker bemoaned his situation, wondering how he could explain the results to the client and still salvage their relationship. He exclaimed, "You know what this job is like? It's like

being Gandalf Stormcrow." I was surprised by this statement. Wasn't data work more like being the all-seeing Eye of Sauron? Or perhaps the narrator, given how much analysts were always telling me to "find the story" in the data? Parker shut those ideas down. He instead provided an abridged account of a scene from *The Two Towers*, describing the moment when Gandalf confronts King Théoden to tell him that he has been bewitched by Saruman, and that his people are in grave danger. As Parker's analogy suggested, he was in a similar situation now, bound to be a "herald of woe" to a powerful organization. Parker's story was perhaps wishful thinking—Gandalf was lauded as a hero by Théoden after he broke the spell that clouded Théoden's eyes—but I remembered then how many other times analysts had compared themselves to messengers. Analysts were excited when they could give good news, and nervous when they felt compelled to give bad news. They agonized over whether clients would truly "get the message," or whether results would be ignored. When the message was unfavorable, they hoped that their clients wouldn't "shoot the messenger," but they also knew that reports contrary to clients' expectations would receive additional scrutiny and critique.

The image of the feudal messenger evokes the unique accountability structure of data analysts at firms like XPG. Unlike scientist-translators—whose claims are subject to peer review and public scrutiny—corporate data analysts provide their information exclusively to a single company, or even a sole person at that company, the client. Each corporate data project is typically not just a singular transaction, but rather represents one instance in an ongoing relationship where the client (more or less) regularly doles out projects to favored firms over the course of months or years. Because this type of vendor-client relationship is so prevalent in the games industry, analysts are enmeshed in a system of clientage that

seems common-sense, but which in practice regularly puts analysts in tough spots. This is because they inhabit the lower position of an uneven power dynamic: the client can exert pressure which analysts may find difficult to refuse because a displeased client can always go elsewhere for their future research, or at least pass their displeasure along to analysts' bosses. Furthermore, XPG analysts were conscious that their reports may be wielded as weapons in the internal political struggles of their clients' organizations: in some cases, workers' jobs or reputation were literally hanging in the balance. The feudal messenger metaphor thus captures the fraught political implications of corporate data analysis in a way that translation elides. While translators are expected to abide by the "original meaning" of the text, XPG's analyst-messengers were doubly bound; they had a duty to please the client, and a duty to pass along the "message" of the consumer faithfully. When these came into conflict, analysts resorted to tactful framing, negotiation, or compromise in order to find workable ways to satisfy both duties at once.

The messenger metaphor also points to the semiotic instability of conversant data, meaning that companies tended to be more concerned with how useful the data was, and less concerned with whether it represented absolute truth. Because they were dealing with the messy realm of speech, it was always possible to discount certain findings in the data by pointing to process: perhaps the question wasn't asked the right way, or some people were lying, or the wrong audience was asked, or the sample size wasn't big enough, or there was an error in the data. Analysts tried to dispel some of these concerns by presenting themselves as trustworthy and capable messengers, but even analysts recognized that their data was provisional, imperfect, and even biased at times. Because neither analysts nor their clients were committed to the "objectivity" of data, the typical

STS critiques regarding the impossibility of an objective viewpoint fall flat here. This is a point which my interlocutors readily conceded; in fact, they had their own sophisticated critiques of respondent bias, clients' motivated reasoning, and the fraught politics of report production. Nevertheless, in most cases businesses and analysts were happy to move forward with projects' findings *as if* they were true. In other words, *pragmatism* was the dominant approach to corporate data that I observed at XPG.[190] It didn't matter whether the data was absolutely impartial or true, as long as it was "good enough" to draw inferences from, or at least "better than the alternative." This pragmatic approach left clients with the flexibility to deploy or withhold scrutiny based on whether findings were considered "actionable." In this type of calculation, the voice of the consumer was merely one factor for game-makers to weigh among others such as: perceived feasibility, costs of production, stakeholders' internal opinions or judgements, impending deadlines, competitors' recent behavior, and so on. While it was common to discount particular findings, it was rare for an entire study to be scrapped; this would require the client or the firm to admit that they had wasted their time and money, and might also require building a new study to replace the old one.

This does not mean that analysts were uncommitted to the truth, only that they held a pragmatic, performative view of truth. As messengers, XPG analysts strongly believed in their duty to the voice of the consumer, and they devoted a great deal of energy to rooting out known and avoidable sources of error in their data. For instance, junior analysts armed with red pens painstakingly pored over reports page-by-page, matching each chart and

[190] James, William. 1907 [2014]. *Pragmatism: A New Name for Some Old Ways of Thinking*. eBooks@Adelaide. Dewey, John. 1910. *How we think*. Boston: D. C. Heath and Company.

figure with the original data and marking any inconsistencies as if they were teachers grading an exam. Rigorous checking also occurred when surveys were programmed, and when data files were compiled, to ensure consistency at each step of the process. This meticulous process of checking recalls historian Mary Poovey's account of 15th-century Italian bookkeeping practices, whereby a rising merchant class attained respectability by referring to well-kept ledgers.[191] Poovey notes that the internal consistency and the precision of these ledgers made them seem trustworthy, but in practice bookkeepers often relied on guesswork, estimation, and fictitious "rectifying figures" in order to make the books balance.[192] Similarly, XPG analysts gained authority by appealing to well-kept data tables, displacing the epistemological question of accuracy with the practical question of internal consistency. Consistent results seemed to stand on their own as self-evident findings, producing a clear "message" that suggested paths forward. For instance, in the post-mortem project that Jonathan showed me above, the ambiguous dimension of a title's "awareness"—with all its gradients of conscious and unconscious attention—was clarified into a simple binary: 83% unaware, 17% aware. These numbers could easily be verified by digging into the original data file and performing some arithmetic, demonstrating that the percentages were indeed consistent with the number of people responding each way in the survey. This precise understanding of "low awareness" was articulated as a call to action for the marketing department, which could be cajoled to work harder or more effectively next time in order to improve the awareness metric for upcoming titles. By appealing to precise, clear, consistent numbers, data workers shifted the terms of the debate into the

[191] Poovey, Mary. 1998. *A history of the modern fact: Problems of knowledge in the sciences of wealth and society*. Chicago: University of Chicago Press.
[192] Ibid.

pragmatic realm; the operative question became a political one, namely the *usefulness* of a result. Useful results could be treated *as if* they were true because they could be counted upon to be consistent and precise enough to organize business around. On the other hand, results deemed useless could be ignored even if they were internally consistent. Consistency was not a trump card that overruled political concerns, but rather operated as a tool that could be wielded or discarded depending on the situation.

XPG analysts' actions align with the broad field described by social theorists as "performative economics," wherein economic calculations are understood to play an active role in shaping and framing markets, rather than passively describing or measuring them.[193] While scholars in this field have largely focused on formal economic science, XPG's private knowledge-work shaped business decisions at the micro scale in ways that were often more important to companies' individual decision-making than economists' broad statements. Among the performative economics group, the closest analogue to XPG's activity is given by political scientist Timothy Mitchell, who outlines the novel "metrological projects" pursued by Thomas Edison in the late 1800s which helped shape the nascent electricity industry.[194] Mitchell argues that Edison's team prevailed over competitors by proposing a new cost-accounting procedure that captured the added value of high-resistance lightbulbs in an electrical grid. Because his team simultaneously pioneered high-resistance bulbs, these novel calculations made his team's proposals appear superior to any

[193] MacKenzie, Donald. 2003. "An Equation and its Worlds: Bricolage, Exemplars, Disunity and Performativity in Financial Economics." *Social Studies of Science* 33 (6): 831 868.
Callon, Michel. 1998. *The Laws of the Markets.* London: Blackwell
MacKenzie, Donald. Fabian Muniesa, and Lucia Siu. 2007. *Do Economists Make Markets? On the Performativity of Economics*. Princeton: Princeton University Press.
Butler, Judith. 2010. "Performative Agency." *Journal of Cultural Economy* 3 (2).
[194] Mitchell, Timothy. 2008. "Rethinking Economy." *Geoforum* 39(3): 1116-1121.

alternatives.[195] Mitchell uses this case study to show how calculations can help bring about the very worlds the purport to measure, and how the success of calculations often depends on their ability to actualize new worlds, rather than their accuracy. My experience at XPG suggests that this process may be more precarious and political than Mitchell describes. Analysts' jokes about "shooting the messenger" underline an environment in which all parties understand the political nature of data, where one's proclivity to hear, reframe, or discount any given "message" depends not only on the message's content, but on the relationships built between speaker, listener, and messenger. In short, calculations can only reshape markets when calculators and companies are aligned; calculators must find a willing ear in the company, or else bend the ears of their audience, if their calculations are to have any impact.

To characterize how companies like XPG and its clients are using consumer data, then, the vocal idiom is much more appropriate than the optical one. Whereas the domain of sight has traditionally been associated with objectivity, neutrality, and separation from the subject of vision,[196] the auditory domain involves intimate linkage between speaker and listener, both of whom have stakes in the conversation.[197] Speech can also be layered, resulting in meta-discourses such as those occurring among analysts at XPG, between analysts and clients, or internally for clients. Hearing someone else speak is an uncertain endeavor, leading to further questions: Was the message interpreted properly? Why was this message conveyed? What did the speaker "really" intend in their heart-of-hearts? And

[195] Ibid.
[196] Crary, Jonathan. 1990. *Techniques of the observer: On vision and modernity in the nineteenth century*. Cambridge: MIT press.
[197] Hirschkind, Charles. 2009. *The Ethical Soundscape: Cassette Sermons and Islamic Counterpublics*. New York: Columbia University Press.

to what extent is any speech act shaped by what was said before? XPG analysts help structure and mediate these tricky conversations between companies and consumers, but they impose costs to do so—speech and hearing themselves must transform—and they also open themselves up to risk as messengers who may be blamed. Speech is chancy and ambiguous. It's easy to imagine corporations as omnipotent when we focus on the targeting of individuals by surveillant data, but conversant data opens them up to risk. Even beyond the risks of getting useless or misleading results—outcomes that are typically blamed on analysts themselves—there is the bigger risk of a narrative emerging that the company is misaligned with their consumers. Such an outcome could potentially lead to overhauls in approach, internal political maneuvering, or at least additional work in the form of applying extra scrutiny to the data or marshalling counter-data.

The conflicted position of the "voice of the consumer"—powerful enough to redirect companies, ambiguous enough to require a messenger, and weak enough to be dismissed by semiotic concerns or other business considerations—speaks to the paradox of demand under viral capitalism. For traditional factory-based capitalism, demand is a relatively straightforward factor: demand for a given good is expressed in terms of quantity of sales, which the factory meets by producing the right amount of goods. Demand in this sense is strictly quantitative: it can increase or decrease, and capitalists are expected to increase or decrease production of the good accordingly. This formulation falls apart completely when assessing a creative, viral product like a videogame. After a game has been made and distributed on digital platforms, production of that title essentially becomes infinite and instantaneous. The game can be downloaded "on demand," reproducing itself with the click of a button. And unlike factory goods, demand for any given title decays rapidly.

Videogames are not like Marx's famous bolts of cloth;[198] videogame capitalists do not hope to create stable profit extraction by continuing to sell the same good indefinitely for more than it costs to produce (see Chapter 1 and the logic of inoculation). For viral capitalists, then, demand is neither stable nor easily predictable. It is not a mere number to be tracked and tabulated. Rather, demand is the "voice of the consumer" as heard through a combination of consumer data, sales figures, and other mediums like online forums, YouTube, Twitter, games journalism, and so on (more on this in Chapter 4). The vocal register here suggests more than just the rich qualitative dimensions of demand and the difficulty of proper interpretation; it reveals a basic premise of viral capitalism. Namely, viral capitalism is a provocation: it creates products which invite consumers to experience, articulate, relate, share, respond, associate, enjoy, and critique. In this way, viral capitalism continually incites consumers to join active relations of demand, which emerge between players, game companies, and consumer data firms like XPG.

It is perhaps no wonder then that the primary mode of data collection in the games industry involves provocation, conversation, and relation. XPG's study participants are invited to articulate their feelings and experiences in response to certain questions, scenarios, or situations. The "voice of the consumer" does not pre-exist these provocations; it is the product of continual prompting. In other words, viral capitalism does not fulfill pre-defined needs or desires (the model of demand under factory capitalism); it is always creating new needs and desires, fueling unending efforts to provoke consumers to respond, and then respond to that response. This dialectic is actualized by conversant data; each

[198] Marx, Karl. 1995 [1887]. *Capital: A Critique of Political Economy*, *Volume I.* Trans. Samuel Moore and Edward Aveling. Moscow: Progress Publishers. Marx/Engels Internet Archive.

question generates a new universe of desires, opinions, and potential demands as different viral products are considered and tested.

In the following section, I continue to explore the generative dimensions of working with conversant data. While the vocal idiom expresses analysts' sense of limited agency—their duty to relay consumers' messages faithfully, as well as their duty to please their clients—the craft-based idiom proposed below expresses the ways in which analysts reclaim agency through fashioning beautiful, well-made reports. The craft-based idiom speaks to analysts' arts of interpreting and persuading, complementing the arts of asking described above.

Beautiful data & the idiom of craft

A common saying I often heard at XPG was that working with consumer data was "halfway between art and science"—or sometimes that the job was "*more* art than science." Early on, I took this saying to refer to the great amount of uncertainty involved in working with consumer data. Analysts regularly had to rely on their personal judgment, their experience with similar projects in the past, and the input of their peers in order to find solutions to everyday problems. After all, there is almost no formal training for the type of research that XPG performs: new hires to the field learn how to be a corporate data analyst through some combination of mentorship, discussion with co-workers, and trial-and-error. Some analysts had prior academic experience in a relevant field (sociology, psychology, anthropology, business, statistics), and XPG did host a few "training" modules for junior analysts, but these formal courses covered only a fraction of analysts' actual job duties, and most did not include the kind of sticky situations analysts had to work through regularly.

Should a counter-intuitive data point be trusted, or is there an error lurking somewhere behind it? What do you do when your survey is not finding qualified respondents? How do you make sense of two results that seem to conflict with one another? When is it proper to reach out to the client with concerns, as opposed to just forging ahead? Beyond such mundane problems, nearly every project at XPG involved novel questions that had never been asked before—about a new videogame title, about a new mechanic, about new gaming behaviors or attitudes, about new monetization models, and so on—meaning that analysts' work quickly exited the domain of scientific certainty and replication. Novel questions thrust analysts instead into the domain of artistic invention and professional judgment, forcing them to be creative designers of new research approaches.

As I spent more time at XPG, I came to realize that the artistry of data work had a deeper, double meaning. Not only did analysts approach data work as a mental art that combined creative imagination with direct experience, but they also paid close attention to the aesthetic dimensions of reports. Analysts spent hours putting reports together slide-by-slide, dragging images and charts into place, aligning slide elements, reformatting graphs, finding or creating custom icons, considering the choice of color and font, thinking about where the viewer's eye would be drawn, and wondering whether there was enough "white space." Through this type of hands-on work, XPG's reports became artisanal products, valuable objects that were custom-made for their clients. According to XPG analysts, the best reports were pleasing to read, clearly laid out, dynamic, and even beautiful. It was a grave sin for a report to be "cluttered," "boring," "dull," or an "eyesore." Analysts who consistently produced beautiful reports were praised publicly for their skills and became go-to resources for others. Furthermore, the billing structure at XPG supported the notion

that analysts were artisan report-makers: projects officially ended when analysts delivered the final report to the client's inbox, at which point they could charge the client with the full fees for the project. In practice, this meant that analysts were neither paid for the data itself nor even their expert analysis, but for the final report that wove data and analysis together in an attractive aesthetic form.

I began to recognize the artisan nature of data work at XPG about halfway through my first summer as an intern there. One afternoon, a mid-level analyst named Olivia groaned over an email she just received. She called me over to look at a "sample report" the client had sent her for a study she was working on. Although the client had not stated this expressly, Olivia explained that the email was more than a set of guidelines for report structure and analysis—it was an implicit instruction that she needed to meet or exceed the aesthetic qualities of the "sample." As she flipped through the sample's pages, she pointed out the sample's slick graphics, its consistent use of a catchy theme, its "modern" feel, and the overall level of "polish" that the report had. She stopped suddenly on a slide and pointed to the title section, exclaiming: "Oh god. This has custom kerning. I'm screwed." When I made a puzzled face, she explained that kerning referred to the spacing between letters, and that the slide title used non-standard kerning for the font, indicating the report designer's high level of attention to detail. Olivia was confident in her abilities to manage, collect, and analyze data, but she professed that her "artistic side" was lacking, meaning she would need to seek out help from a co-worker. Her dread at having to match the standard set by the sample spoke to the high value XPG's clients placed on artistry in putting reports together. The document that Olivia produced would not only go to the client's inbox; it would serve as the focal point for a series of internal presentations at the client's company,

circulating through groups of important stakeholders that would each need to be impressed and convinced.

Not all clients were so explicit about the value of report aesthetics, but XPG analysts consistently stressed the importance of delivering well-made, polished, pleasing reports even for clients that seemed not to care about these dimensions. The aim of report-making was to create a document that was more than informative. Reports needed to be *persuasive*, meaning that they told a convincing story about the consumer that was easy to follow and seemed to flow naturally from the study's findings. This was a difficult task because the data upon which the report was based was often messy, sometimes conflicted, and always overwhelming in its unfinished state. Because projects could potentially involve thousands of consumers, the data collection process created a cacophony of noise that was recorded as "raw" data in the form of each participant's individual responses. "Raw" data required a lot of shaping, prepping, contextualizing, and formatting in order to make it presentable. Refashioning this cacophony into a singular "voice of the consumer" was a practiced craft, an art that involved close attention to the way in which data was portrayed, organized, and augmented with text or images. As an intern at XPG, I learned that slides needed to have a "visual logic" that resonated with the "logical" conclusions the report was trying to draw from the data. This visual logic could be quite simple, such as highlighting the most important data point in a striking color to draw the reader's attention, or fiddling with a chart's scaling to make differences appear more or less salient, depending on the needs of the underlying narrative. At other times, reports' visual logic was more complex, such as selecting slide aesthetics that would subtly resonate with the study topic (reports about cutting-edge games or technologies should "feel futuristic," reports about child gamers

should "feel playful," etc.). The primary value of artisan report-crafting was that masterfully-made reports were convincing, and therefore useful. For analysts, this art ideally balanced their dual duties to the consumer and the client; the consumer's message was conveyed in a clear and appealing fashion, while clients would be impressed by the level of polish and hopefully become a more receptive audience. Clients used reports to inform and contribute to internal company debates, drawing authority from well-crafted data whose layout and visuals reinforced their conclusions. In other words, analysts fashioned reports as persuasive objects that first worked to convince clients, and then could be deployed by clients themselves to convince other stakeholders.

Reports allowed analysts to reclaim agency by augmenting their interpretations of the data with corresponding visual demonstrations, delivering a cohesive narrative that they hoped would forestall resistance and skepticism. Analysts' report-crafting activities underline the fact that data is rarely convincing on its own, and that adding more data does not necessarily increase its authoritativeness. The fundamental weakness of data by itself is a lesson that has been felt keenly by environmental activists, scholars, and scientists fighting for the public to recognize the dangers of global climate change. Even though the evidence has been abundantly "clear" for years, researchers and activists have realized that there is a critical need for more convincing, relatable ways of persuading people to understand and take action to potentially avert global disaster.[199] Similarly, even though the internet has given people unprecedented access to information, this does not necessarily mean that people are more informed; the internet has also become a haven for

[199] Callison, Candis. 2014. *How Climate Change Comes to Matter: The Communal Life of Facts*. Duke University Press.

disinformation, propaganda, and unfounded rumor.[200] While scholars have asked after what impact this age of information overload has on public perceptions and institutional trust,[201] companies also are being presented with an unprecedented abundance of information today. Analysts' reports compete for attention with a variety of other data to which games publishers have access: sales figures, in-game information, forum chatter, critics' voices, user reviews, and more. XPG analysts understand well that successful fact-making in such an environment requires more than just a claim to "objective" methods; it requires building and navigating close relationships with the intended recipients of knowledge, their clients.

This means that fact-making proceeds quite differently in the corporate world than in academia. In *Science in Action*, STS scholar Bruno Latour explores how scientific statements acquire factual status, describing a public citational process whereby scientists incorporate others' findings in their own papers first as uncertain statements to be tested, then as proven statements that they build upon, and eventually as unquestioned truths that do not even require a citation.[202] Latour calls this process "black boxing," showing how scientific facts operate as "black boxes" that become taken for granted and require effort to re-open.[203] I saw black boxes everywhere at XPG, but they functioned differently from Latour's scientific black boxes. Each figure, chart, quote, and graph in a report represented a black box, a concise statement of fact about the consumer, the market, or the viral product. But

[200] Wooley, Samuel, and Philip Howard, Eds. 2019. *Computational Propaganda: Political Parties, Politicians, and Political Manipulation on Social Media*. Oxford University Press.
[201] Andrejevic, Mark. 2013. *Infoglut: How Too Much Information is Changing the Way We Think and Know*. Routledge.
[202] Latour, Bruno. 1987. *Science in action: How to follow scientists and engineers through society*. Cambridge: Harvard University Press.
[203] Ibid.

unlike scientists, analysts did not endeavor to turn facts into more facts. The goal of conversant data production was to establish facts, turn facts into persuasive narratives, and narratives into actions. This process had more urgency than the slow, gradual, accumulative process of scientific fact-making. Consumer data was understood to have a limited shelf life; its relevance decayed as the market shifted, as consumers' attitudes changed, and as business plans evolved. This meant that consumer data need not undergo a lengthy, citational process of closure to become a stable fact; adopting a pragmatic stance, clients and analysts could skip the closure process entirely and agree to proceed *as if* the data were factual. Clients and analysts only needed these pragmatic facts to hold until the report had been circulated, the corollary actions had been carried out, or the next research project was commissioned. Consequently, it was less important for facts to be unassailable, and more important for them be clear, useful, attractive, and well-organized. This prioritization of the mobility of facts over their objectivity helps explain the high value placed on artisanship at XPG. Artisanship made facts travel by folding them into attractive reports with clear narratives, enabling them to be incorporated into stakeholders' perceptions and plans rapidly and with minimal friction. Artisanship was also the foundation of positive relationships with clients; polished reports increased clients' confidence that analysts were competent in all aspects of the craft, making them more likely to take the pragmatic leap and treat the data *as if* it were true without further investigation.

Not all data generated by a study at XPG was destined to travel in a report. Scrolling through data files at XPG, I was able to peruse statistic after statistic, potential fact piled upon potential fact. XPG's data files were matrixes of black boxes in-the-waiting, neatly

arrayed in rows and columns, each representing a concise proposition about the consumer: 78% of the audience play games 3+ hours a week, 35% own an Xbox One, 22% play first-person shooter games, 90% are aware of eSports, etc. Even in qualitative studies, participants made many remarks that were captured in audio files and analysts' notes but did not form part of the subsequent analysis. This type of "raw" information occupied a liminal state between fact and not-fact; any piece could in theory be elevated to factual status, or else be left in liminal obscurity. If facts are black boxes, the abundant mass of information in any data file at XPG represented *black matter*, the primary material that analysts pored over, selected, shaped, and cut into black boxes. The danger of black matter was that it allowed for a multiplicity of narratives about the consumer, depending on which pieces were highlighted, how they were interpreted, and how they were put together and arranged. Therefore, the black matter of the data file does not function at all like an individual black box. It is not a simple machine that can be relied upon to transform an input into an output. Rather, it is an abundant resource for meaning-making, a flexible material that can be broken down and reconstituted into any number of outputs. As artisan laborers, it was up to XPG analysts to work with black matter, discriminate between "good" and "bad" pieces, and transform the good pieces into a beautiful finished product, i.e. the report. This craft had to be learned by experience and mentorship; it took a practiced eye to discern which pieces of data could be considered both "relevant" to the client and "representative" of the consumer, and it took a practiced hand to shape and arrange these pieces into an effective report. This does not mean that analysts had complete artistic freedom, or that they just made up narratives to suit their needs. Just as any artisan can only work with the material they have, XPG analysts were constrained by the data file itself,

as well as their own skill. The report-making process was primarily a subtractive endeavor; analysts cut the data file down into digestible pieces which they had to place into the report, so the primary messages analysts drew out could not contradict these pieces. Furthermore, clients often had key questions for which they were eager to see the results, meaning that it was impossible to ignore certain pieces of data. Even though analysts worked to make their report-objects appear complete, the black matter of the file always lurked behind any report. Unsatisfied clients would ask analysts to alter or add to the report, forcing them to return to the file and fashion a different object from it. The most dreaded outcome was when a client asked for the data file itself in order to check on analysts' work or create their own report, signaling that the regular client-vendor relationship had fallen apart completely, and that the analyst had failed in their task. In short, success for XPG analysts meant mastery and control of black matter, making a finished product that was compelling enough to forestall the need to even think about the "raw" material.

My description of the data file as "raw" black matter should not be construed as an argument that the data collected by XPG is a spontaneous reflection of a pre-existing reality. Informatics scholar Geoffrey Bowker points out that "raw data" is an oxymoronic phrase.[204] In his prior work with Susan Leigh Star, he studied modern classification systems in arenas like medicine and governance, showing in each case that the data used by these systems is conditioned, structured, and transformed not only when it is collected, but also when it is stored.[205] A variety of scholars have subsequently agreed that all data is

[204] Bowker, Geoffrey. 2005. *Memory Practices in the Sciences*. Cambridge: MIT Press.
[205] Bowker, Geoffrey and Susan Leigh Star. 1999. *Sorting Things Out: Classification and Its Consequences*. Cambridge: MIT Press.

"cooked," suggesting that more attention should be paid to the constraints and conditions of "big data" collection which so often seem self-evident and transparent.[206] Anthropologist Tom Boellstorff notes that this distinction between the "raw" and the "cooked" references Claude Lévi-Strauss, who also included a third cultural category, the "rotted."[207] While this gustatory framing is instructive, my treatment of "raw" data in this chapter does not derive from Lévi-Strauss' culinary triangle, but rather from Karl Marx's formulation of labor. In *Capital*, Marx describes labor as primarily a transformational act, a process through which things become useful to satisfy human needs, gaining use-value.[208] Marx defines "raw material" as the "subject of labor," that which labor works upon to create a product. Significantly, Marx stresses that rawness is not an inherent quality of a thing, but rather merely refers to the position of the thing in the labor process.[209] The very same bolt of cloth which is a product for one factory can be a raw material for another factory. For Marx, "raw" materials are thus objects which are "already filtered through labor," meaning that "rawness" is simply an intermediate, temporary state that indicates both prior transformation and future transformation via labor.[210] By applying Marx's understanding of "rawness" to data, it becomes clear that the black matter of the file is precisely this type of "raw material." As such, it is an intermediate good, first filtered through the prior labor of respondents and analysts, then becoming the subject of analysts' labor to produce the finished report.

[206] Gitelman, Lisa, Ed. *'Raw Data' Is an Oxymoron*. Cambridge: MIT Press.
[207] Boellstorff, Tom. 2013. "Making big data, in theory." *First Monday* 18 (10): October 7.
[208] Marx, Karl. 1995 [1887]. *Capital: A Critique of Political Economy*, *Volume I.* Trans. Samuel Moore and Edward Aveling. Moscow: Progress Publishers. Marx/Engels Internet Archive.
[209] Ibid.
[210] Ibid.

These two moments of labor require distinct, yet connected, skills from analysts. During the data collection stage, analysts must act as skilled mediators in order to ensure that respondents produce "raw" black matter that will be valid and useful. Then, during the reporting stage, analysts must act as skilled artisans in order to cut black boxes from the file and build these into a persuasive report. Because skilled labor is required at both stages, nothing about corporate data production can be considered natural, spontaneous, or transparent. But the fact that conversant data is not spontaneous is not a critique that undermines its usage; rather, analysts and clients already understood that their data was constructed, and therefore only considered it useful when it was *well-made*. This suggests that it may be more fruitful to think about data not as "information" or "knowledge" in the abstract, but as the "raw" material for skilled craftwork, whereby knowledge is the end product. Like any type of artisan labor, data craftwork is result of: 1. The process through which "raw" materials are fashioned and selected; 2. The mentor-mentee relationships and other knowledge structures through which the craft is learned and developed; 3. The client relationships through which the craftsperson's product is valued, judged, and reshaped. In other words, data is not an abstract construct that transforms according to its inclusion in a technical apparatus of knowledge; data is an economic good that transforms according to its inclusion in complex systems of labor relations.

One thing that facilitated analysts' ability to work with the file's black matter was that studies operated at a relatively small scale. Namely, XPG analysts considered smaller datasets to be more amenable materials to work with, better able to be folded into persuasive narratives due to their manageable size. In contrast to "big data" which

generally requires algorithms to parse,[211] I suggest that it's more appropriate to characterize XPG's data as *human-scale data*, workable by-hand without the need for specialized tools. Whereas "big datasets" can include information on millions of users, the typical quantitative project at XPG had a total "N value" (respondent count) anywhere between 400 people and 10,000 people. XPG's qualitative studies were even smaller, with a typical N value ranging between 4 people to 100 people. The resultant datasets had a relatively low amount of data, small enough that a human analyst could process, check, and reorganize them line-by-line. This meticulous, by-hand analysis was not just a theoretical possibility at XPG; it was a core part of analysts' work. Junior analysts were routinely assigned the duty of scanning through the entirety of the file in preparation for reporting, searching for potential errors, inconsistencies, missing elements, and interesting findings. This task could be mind-numbing, requiring the analyst to scroll painstakingly through thousands of similar-looking data tables, but it could typically be accomplished in less than a single 8-hour workday. For an experienced analyst who had developed an eye for this kind of data, file checking could take only a few hours. File checking thus epitomizes the routine, by-hand, judgment-based work that XPG analysts performed on "raw" human-scale data. Although XPG analysts sometimes compared this process to "drinking from a firehose," they nevertheless were regularly able to holistically assess the file, "find the story" in the data, and eventually pare the file's black material down to meaningful narrative chunks. This holistic, narrative-building process was a source of authority for XPG, allowing analysts to speak confidently about the "voice of the consumer" as a set of

[211] Scott, Steven L. et al. 2013. "Bayes and big data: the consensus Monte Carlo algorithm." *International Journal of Management Science and Engineering Management* 11 (2): 78-88.

consistent messages and demands that were reinforced across the entire dataset. The consumer's voice also resonated more clearly because XPG set manageable limits on how many participants could speak in a given study, as well as limits on what topics they could discuss.

Scholarly discourse on corporate data seems to be predominantly concerned with "big data" operations, which typically paint a different picture of data work than the artisanal labor I've described at XPG.[212] Some have even characterized our contemporary world as undergoing a "big data revolution"[213] placing us squarely in the "age of big data,"[214] defined by overwhelming flows of information, computerized agents, and ubiquitous tracking.[215] Critiques of big data are typically linked to concerns about how automated computer software, or algorithms, are powerfully shaping our experiences online.[216] Scholars have highlighted the influence of algorithms across various domains—algorithms shape which search results we see on Google, which Facebook posts show up on our feeds, which

[212] van Dijck, Jose. 2014. "Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology." *Surveillance & Society* 12 (2): 197-208.
Lyon, David. 2014. "Surveillance, Snowden, and Big Data: Capacities, consequences, critique." *Big Data & Society* July-December 2014: 1-13.
Boellstorff, Tom and Bill Maurer. 2015. *Data, Now Bigger and Better!* Prickly Paradigm Press.
[213] Mayer-Schönberger, Viktor and Kenneth Cukier. 2013. *Big Data: A Revolution that Will Transform how We Live, Work, and Think*. Boston: Houghton Mifflin Harcourt.
Kitchin, Rob. 2014. *The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences*. Los Angeles: Sage Publications.
[214] Tene, Omer, and Jules Polonetsky. 2012. "Big data for all: Privacy and user control in the age of analytics." *Northwestern Journal of Technology and Intellectual Property* 11 (5).
Peters, Brad. 2012. "The Age of Big Data." *Forbes*: July 12.
Lohr, Steve. 2012. "The Age of Big Data." *New York Times*: February 11.
Wolfe, Patrick. 2013. "Making sense of big data." *Proceedings of the National Academy of Sciences* 110 (45): 18031-18032.
Lynch, Michael P. 2016. *The Internet of us: Knowing more and understanding less in the age of big data.* WW Norton & Company.
[215] Andrejevic, Mark. 2013. *Infoglut: How too much information is changing the way we think and know.* New York: Routledge.
[216] Kockelman, Paul. "The anthropology of an equation: Sieves, spam filters, agentive algorithms, and ontologies of transformation." *HAU: Journal of Ethnographic Theory* 3.3: 33-61.
Amoore, Louise and Volha Piotukh, Eds. 2016. *Algorithmic Life: Calculative Devices in the Age of Big Data*. New York: Routledge.

products Amazon recommends us, which YouTube videos appear next, and so on.[217] In contrast, this chapter has attempted to humanize corporate data,[218] underscoring how a significant portion of corporate data is primarily shaped by human hands, given meaning in private conversations, and finally mobilized through personal connections. Even if algorithms may influence which games appear first in online search engines or the app store, data workers at firms like XPG often help inform the basic content and framing of these games prior to their public release. Big data and its algorithms seemed mostly irrelevant to analysts at XPG—despite the fact that XPG worked with a variety of giant, cutting-edge, technologically-savvy companies. Furthermore, XPG's executives did not identify big data as an existential threat to their business. "Big data" may be an important new trend in certain corporate operations, but I saw no indication that the "boutique," "custom" data work of XPG was declining or being replaced.

Indeed, XPG was just one consumer research firm among many successful competitors, all of whom regularly traded in small, custom-made datasets for corporate clients. While XPG specialized in servicing the videogame industry, market research is deployed in a wide variety of industries worldwide, including televisual and film entertainment, fashion, pharmaceutics, foodstuffs, motor vehicles, the tech sector, realty, and more. As I discovered through analysts who had left XPG and joined other consumer research firms, the basic small data methodologies and craft-based labor processes I observed at XPG seemed to be

[217] Beer, David. 2009. "Power through the algorithm? Participatory web cultures and the technological unconscious." *New Media & Society* 11 (6): 985-1002.
Steiner, Christopher. 2012. *Automate This: How Algorithms Came to Rule Our World*. New York: Portfolio/Penguin
Gillespie, Tarleton. 2014 "The relevance of algorithms." *Media technologies: Essays on communication, materiality, and society*. Eds. Tarleton Gillespie, Pablo Boczkowski, and Kirsten Foot. Cambridge: MIT Press.
Hallinan, Blake, and Ted Striphas. 2016. "Recommended for you: The Netflix Prize and the production of algorithmic culture." *New media & society* 18 (1): 117-137.
[218] Seaver, Nick. 2018. "What should an anthropology of algorithms do?." *Cultural Anthropology* 33 (3): 375-385.

broadly shared by the firm's competitors. These fundamental methodologies—random-sample surveys, intercepts, focus groups, consumer product tests, needs-based segmentations, and more—date back to the early 1900s, a time when the dominant business paradigm in the United States was shifting away from an emphasis on efficient production and toward an emphasis on marketing, sales, and product development.[219] In this environment, researchers like Ernest Dichter, George Gallup, Anna Freud, Arthur Nielsen, Charles Parlin, and Edward Bernays built their careers by professing "market research" to be a new corporate science, a sophisticated practice that would reveal consumers' unspoken needs, desires, and preferences to companies.[220] Since this time, market research has grown to an estimated $46 billion industry globally in 2017.[221] Therefore, while scholars may be concerned about the growing ubiquity of "big data," the human-scale data operations of consumer research are already ubiquitous, powerful, and subtly shaping our experiences of goods. Given the long-standing relationships between companies and small data firms, it is perhaps more likely that "big data" will be incorporated into existing consumer research as an additional tool in researchers' craft, rather than fundamentally disrupting it.

[219] Tadajewski, Mark., and D.G. Brian Jones. 2014. "Historical research in marketing theory and practice: a review essay." *Journal of Marketing Management* 30 (11-12): 1239-1291.
Schwarzkopf, Stefan. 2016. "In search of the consumer: the history of market research from 1890 to 1960." *Routledge Companion to Marketing History*: 61-83. London: Routledge.
[220] Igo, Sarah Elizabeth. 2007. *The averaged American: Surveys, citizens, and the making of a mass public*. Cambridge: Harvard University Press.
Curtis, Adam. 2002. *Century of the Self (Vol. 17).* London: BBC Four.
[221] Richter, Matthias. 2018. "Market research worldwide: USA with healthy growth rate, moderate figures from Canada." *Marktforschung.de*. https://www.marktforschung.de/aktuelles/marktforschung/marktforschung-weltweit-usa-mit-gesunder-wachstumsrate-moderate-zahlen-aus-kanada/

The politics of mass-appeal

> It was my first trip to Critical Initiative Games (CIG), a large American videogame developer who had been making games for over a decade, but whose latest title had broken records in sales and catapulted the company to the spotlight. A "brand manager" for CIG had set up a lunch-time meeting near CIG's offices with a small team at XPG, including myself, to discuss the image that gamers had of CIG's different gaming properties. Working his way through a plate of tacos, the brand manager lamented that the designers at his company seemed "glued to Reddit." I already knew that the forum-based website had an active following of gamers—who used certain subreddits to voice their opinions about games, share gripes about developers, and comment on videogame news—and it made sense to me that CIG game designers were listening in on these discussions. The brand manager continued, noting that he took the website "with a grain of salt." He mentioned how in his mind, Reddit was full of misogynists, "keyboard warriors," and the "whiniest" segment of gamers. The XPG analyst beside me chimed in, agreeing that Reddit was definitely not representative of all gamers, suggesting that in prior studies they had found only a small portion of the total gaming population used Reddit. The brand manager smiled and blurted out, "That's why we need you guys!" The conversation continued with the analyst outlining XPG's capabilities, promising to provide the brand manager with a better picture of CIG's players than Reddit. For a price, XPG's report would allow the manager to go back to his designers and convince them to stop chasing the "Reddit drama of the month," finding supposedly-better footing for their work in XPG's analyses. If a company aims to "listen" to its players, this lunch revealed CIG's internal struggles about the terms of that listening: it matters *who* can speak, and *how* they speak, because different messages appear in each case. The issues that Reddit's "hive mind" cares about deeply may have no significance to XPG's "representative" consumer, and vice versa. By the end of the lunch, the brand manager shook hands with the XPG team; they recognized each other as allies, joined in the quest to dismiss Reddit and construct a new, more convincing grounds for listening to CIG's players.

In previous sections, I described how XPG analysts collect, manage, and present consumer data to their corporate clients, characterizing this process first as a matter of listening, mediating, and voicing the consumer, and second as a matter of crafting beautiful, cohesive report-objects that can portray consumer's voice clearly and persuasively. Large games publishers spend a great deal of money and political capital to fund these listening projects. Despite all this effort, gamers regularly critique publishers for being unable or unwilling to listen to their voices. Incidences of online community backlash range from minor everyday gripes to full-blown condemnations and calls-to-action against certain

publishers. At the low end of this spectrum, Reddit threads for popular multiplayer titles like *League of Legends*[222] and *Hearthstone*[223] are perennially filled with balance complaints about the current state of the game, with suggestions for how the developer might "fix" perceived issues. Other instances of backlash include public skepticism about future games and calls for fellow gamers to be wary, such as when Blizzard announced *Diablo Immortal* as a mobile title during BlizzCon 2018 (see Introduction).[224] The high end of this spectrum is represented by events like EA's 2017 release of *Star Wars Battlefront II (2017)*. Gamers were so enraged by the title's "pay to win" monetization system that they took to online platforms to protest, condemn EA, and organize boycotts of the publisher.[225] Gaming news outlets and influencers spun this event into a full-blown scandal,[226] and eventually EA caved to public pressure, walking back their decisions and restructuring the game's monetization model to be "fairer" and more "consumer-friendly."[227] Such events seem to

[222] u/abbadorlol. 2018. "The Downsides of a Constantly Evolving Game (League of Legends - Doublelift)." Reddit.com/r/hearthstone.
[223] u/Phoenix-san. 2018. "Tess Greymane 'bugfix' or 'gameplay improvement' is outrageous. Let's not tolerate this!" Reddit.com/r/hearthstone.
[224] CrazyQuiltGamer. 2018. "BlizzCon 2018 Diablo 3 MOBILE Announcement w/ Live Reaction (YouTube)." *YouTube.com*: November 2. https://youtu.be/q6UnNC6D3A8
Nexius. 2018. "The Moment Diablo Died At Blizzcon 2018 (Hardcore Death Highlight)." *YouTube*: November 3.
Kuchera, Ben. 2018. "Diablo: Immortal broke the unspoken rules of Blizzard, and BlizzCon." *Polygon.com*: November 5.
[225] u/MBMMaverick. 2017. "Seriously? I paid 80$ to have Vader locked?" Reddit.com/r/StarWarsBattlefront.
u/[deleted]. 2017. "If you are unable to find the refund button on Origin, here is a solution without talking to customer support." Reddit.com/r/StarWarsBattlefront.
u/Rhyuzi. "Unlocking Everything in Star Wars Battlefront II Requires 4,528 hours or $2100." Reddit.com/r/StarWarsBattlefront.
u/TheMadPuma. "Can we please boycott Star Wars Battlefront 2." Reddit.com/r/gaming.
u/ATopHatCobra. "A Call to Boycott EA." Reddit.com/r/gaming.
[226] Good, Owen 2017. "EA responded to Battlefront 2 unlock estimates, and players weren't having it." *Polygon*: November 13.
BBC. 2017. "Star Wars Battlefront II game faces further backlash." *BBC.com*: November 15.
The Act Man. "EA Proves They're The WORST Company In America... AGAIN!! (Battlefront 2 Controversy)." *YouTube*: November 16.
Jim Sterling. 2017. "EA and Battlefront II Really Fucked This Up (The Jimquisition)." *YouTube*: November 22.
Kim, Tae. 2017. "EA's day of reckoning is here after 'Star Wars' game uproar, $3 billion in stock value wiped out." *CNBC.com*: November 28.
[227] Wasilczyk, John. 2017. "Change will be a constant in *Star Wars* Battlefront II." *EA.com*: November 13.

suggest that big gaming companies are not listening, or at least are regularly suffering from breakdowns in communication with their consumers. How can gaming companies invest so much into listening to their gamers, and yet make decisions that seem so clueless?

The answer to this apparent paradox lies in the fundamental conflict between the voices of online discourse and the "voice of the consumer" that appears in the report. In practice, I found that these two rarely accord with one another. As discussed earlier in this chapter, analysts' reports tend to detour around the cacophony of public voices that might represent players, and instead present the consumer's voice as emerging solely from private, structured speech acts—the messages that respondents send during discrete surveys, focus groups, interviews, and the like. In the parlance of XPG analysts, these private speech acts are considered "representative" of the consumer, whereas public discourse is "unrepresentative." As Michel Callon and Bruno Latour note: "*traduttore traditore*," "to translate is to betray."[228] To speak in the place of players, analysts must undercut any voices that appear outside of their carefully crafted studies. With this in mind, it is perhaps unsurprising that gaming companies appear out of touch with their online communities. Community voices are being systematically discounted by data work, placed in a hierarchy of representativeness where spontaneous, online discourse matters less than the private, structured discourse of conversant data operations.

Good, Owen. 2017. "EA slashes Battlefront 2 unlock hero costs after backlash." *Polygon*: November 13.
Schreier, Jason. 2017. "EA Temporarily Removes Microtransactions From *Star Wars Battlefront II*." *Kotaku*: November 16.
Frank, Allegra. 2018. "Star Wars Battlefront 2's progression system update is a complete revamp." *Polygon*: March 16.
Webster, Andrew. 2018. "EA says it's learned from Star Wars Battlefront controversy, vows to 'be better.'" *The Verge*: April 13.

[228] Callon, Michel. 1984. "Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay." *The Sociological Review* 32.S1: 196-233.
Latour, Bruno. 1987. *Science in Action.* Cambridge: Harvard University Press.

However, this analysis simply begs the question: why do companies place a higher value on private consumer data than on public discourse? I suggest that this hierarchy only makes sense because conversant data relies on the unquestioned legitimacy of democratic principles. Democratic language has been lurking in the background of this chapter, but it also occasionally rose to the level of explicit mentions at XPG. I was told that gamers ultimately "vote with their wallets" on what they want. Surveys should "let respondents pick" between given alternatives. Respondents' choices were understood to be "representative" of a larger group. The "voice of the consumer" even has echoes of the "voice of the people." The democratic frame of consumer research is what joins the idioms of voice and craft together: when skillfully crafted and presented, the voice of the consumer takes on the character of a political mandate, expressing a collective will to corporate authorities.[229] Democratic reasoning at XPG was more than just rhetorical; rather, it represented the most basic, fundamental way that analysts made sense of their data. A ubiquitous feature of XPG reports was that they split gamers into majority and minority positions, and then argued that the client should prioritize the majority positions. In fact, every single question in any XPG study could be understood as generating majorities and minorities, or at least relative pluralities; the "logical" conclusions that reports drew relied on the unquestioned legitimacy of the majority position for slide after slide, question after question. Although companies were not legally bound to follow the majority's demands, in practice they often deferred to the democratic principle of "majority rule." The "voice of the

[229] Schwarzkopf, Stefan. 2011. "The Consumer as 'Voter', 'Judge' and 'Jury': Historical Origins and Political Consequences of a Marketing Myth." *Journal of Macromarketing* 31 (1): 8-18.
Schwarzkopf, Stefan. 2011. "The Political Theology of Consumer Sovereignty: Towards an Ontology of Consumer Society." *Theory*, *Culture & Society* 28 (3): 106-129.

consumer" carried significant moral weight because it was understood to represent the mandate of the majority, and the company was understood to have an obligation to satisfy this mandate. In short, XPG analysts positioned the majority's popular demands not as an abstract economic force, but rather as a political relationship between companies and consumers that involved certain reciprocal opportunities, duties, and responsibilities.

Majority and minority positions are not a simple effect of getting a lot of people to speak at once. Rather, majority and minority positions only resulted from analysts' work to structure the conversation, channeling responses into a limited possibility-space. In this way, XPG's studies mimicked the structure of democratic processes: the "voter" is presented with a few choices, asked to make their selection in private, and these selections are then tallied and aggregated in order to distinguish the "winning" propositions from the "losing" ones. XPG studies typically included more complicated procedures than single-choice, first-past-the-post voting systems, but the underlying sequence of private selection, aggregation, and resultant hierarchization remained (see Chapter 3 for more on this process). The larger the majority, the stronger the mandate given by the "voice of the consumer." Conveniently, heeding the majority aligns well with the logic of viral capitalism, specifically the axiom of mass contagion (see Chapter 1). Because big games publishers are attempting to mass-distribute public fantasies, the most straightforward way to ensure mass virality is to build a product that appeals to the largest majority possible. However, as outlined previously, it is still possible for corporate stakeholders to ignore or contest majority positions because the voting process is productively ambiguous; while the counts themselves are precise, the meaning of these votes may be subject to interpretation. This section adds that such efforts to resist conversant data amount to critiques of democratic

reasoning—perhaps the people don't really know what they want, or what they want is infeasible, or the process is flawed and the people were not given good choices, or the process is flawed and excludes some people. Such critiques rarely threaten the primary legitimacy of the majority; rather, they suggest that perhaps different approaches or interpretations are needed to properly ascertain the majority's "true" interests and demands. In practice, the solution is usually to reinterpret the data, procure more data, or procure better data rather than delve into the shaky territory of public discourse, which can never be crystallized into a stable majority, and thus never quite achieves recognition as being "representative" of the consumer's will.

It is no coincidence that consumer research leans heavily on democratic framings. The history of consumer research in the United States is heavily intertwined with political opinion polling—not only did they emerge at nearly the same time in the early 1900s and relied on largely the same techniques, but they were popularized by many of the same individuals.[230] Notable pollsters such as George Gallup, Elmo Roper, and Louis Harris ran dual businesses, on the one hand selling political poll results to newspapers for publication, and on the other hand conducting consumer surveys for corporate clients. These early research firms literally joined public politics and private business, using political polling as a high-profile form of marketing to prospective clients, who could be enticed to pay for exclusive access to similar insights about their own consumers. Tracing the impact of pollsters' work, historian Sarah Igo describes the post-WWI period as a critical time when a new notion of America as a "mass public" first emerged, reliant on the statistical calculation

[230] Igo, Sarah. 2007. *The Averaged American: Surveys, citizens, and the making of a mass public.* Harvard University Press.

of the "average American."[231] For researchers like George Gallup, opinion polling was an explicitly democratic pursuit;[232] he famously described his own efforts as taking "the pulse of democracy."[233] Of course, states have been gathering statistics on their populations for ages as part of the art of governance,[234] but 20th-century surveyors made polls seem newly democratic, encouraging people to participate as citizens, express their will, and learn about the nation. Framing polling as analogous to democratic voting, pollsters allied themselves with the legitimacy of American democracy at a time when Americans saw themselves as under threat from political alternatives such as authoritarianism and communism.[235] Polls have since become a fixture of the American political landscape, widely recognized as important expressions of public attitudes and interests in between election days. My field experiences at XPG suggest that parts of this democratic framing may have been transferred into the private side of pollsters' work: XPG analysts and their corporate clients largely took it for granted that it was meaningful and useful to hear from the "average consumer," that surveys were the proper way in which consumers could express their will in between high-profile product launch dates, and that considering this will was necessary for doing business.

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[231] Ibid.
[232] Hogan, J. Michael. 2009. "George Gallup and the rhetoric of scientific democracy." *Communication Monographs* 64 (2): 161-179.
[233] Gallup, George. 1940 [1968]. *The Pulse of Democracy: the Public-Opinion Poll and How it Works*. Praeger.
[234] Foucault, Michel. 1978. "On Governmentality." *Ideology and Consciousness* 6: 8-10.
Hacking, Ian. 1990. *The taming of chance*. Cambridge: Cambridge University Press.
Scott, James C. 1998. *Seeing like a state: How certain schemes to improve the human condition have failed.* Yale University Press.
Mitchell, Timothy. 1999 [2006]. "Society, economy, and the state effect." *The anthropology of the state: A reader*: 169-186.
Desrosières, Alain. 2002. *The politics of large numbers: A history of statistical reasoning.* Harvard University Press.
[235] Robinson, Daniel J. 1999. *The measure of democracy: Polling, market research, and public life, 1930-1945.* University of Toronto Press.
Igo, Sarah E. 2006. "'A gold mine and a tool for democracy': George Gallup, Elmo Roper, and the business of scientific polling, 1935–1955." *Journal of the History of the Behavioral Sciences* 42 (2): 109-134.

The democratic framing also helps make sense of how games publishers largely viewed their online communities—namely, as the *activist fringe* of gaming. My interlocutors maintained that online discourse only reflected a small segment of gamer-consumers, those considered to be the biggest gaming enthusiasts, the most engaged with games industry news, and the most invested in gaming as an identity. To the contrary, XPG's research projects were understood to reach a mass of "average" gamer-consumers who may not spontaneously share opinions about games in online settings, and may play videogames without necessarily self-identifying as a "gamer." Note that this distinction does not derive wholly from data workers; gamers who actively post on sites such as Reddit and Twitter tend to characterize themselves as "hardcore" gamers, as opposed to the "casuals" who play games supposedly in an uninformed, less-serious manner. This distinction is an important source of forum-goers' claims to be heard by gaming companies. By positioning themselves as "dedicated" or even "true" gamers, they imply that their attitudes and experiences should be at the center of games production.[236] This sentiment periodically boils over when "hardcore" gamers recognize that their medium—and possibly their identity as "gamers"—is being threatened by gaming companies. The most salient recent example of this is #GamerGate in 2014, an online controversy in which self-proclaimed "Gamergaters" banded together in online forums to decry the influence of "feminism" and "social justice warriors," coordinated targeted campaigns of harassment against notable women in the games industry, and accused female games journalists of engaging in

[236] Paaßen, Benjamin, Thekla Morgenroth, and Michelle Stratemeyer. 2016. "What is a True Gamer? The Male Gamer Stereotype and the Marginalization of Women in Video Game Culture." *Sex Roles* 76 (7-8): 421-435.

unethical review practices.[237] Scholars studying #GamerGate have recognized the controversy as based on "hardcore" gamers' misplaced sense of ownership over gaming as a medium.[238] Because Gamergaters' identities tended to overlap with other social categories—young, white, masculine, conservative—their actions manifested the threat they felt against those arguing that gaming should change.[239] It is important to note that although #GamerGate was a striking controversy, it merely represents one way in which "hardcore" gamers might be defined and activated. For instance, a similar sense of deep connection and ownership develops around "fandoms" for particular games, but these communities may not rely on the narrow demographics or political views of Gamergaters (see Chapter 4). In any case, my interlocutors rarely took "hardcore" gamers' online claims at face value, instead reconceiving the relationship between "hardcore" and "casual" as a relationship between the activist fringe and the quiet center.

The political frame thus reconciled the different demands that emerged from online gamer communities and XPG's private data; the gap between the two was expected, just as one might expect a gap between the activist wing of a party and its establishment center. This does not mean that big games publishers ignored online communities entirely. To the contrary, because they were recognized as fringe activists, online communities had the

[237] Dewey, Caitlin. 2014. "The only guide to Gamergate you will ever need to read." *The Washington Post*: October 14.
Burgess, Jean. 2015. "Mapping sociocultural controversies across digital media platforms: one week of #gamergate on Twitter, YouTube, and Tumblr." *Communication Research and Practice* 2 (1): 79-96.
[238] Rogers, Matthew J. 2016. "'Vidya games are for nerds like us': Identity Deployment in the GamerGate Controversy." *DigitalCommons@UConn*.
Braegger, Victoria. 2018. "The Gamer is a Lie: #GamerGate and the Loss of Gamer Identity." *DHU3*, Session 3, 7.
[239] Chess, Shira and Adrienne Shaw. 2014. "A Conspiracy of Fishes, or, How We Learned to Stop Worrying About #GamerGate and Embrace Hegemonic Masculinity." *Journal of Broadcasting & Electronic Media* 59 (1): 208-220.
Massanari, Adrienne. 2015. "#Gamergate and The Fappening: How Reddit's algorithm, governance, and culture support toxic technocultures." *New Media & Society* 19 (3): 329-346.
Mortensen, Torill Elvira. 2016. "Anger, Fear, and Games: The Long Event of #GamerGate" *Games and Culture* 13 (8): 787-806.

power of vanguardism, driving the conversation by focusing on a small set of issues. Analysts and publishers alike paid attention to these issues, developing questions around them that would be included in studies to test how sensitive "average" gamers were to these concerns. For instance, popular online gripes might be turned into a discrete list in a survey, and respondents would be asked which they identified with the most. The resultant analysis would take a disorganized set of community-driven issues and translate them into a hierarchy of priority. The catch here was that this hierarchy would be determined by XPG's respondents, rather than by the community itself. XPG studies thus coopted language and ideas from online gaming discourse, but simultaneously undercut them by reinforcing that it was the "average" consumer's opinion that truly mattered. The power of online communities was felt more directly in the case of scandal. When online activism was sufficiently sustained, negative, and widespread, it created controversies that even "average" gamers recognized. These mega-controversies would surface spontaneously in respondents' feedback during focus groups, surveys, or interviews. XPG analysts pointed to such moments as evidence that fringe and "average" gamers were aligned on a given issue, which was therefore understood as an especially clear call to action. For instance, after the *Star Wars Battlefront II (2017)* launch scandal, XPG study participants throughout 2018 regularly mentioned the game as an example of egregious "pay-to-win." In reports for these studies, XPG analysts suggested that publishers avoid the pitfalls of these types of scandals, arguing that publishers needed to be sensitive to any perception of their games as "pay-to-win." In this way, online communities' capacity to coordinate and mobilize certainly mattered, attaching a level of infamy to certain companies or titles that publishers actively sought to avoid. Still, communities' powers were strictly limited by this framing; the fringe

only mattered precisely *to the extent* that their opinions, concerns, and demands were also reflected by "average" gamers. The majority principle maintained its legitimacy, and typically online communities could be marginalized, reflecting a vocal minority rather than acting as true representatives of majority gamer positions.

The centrality of democratic reasoning here reveals that typical scholarly critiques cannot be applied to conversant data. Both scholarship and media accounts of corporate data tend to rely on the rhetoric of authoritarianism. They characterize data-gathering corporations as having full control over the data, as representing Big Brother, as endangering users' right to privacy, and as lacking in mechanisms for users to address potential abuses of their data. While these are certainly valid critiques with respect to surveillant data, they fall flat when considering the kind of conversant data that XPG dealt with regularly. This is not only because conversant data is different in kind— human-scale rather than big, representative rather than total, voluntary rather automatic—but also because conversant data is framed by its purveyors and handlers as akin to a democratic process. It is true that companies maintained the authority to make decisions unilaterally about their products, but my interlocutors understood that these decisions would ultimately be judged by consumers—first when respondents answered questions in XPG's studies, and ultimately when consumers "voted with their wallets" in the live marketplace. Furthermore, XPG's clients did not see conversant data as a means for targeting individuals, but rather as a means for aligning their actions with the "average" member of aggregate audiences. In other words, conversant data primarily operated as a medium of representative speech, rather than a medium of control. Games publishers' power over the public—to the extent that it existed—was largely the power of mass appeal, not the power

of mass control. Even though corporations are certainly not democracies, their reliance on democratic reasoning suggests that critics of conversant data regimes might avail themselves by considering the fundamental issues with democratic systems.

Online gaming communities are already beginning to move toward these kinds of critiques. Since 2017, Redditors, YouTubers, and other online activists have pushed for "loot box" style microtransactions to be recognized as gambling, both socially and legally.[240] This movement has resulted in highly visible forum threads and videos, but activists have also sent letters to political representatives and issued formal complaints to regulatory bodies.[241] In response, loot boxes have been banned in Belgium,[242] U.S. congressional members have introduced bills to classify loot boxes as a form of gambling,[243] and the Federal Trade Commission has launched an investigation into the matter.[244] Online activists have argued that even if the recent success of loot boxes indicates that they are acceptable to a majority of gamers, there are nevertheless certain groups who are unduly harmed by them—specifically children and gambling addicts.[245] In

[240] u/calibrono. 2017. "I will now talk about Lootboxes and Gambling for just over 40 minutes [Totalbiscuit]." Reddit.com/r/Games.
TotalBiscuit. 2017. "I will now talk about Lootboxes and Gambling for just over 40 minutes." *YouTube*: October 8.
The Game Theorists. 2018. "Game Theory: How Loot Boxes HACK YOUR BRAIN!" *YouTube*: January 10.
Pirjevec, Lovro. 2017. "Make ESRB declare lootboxes as gambling." *Change.org*.
Jim Sterling. 2018. "Child Gambling Quadruples In UK, Loot Boxes Named And Shamed." *YouTube*: November 21.
[241] u/Kuchenjaeger. 2017. Comment in "The ESRB says it doesn't see loot boxes as gambling," u/nater0. Reddit.com/r/Games.
[242] Yin-Poole, Wesley. 2018. "Now Belgium declares loot boxes gambling and therefore illegal." *Eurogamer.net*: April 25.
[243] Schreier, Jason. 2019. "U.S. Senator Introduces Bill To Ban Loot Boxes And Pay-To-Win Microtransactions." *Kotaku*: May 8.
[244] Gach, Ethan. 2018. "The FTC Says It Will Investigate Loot Boxes." *Kotaku*: November 28.
[245] Lum, Patrick. 2018. "Video game loot boxes addictive and a form of 'simulated gambling', Senate inquiry told." *The Guardian*: August 16.
Griffiths, Mark. 2018. "Gambling: 'loot boxes' in video games could be conditioning children." *The Conversation*: December 4.
u/JingleFett. 2018. "Why loot boxes are in fact actually a form of gambling - an analysis by a game developer." Reddit.com/r/StarWarsBattlefront.

other words, the argument against loot boxes is an argument about the *tyranny of the majority*; even if publishers are careful to design monetization systems that a majority of gamers accept, they may make decisions that harm minority groups. Another version of this same argument against the majority is deployed by "hardcore" gamers online, who present themselves as a vital minority group whose interests are being overlooked in favor of "casuals." Even outside of these arguments, the tyranny of the majority can be seen whenever publishers value the perspectives of "average" gamers—typically white males—over others.

Conversant data regimes are not democratic systems, but their democratic framings open them up to concerns on democratic grounds: concerns about representativeness, about transparency, about corruption, about voter access and inclusion, about proper interpretation of the majority's demands, and more. One related issue that publishers and XPG analysts grappled with was that their studies often covered more than one country. While it is complicated to consolidate any set of gamers' messages into a clear "voice of the consumer," this process becomes even trickier when gamers are dispersed across different national contexts and may speak in different languages. Because blockbuster videogames are distributed and sold across the world, how useful is it to think of the games industry as "global capitalism"? This chapter has shown how data analysts mediate the relationship between certain corporations and their audiences, but this relationship is especially complex when audiences are dispersed across national boundaries. The next chapter explores how XPG analysts elicited measurably distinct, region-specific voices of the consumer by reproducing the same questions across the world, and then modifying these

questions based on “local” conditions, reinforcing post-global capitalist strategies which neither wholly flattened difference nor assumed absolute alterity.

CHAPTER 3: MODULARIZING THE GLOBAL

Waking from the global dream

In March 2018, the Publicity Department of the Chinese Communist Party quietly stopped granting licenses for new videogames in China.[246] Reporters would eventually label this event a temporary "regulatory freeze"[247] or "crackdown,"[248] but at the time the situation was more like a fog—a paralyzing cloud that settled over China's games market, shrouding everything in uncertainty. Unable to launch new games in their home market, Chinese publishers leaned more heavily on monetizing existing titles, but also engaged in self-censorship of game elements that could be construed as dangerous or immoral.[249] Some resorted to a grey market of buying "shell" licenses from defunct games, releasing new games under old approvals.[250] Problems with this system mounted in August, when Party regulators notably pulled the license of hit title *Monster Hunter World (2018)* just days before its release date.[251] By October, Chinese games publishers were reporting much bleaker outlooks for the future. Tencent's stock value had tumbled down 48% from its high in January, and NetEase's stock decreased by 44% in the same time period.[252]

Because XPG worked with several Chinese clients, I heard secondhand tales of their woe, anxiety, and stress circulate through our office. Gossip at office birthday parties would turn to coded mentions of the dire "political situation" in China. Those returning from the country complained that their regular websites and VPNs had been shut down, forcing them to seek out alternatives. XPG analysts who were Chinese nationals living in the United States grew more concerned about their work visas. Analysts were well aware that China's parliament had recently moved to repeal presidential term limits at the behest of President Xi Jinping,[253] anticipating that Xi

[246] Wang, Yue. 2018. "As China's Regulatory Freeze Drags On, Its Gaming Industry Searches For An Answer." *Forbes.com*: December 10.
[247] Chen, Lulu Yilun, Steven Yang, Yuan Gao, and Yuji Nakamura. 2018. "China Freezes Game Approvals Amid Agency Shakeup." *Bloomberg.com*: August 14.
Grubb, Jeff. 2019. "China thaws game-license freeze with 80 new approvals." *VentureBeat.com*: January 2.
[248] Huang, Zheping. 2018. "China's games industry at a turning point amid regulatory crackdown, with Korea offering a vision of its future." *South China Morning Post*: September 11.
[249] Dong, Joe. 2018. "Chinese censorship affects games everywhere — and it's getting bigger." *VentureBeat.com*: November 15.
[250] Ye, Josh. 2018. "How gaming giants are surviving China's GAME FREEZE." *Abascusnews.com*: November 16.
[251] Hall, Charlie. 2018. "Monster Hunter: World no longer available in China." *Polygon.com*: August 13.
Huang, Zheping. 2018. "Monster Hunter: World – Tencent pulls top selling game days after launch as China continues online content crackdown." *South China Morning Post*: August 13.
[252] Tencent Holdings Limited (TCEHY). Historical Prices: Jan 26, 2018 – Oct 30, 2018. *Yahoo Finance*.
NetEase, Inc. (NTES). Historical Prices: Jan 26, 2018 – Oct 30, 2018. *Yahoo Finance*.
Taylor, Haydn. 2018. "Tencent announces restructure as share price continues to tumble." *Gamesindustry.biz*: October 1.
Seeking Alpha. 2018. "NetEase Just Released Another Mega Hit Game: Enough To Buy The Dip?" *SeekingAlpha.com*: October 3.
[253] Buckley, Chris and Keith Bradsher. 2018. "China Moves to Let Xi Stay in Power by Abolishing Term Limit." *The New York Times*: February 25.

Jinping's vision of the Party—including its oppositional stance towards videogames—would stretch far into the conceivable future.

In December 2018, Communist Party officials announced that they would resume issuance of videogame licenses,[254] but their decision-making process remained opaque. Without any known standards for compliance, publishers remained in an environment of extreme uncertainty. In prior years, XPG had positioned itself as a "gateway to Asia," boasting that it had unique access to Chinese and South Korean gaming markets and could help publishers build a specific "China strategy." In the aftermath of 2018's regulatory freeze, this strategy reversed and XPG increasingly began to sell its services to Chinese publishers looking for an "American strategy." In media coverage of the aftermath of the freeze, one reporter quotes a Chinese publisher as saying: "Going overseas is just like swimming – when there's a flood one day, you'll realize it's a survival skill."[255] This sentiment was widely echoed in conversations I had with XPG's Chinese clients. These clients saw expansion into the American gaming market as necessary due to China's tumultuous political climate, for they could never be sure when the next regulatory freeze would set in, or when it would thaw.

In the 1990s and 2000s—the decades just after the fall of the Soviet Union and the Berlin Wall—the dual arms of the Internet and free market capitalism seemed to embrace the entire world, heralding an impending future where all peoples would be part of one "global village."[256] Evidence of globalization seemed to be everywhere. Free trade would bring all peoples of the world into economic codependence and prosperity,[257] while freedom of information and the press would bring us into a new age of mutual understanding and self-identification as world citizens.[258] Newly formed organizations like

McDonnel, Stephen. 2018. "China's Xi allowed to remain 'president for life' as term limits removed." *BBC.com*: March 11.

[254] Liao, Rita. 2018. "Winter is ending: China to restart game approvals." *TechCrunch.com*: December 20.

[255] Huang, Zheping. 2018. "China's games industry at a turning point amid regulatory crackdown, with Korea offering a vision of its future." *South China Morning Post*: September 11.

[256] McLuhan, Marshall. 1964. *Understanding Media: The Extensions of Man*. New York: McGraw-Hill.

[257] Eckes, Alfred E. Jr. and Thomas W. Zeiler. 2003. *Globalization and the American Century.* New York: Cambridge University Press.

Schonhardt-Bailey. 2006. *From the Corn Laws to Free Trade: Interests, Ideas, and Institutions in Historical Perspective*. MIT Press.

[258] Rheingold, Howard. 2000. *The virtual community: Homesteading on the electronic frontier.* MIT Press.

Turner, Fred. 2006. *From counterculture to cyberculture: Stewart Brand, the Whole Earth Network, and the rise of digital utopianism.* Chicago: University of Chicago Press.

the WTO (World Trade Organization) and APEC (Asia-Pacific Economic Cooperation) were charged with breaking down barriers to trade, leading to the extension of "free trade zones" based on "free trade agreements." Western companies took advantage of these developments by engaging in widespread offshoring and outsourcing, building international supply chains which promised to drive down consumer costs, even as many raised concerns over the impacts on workers.[259] In this environment, the success of businesses became increasingly tied to their "globality," especially the number of countries in which they operated and sold products, a contest which McDonald's was winning handily with franchises open in over 100 countries.[260] State governments also pursued international cooperation more vigorously at this time, evidenced most conspicuously in the expansion of the United Nations' powers throughout the 1990s,[261] as well as the formation of the European Union.[262] As EU member nations' currencies gradually changed over to the Euro, many speculated about a future governed by a single world currency.[263] Personal access to the Internet grew dramatically in these decades, such that online chat rooms, email, and early forms of social media like MySpace seemed to signal the rise of virtual relationships, publics, and identities untethered to locality.[264] Similarly, the dot com bubble led to a surge of online businesses who seemed poised to nullify physical

[259] Fernandez, Luis. 2008. *Policing Dissent: Social Control and the Anti-Globalization Movement*. New Brunswick: Rutgers University Press.
Urry, John. 2014. *Offshoring*. Cambridge: Polity Press.
[260] Love, John F. 1995 [1986]. *McDonald's: Behind the Arches*. Revised Edition. New York: Bantam Books.
[261] Meisler, Stanley. 2011 [1995]. *United Nations: A History*. Revised Edition. New York: Grove Press.
[262] Bretherton, Charlotte and John Vogler. 2006 [1999]. *The European Union as a Global Actor*. Second Edition. New York: Routledge.
[263] Cooper, Richard. "A Monetary System for the Future." *Foreign Affairs* 63 (1): 166-184.
Lynch, Daniel C. and Leslie Lundquist. 1996. *Digital Money: The New Era of Internet Commerce*. Wiley.
Rogoff, Kenneth. 2001. "Why Not a Global Currency?" *American Economic Review* 91 (2): 243-247.
[264] Turkle, Sherry. 1995. *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.

storefronts.[265] Finally, although environmental movements had long been pushing for recognition of the Earth as an interdependent, planetary ecosystem, growing public recognition of issues such as ozone depletion, global warming, and acid rain in these decades made the "global" frame even more compelling.[266]

Embedded in this vibrant zeitgeist, social theorists of the 1990s and 2000s devoted numerous analyses, treatments, debates, conferences, and entire edited volumes to globalization.[267] In one such volume, Frederic Jameson compares the term globalization to the "proverbial elephant, described by its blind observers in so many diverse ways."[268] Indeed, globalization seemed at the time to be anywhere scholars looked: technology, culture, politics, economies—all were characterized as undergoing significant changes worldwide. Although exact definitions were debated, many initially pulled on David Harvey's notion of "time-space compression"[269] to describe these changes. For instance, in 1992 sociologist Roland Robertson gives a succinct definition of globalization as "the compression of the world and the intensification of the consciousness of the world as a whole."[270] These sorts of definitions tended to emphasize practices of cultural linkage,

[265] Cassidy, John. 2002. *dot.con: The Greatest Story Ever Sold*. New York: Harper Collins Publishers.
[266] Jamison, Andrew. 1996. "The shaping of the global environmental agenda: the role of non-governmental organisations." *Risk, Environment and Modernity: Towards a New Ecology*. London: Sage: 224-245.
[267] Belk, Russell W. 1996. "Hyperreality and Globalization: Culture in the Age of Ronald McDonald." *Journal of International Consumer Marketing* 8 (3-4): 23-37.
Tomlinson, John. 1999. *Globalization and Culture*. Polity Press.
Hannerz, Ulf. 1996. *Transnational Connections: Culture, People, Places*. New York: Routledge.
Scholte, Jan Aart. 2000. *Globalization: A Critical Introduction*. St. Martin's Press.
Lechner, Frank J. and John Boli. 2000. *The Globalization Reader*. Blackwell Publishers.
Held, David and Anthony McGrew. 2002. *Globalization/Anti-Globalization: Beyond the Great Divide*. Polity Press.
Ritzer, George, Ed. 2002. *McDonaldization: The Reader*. Sage Publications.
Foster, Robert J. 2008. *Coca-Globalization: Following Soft Drinks from New York to New Guinea.* New York: Palgrave Macmillan.
[268] Jameson, Frederic and Masao Miyoshi. 1998. *The Cultures of Globalization*. Duke University Press.
[269] Harvey, David. 1990. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change.* Cambridge: Blackwell Publishers.
[270] Robertson, Roland. 1992. *Globalization: Social Theory and Global Culture*. Thousand Oaks: Sage Publications.

economic change, and identity re-formation, envisioning a smaller Earth where ideas, people, and things moved easily and rapidly across national boundaries.

If humans were now living on a squeezed-together Earth, anthropologists around the turn of the millennium used fieldwork to answer critical questions about what "globalization" entailed: To what extent and how were peoples' everyday lives changing due to globalization? How successful were attempts at globalizing businesses, consumer culture, political identity, and more? On whose terms was globalization occurring? In his influential 1990 article on the five "scapes" of global flow, anthropologist Arjun Appadurai opens by characterizing the "central problem" of globalization as "the tension between cultural homogenization and cultural heterogenization."[271] Anthropologists sometimes reframed this opposition as the "local" versus the "global," [272] but in any case the main issue was to test the globalist vision of a shrinking, flattening, unifying world against the lived experiences of the supposed subjects of globalization. In the 1970s and 1980s, World Systems Theorists had described Earth as an interdependent economic system wherein resources and wealth flowed from the global periphery to the center.[273] Following the thread of this theory, globalization represented the increasing "penetration" of capitalist logics around the world, looping more nations into the world system and forcing them to play the role of periphery.

But by the early 1990s, anthropologists of capitalism had begun to contest these notions; for instance, while Marshall Sahlins agreed that international flows of capital were

[271] Appadurai, Arjun. 1990. "Disjuncture and Difference in the Global Cultural Economy." *Theory, Culture & Society* 7 (2-3): 295-310.
[272] Kearney, M. 1995. "The Local and the Global: The Anthropology of Globalization and Transnationalism." *Annual Review of Anthropology* 24: 547-565.
[273] Wallerstein, Immanuel. 1974. *The Modern World System.* Academic Press, Inc.
Wolfe, Eric. 1977. *Europe and the People Without History*. University of California Press.

extensive and often promoted inequality, he rejected the systematicity and unidirectionality that he perceived in World Systems Theory, instead arguing that more attention be paid to how different peoples bent capitalist relationships to their own needs.[274] Rather than understanding capitalism as merely a 'penetrative' force, anthropologists of the 1990s and beyond have emphasized conditions of resistance, heterogeneity, and hybridization that help constitute contemporary capitalist relations.[275] Accordingly, anthropologists resolved the local/global tension by pointing out that both the "local" and the "global" are not fixed domains, and instead are merely contingent products of cultural practices.[276] Recent anthropological works have gone even further by scrapping the singularizing frame of "globalization" altogether, shifting the focus away from "flow" and towards processes of "entanglement,"[277] "connectivity,"[278] "friction,"[279]

Nash,, June. 1981. "Ethnographic Aspects of the World Capitalist System." *Annual Review of Anthropology* 10: 393-423.

[274] Sahlins, M. 1988 [1994]. "Cosmologies of capitalism: The trans-pacific sector of 'The World System.'" *Culture/power/history: A reader in contemporary social theory*: 412-455.

[275] Ong, Aihwa. 1987. *Spirits of resistance and capitalist discipline: Factory women in Malaysia. Suny* Press.
Mazzarella, William. 2003. "'Very Bombay': Contending with the Global in an Indian Advertising Agency." *Cultural Anthropology* 18 (1): 33-71.
Dunn, Elizabeth. 2004. *Privatizing Poland: Baby food, big business, and the remaking of labor.* Cornell University Press.
Zhan, Mei. 2005. "Civet cats, fried grasshoppers, and David Beckham's pajamas: Unruly bodies after SARS." *American anthropologist* 107 (1): 31-42.
Chakrabarty, Dipesh. 2007. *Provincializing Europe: Postcolonial Thought and Historical Difference.* Princeton University Press.
Tsing, Anna. 2015. *The mushroom at the end of the world: on the possibility of life in capitalist ruins.* Princeton University Press.
Bear, Laura. 2015. *Navigating Austerity: Currents of Debt along a South Asian River*. Stanford University Press.

[276] Marcus, George E. 1995. "Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography." *Annual Review of Anthropology* 24: 95-117.
Appadurai, Arjun. 1996. "The Production of Locality." *Modernity at Large*: 178-199. Minneapolis: University of Minnesota Press.

[277] Zhan, Mei. 2009. *Other-Worldly: Making Chinese Medicine through Transnational Frames*. Duke University Press.

[278] Grewel, Inderpal. 2005. *Transnational America*. Duke University Press.

[279] Tsing, Anna. 2005. *Friction: An Ethnography of Global Connection*. Princeton University Press.

"placemaking,"[280] and "substantiation."[281] Attending to mobility and immobility alike, such works argue against any necessary endpoints for transnational relations, instead describing specific projects that create their own scales, temporalities, and comparisons.

While informed by such approaches, this chapter takes a slightly different tack. Setting aside the factual basis of specific transnational capitalist relations, I turn to how large videogame corporations understand their own "global" presence, mission, and impacts. Specifically, I aim to show how large Western corporations envision a world of distinct regional markets through data, reifying national boundaries as important difference-makers in their own capitalist operations. Anthropologist Anna Tsing has described globalization as a diverse series of "projects" aligned under claims of future-making, circulation, and the conflation of disparate processes into a singular vision of global change.[282] Tsing's analysis of globalization points out that globalization is a useful frame for all sorts of actors—companies, states, the media—who may be pursuing divergent outcomes, and whose actual impacts may be less predictable than imagined. Similarly, other anthropologists of "global" corporations describe globalization as "myth"[283] or as "hype,"[284] arguing that even as Western marketers, managers, and bankers pursue the dream of global growth, their actions and capabilities regularly fall short of the global status they project. At XPG, I saw some evidence of global hyping—for instance, XPG analysts often boasted to clients of their international presence and expertise, even if many

[280] Rofel, Lisa. 2007. *Desiring China: Experiments in Neoliberalism, Sexuality, and Public Culture.* Duke University Press.
[281] Choy, Tim. 2011. *Ecologies of Comparison: An Ethnography of Endangerment in Hong Kong*. Duke University Press.
[282] Tsing, Anna. 2000." The Global Situation." *Cultural Anthropology* 15 (3): 327-360.
[283] Applbaum, Kalman. 2008. "Crossing Borders: Globalization as Myth and Charter in American Transnational Consumer Marketing." *American Ethnologist* 27 (2): 257-282.
[284] Ho, Karen. 2009. *Liquidated: an ethnography of Wall Street.* Durham: Duke University Press.

of XPG's "satellite offices" abroad in fact only consisted of a few individuals. However, XPG's analysts and their games publisher clients understood themselves and the world in vastly different ways than businesspeople during the heady days of globalization. Just as anthropologists have dramatically reconsidered "globalization" in recent years, I argue that "global" businesses too are reframing their operations now that the spell of globalism has broken.

China's 2018 licensing freeze was a stark reminder to videogame publishers, developers, and consumer analysts that the global dream's original promises of limitless circulation and one-world unification have somehow fallen dramatically short. During my fieldwork period, none of my interlocutors professed that the world was shrinking rapidly, that we were on the cusp of a new era of global consciousness, or even that their goal was to connect people around the globe. If the "global" frame has dissolved in the videogame industry, I argue that the new frame that has taken its place is *modularity*: turning the world into discrete pieces that can be disassembled, rearranged, substituted, or copied over at will (more on this below). Modularity envisions all products as reconfigurable bundles of features and associations, and all consumers as similar bundles of traits and dispositions. According to this frame, the work of international distribution becomes a matter of adjusting the product's parts whenever it crosses regional lines, each time fitting the new product-bundle to the unique psyche of the most prevalent consumer-bundles in that region. Rather than attempting to erase or obsolete difference in favor of "one world" unification, international business now revolves around recognizing and appealing to regional disjunctures in order to modularly tailor products for distant markets. XPG analysts were vital to such transnational projects, as their data made difference precisely

measurable, comparable, and thus manageable. While modular business practices lack the grand rhetoric of globalization, I outline below how they nevertheless signal new ways in which big companies are reordering the world, not as a unitary space without boundaries, but as a series of bounded mirror-regions, reflecting one another even as their constituent pieces are reorganized, reshaped, and revalued.

An important contextual condition of the modular frame is the heightened salience of national rhetoric, politics, and content regulation today. Unlike the 1990s and 2000s, the most recent decade has seen a retreat from globalism paired with a new rise in nationalism: from Donald Trump's "America first" policies[285] to Brexit to Xi Jinping's "Chinese Dream."[286] Although these ideas are typically linked to conservative movements,[287] progressives have also developed their own critiques of globalization. For instance, in 2016 then-primary candidate Bernie Sanders penned an Op Ed wherein he denounced the Trans-Pacific Partnership and argued that an "increasingly globalized economy, established and maintained by the world's economic elite, is failing people everywhere."[288] President Trump's critique of globalization is simpler—that the current state of global trade represents "bad deals" for Americans where other countries have "taken advantage" of the United States—reframing international agreements as zero-sum contests between bounded nations.[289] Even if most XPG analysts I spoke with were personally opposed to Donald Trump's nationalist rhetoric, his strict stance on

[285] Shapiro, Ari. 2017. "As Trump Adopts 'America First' Policy, China's Global Role Could Change." *NPR, All Things Considered*: January 23.
[286] Mohanty, Manoranjan. 2013. "Xi Jinping and the 'Chinese Dream.'" *Economic and Political Weekly* 48 (38): 34-40.
[287] Nwanevu, Osita. 2019. "Conservative Nationalism is Trumpism for Intellectuals." *The New Yorker*: July 21.
[288] Sanders, Bernie. 2016. "Bernie Sanders: Democrats Need to Wake Up." *The New York Times*: June 28.
[289] Matthews, Dylan. 2017. "Zero-Sum Trump: What you learn from reading 12 of Donald Trump's books." *Vox.com*: January 19.

immigration, and his imposition of trade tariffs, such events were part of the background context in which they worked, repeatedly emphasizing national boundary-lines and the failure of the "one world" global dream. My interlocutors readily applied theories of geographic difference to videogames, pointing out that national populations varied widely in their hit titles, pop-cultural touchstones, regulatory regimes, and even subtle dispositional traits like sense of humor, optimism, or coolness. Indeed, the games industry has long developed a regional approach to identifying game-related tastes and design philosophies; after all, the distinction between "Japanese gaming" and "American gaming" goes back to the early 1980s and remains strong today (see Chapter 1).

In sum, the international strategies that XPG analysts suggested were not premised on selling a singular "superior" product that would "obsolete" local alternatives, nor on "educating" local consumers to adopt "global tastes,"[290] but on tailoring the product and its marketing carefully in each region based on its idiosyncrasies. This type of strategy is sometimes referred to as "glocalization,"[291] but my interlocutors lacked the mythic cultural frame of globalization—the adherence to the global project—that would make glocalization as a term meaningful in this context. Instead, perhaps it makes more sense to characterize XPG's analysts and their big games industry clients as enacting global capitalism after "globalization," doing international business stripped of the mythos of global society or global consumer identity. In the aftermath of globalization, it is important to recognize the new ways that large international companies are positioning themselves, understanding their consumers, and remaking their products accordingly. This chapter is about such post-

[290] Applbaum, Kalman. 2008. "Crossing Borders: Globalization as Myth and Charter in American Transnational Consumer Marketing." *American Ethnologist* 27 (2): 257-282.
[291] Roudometof, Victor. 2015. "The Glocal and Global Studies." *Globalizations* 12 (5): 774-787.

global global pursuits, showing how market research data plays a pivotal role in simultaneously producing global similitude and difference in the games industry. I have already described how analysts use data to present the voice of the consumer to companies (see Chapter 2), but this process is somewhat more complicated in international projects, where each regional market is generally understood to represent its own unique voice, and where these voices are sometimes gathered into an aggregate "global" voice.

Specifically, I argue that the overarching frame through which my interlocutors understood the world was not one of convergence, but of modularity. I borrow this term from anthropologist Hannah Appel, who describes the oil-extraction projects of international offshore rigging companies as exercises in modularity, which she defines as "a bundled and repeating set of technological, social, political, and economic practices aimed at profit making."[292] Appel's use of modularity here draws attention both to the ways in which oil companies *reproduce* the same kinds of technical procedures, infrastructures, and social relationships in widely varying locales, as well as the ways in which they *modify* these bundles to fit on-the-ground conditions. The result is a well-functioning rig that extracts oil and ships it reliably no matter where it is located. In this sense, modularity refers to the atomization of capitalist processes, such that parts of it can be picked up, tinkered with, and set down elsewhere as a new-but-familiar bundle. Appel's work shows how modularity is a productive frame for understanding capitalist extraction, yielding a state of "frictionless and disentanglement"[293] as the modular bundle makes oil and profits flow in distant, disparate locales. This chapter extends Appel's approach by showing how

[292] Appel, Hannah. 2012. "Offshore work: Oil, modularity, and the how of capitalism in Equatorial Guinea." *American Ethnologist* 39 (4): 692-709.
[293] Ibid.

modularity is also useful for understanding the end points of capitalist supply chains: sales and consumption. Specifically, I show how big games publishers use modular design and marketing strategies when selling games worldwide, turning game-fantasies into discrete bundles that can be picked up, retuned, and re-applied endlessly based on regional conditions. In this way, ideally, a game can be made appealing no matter where it is sold.

The task of the games publisher thus becomes matching the modular architecture of their own game—its fantasies, features, and offerings—to the unique modular architecture of consumers in each region: their measurable attitudes, interests, and associations. Yet modularity is more than a tactic by which videogame capitalists sell their products internationally; it is an implicit social project that informs everything from game design to release schedules to the popular culture of videogaming itself. The modular dream is one which has not yet been grasped, hyped, or mythologized to nearly the same extent as globalization. It is a subtler dream, one which does not promise to radically reshape the globe all at once, instead proceeding by reconsidering that which already exists, suggesting that its constituent parts could be pulled apart, augmented, remixed, and reactivated piecemeal. Modular companies thus do more than respond to popular demand with the requisite supply: they simultaneously fragment demand and the product itself into multiple regional variants, attempting to engage each regional audience in separate—yet parallel—relations of demand. Games publishers are therefore proceeding not so much in search of a world of frictionless capitalism, but for productive frictions through which they can make profit by getting a grip on people place-by-place.[294]

[294] Tsing, Anna. 2005. *Friction: An ethnography of global connection.* Princeton University Press.

In the upcoming section, I detail how XPG analysts enacted the modularization of people and things for their games industry clients. I argue that modularization occurs via a four-step process in consumer surveys, which mirrors the four-step process that publishers use to localize games in regional markets. Further, I describe modularity as the basic structure of XPG's survey data, allowing survey-takers' responses to be collapsible into a singular voice whose parts, traits, and demands can be calculated and hierarchically arranged. The next section brings modularity to the international context, showing how multi-market studies at XPG created regional distinctions that were discretely measurable, and thus addressable by big publishers. I explain how this approach allowed publishers to do the substantive work of international business management: assessing consumer demands, organizing work units, and building relations with audiences in distant locales. In the final section, I contemplate what it's like to live inside a thoroughly modularized environment—as well as how modularization may be changing the state of the gaming scene today. I end the section by describing how capitalists' uneven application of modular practices leads to a global hierarchy of regions, leaving silences and gaps denoting peoples whose voices are never heard by international companies, meaning that they never receive tailored versions of international goods.

Modularity in action

> I am sitting behind a one-way mirror in Phoenix, Arizona, looking at a group of 8 people sitting around a table in an adjoining room. A moderator shows the group four game boxes in turn, each identical except for the image on the front. The moderator reveals the first package which depicts a pair of dueling samurai [A], then the next package of a sweeping plain with a horse just cresting the horizon [B], then one that's a close-up of a stylized sword with carvings on it [C], then finally an image of a silhouetted warrior entering a pagoda [D]. The group members privately rate each image on a scale of 1 to 10 and then share their ratings with the group. The moderator

> prompts the group to further dissect the images, outlining the kind of game they'd expect from each, the feelings the images give them, and the feelings they want to have when they think of a game. The group settles on two favorites, the sweeping plains image (it reminds them of "vastness," "exploration," and "heroism") and the silhouetted warrior image (it best evokes "feudal Japan" for them, while also highlighting the weapon).
>
> In the back room watching the group beside me, an American game marketer chuckles that "the European Team won't be happy." The European Team had performed their own research in France and Germany, where the dueling samurai image was decisively declared the victor. They had a bet with the American Team that things would be the same in America, meaning that the very groups I was attending would have been a waste of time. The failure of the dueling samurais in this Phoenix room proved them wrong, much to the delight of the American marketer. In the space of a few hours of discussion, the terms of debate had been shifted: rather than asking which package's artwork was good or bad, the operative question became which package's art was good *for whom*. The implicit follow-up question danced through the back room: might it not make sense for the game to have a different package in America, one that spoke directly to the unique traits, associations, and desires of American players?

At first glance, videogames seem to be ideal goods for the age of globalization. As digital collections of code, they can theoretically be delivered electronically to any consumer with an Internet connection and a compatible device, regardless of nationality. Hit franchises like *Super Mario Bros.*, *Sonic the Hedgehog*, *FIFA*, and *Grand Theft Auto* are recognizable and beloved by players worldwide. In the case of online multiplayer games, it is even possible for players to join the same match when they live on the opposite sides of the globe. Yet when big-budget videogames are launched internationally, consumers in different regions typically do not get quite the same product. The frictionless rhetoric of global gaming immediately collides with place-based disjunctures in language, cultural reference-points, and regulatory conventions. For starters, big publishers typically employ localization teams to translate their games' original text into regional languages. When games feature voice acting, publishers may also seek out local actors to provide dubs, employing different talent in each region's market. Translation and dubbing work can be incredibly labor-intensive

since modern videogame scripts may contain tens of thousands of lines. For instance, the English script for *The Witcher 3: Wild Hunt (2015)* includes over 450,000 words, [295] making its length roughly equivalent to the entire *Lord of the Rings* trilogy.[296] In the year of its release, *The Witcher 3: Wild Hunt (2015)* had localized text in 15 languages, and full voice-overs in 7 languages.[297] The translation process here is complex; localization teams encounter game scripts with puns, jokes, rhymes, cultural referents, and accents that might not be fully commensurate with the target region. Translated game text also might not fit the boxes and buttons in which they were originally housed on the screen, necessitating visual UI overhauls. Accordingly, videogames cannot be understood as products which are simply assembled in one place and then shipped out worldwide, en masse. Instead, mass-market videogames hop somewhat-haphazardly from market to market, making this transition by fractalizing into new regional variants.

Publishers' viral ambitions to rapidly tap into the biggest audiences possible (see Chapter 1) do not stop at their home market. When the logic of virality encounters the world stage, publishers readily apply the principle of mutation to transnational sales: even successful products must be *adapted* to markets abroad. To this end, localization teams sometimes implement substantive content changes beyond text translation or voice dubbing. For example, Reiko Ninomiya, a localization head at Nintendo Treehouse, explained in a *Kotaku* interview about the *Animal Crossing* series that they made numerous changes to bring the game from Japan to America: altering the center of the town map to be

[295] Hester, Blake. 2016. "The Story Behind The Story Of The Witcher 3: Wild Hunt." *GameInformer.com*: August 20.
[296] LOTR Project. 2012. "Word Count and Density." *LOTRProject.com/statistics/books/wordscount*.
[297] TheEvilChris. 2015. "The Witcher 3: Wild Hunt Language availability." *Forums.CDProjektRed.com*: May 4.

a fountain instead of a shrine, changing in-game holidays to align with American ones, creating new personalities for characters that originally relied on Japanese tropes, and so on.[298] In some cases, game content is altered due to regulatory differences between regions, a trend which has been especially prominent in the case of China.[299] Top games like *World of Warcraft (2004)*,[300] *Rainbow Six: Siege (2015)*,[301] *League of Legends (2009)*,[302] and *Path of Exile (2013)*[303] have all removed blood, skeletons, skulls, or references to the supernatural from the Chinese versions of their games due to fears of failing Party licensing reviews. Although China represents the most extreme end of regional self-censorship, compliance officers work to ensure that games receive more permissive content ratings in every region—usually trying to avoid a costly "Adults Only" or "Age 18+" designation by removing explicit language, nudity, or scenes of violence from the game based on their experience with each ratings system. This type of localization work—both linguistic and regulatory—is not unique to videogames and has been well-documented by scholars in other forms of media like television, comics, and films.[304] In fact, given the close ties

[298] Schreier, Jason. 2014. "Nintendo's Secret Weapon." *Kotaku.com*: April 22.
[299] Conditt, Jessica. 2019. "Chinese video-game censorship doesn't end with 'Devotion.'" *Engadget.com*: August 2. Liszewski, Andrew. 2019. "China's New Video Game Rules Officially Ban Blood, Corpses, Mahjong, and Poker." *Gizmodo.com*: April 22.
[300] Plunkett, Luke. 2009. "WoW Finally Returns To China, With A Little More Censorship." *Kotaku.com*: August 7.
[301] Good, Owen S. 2018. "Rainbow Six Siege content censored for China launch, angering fans." *Polygon.com*: November 3.
[302] Zhang, Jing. 2014. "The League of Legends New Dawn cinematic has been censored by China, but not where you might expect." *TechInAsia.com*: July 22.
[303] Wilson, Jason. 2016. "Path of Exile continues charting its path to China." *VentureBeat.com*: August 18.
[304] Dorfman, Ariel and Armand Mattelart. 1971 [2018]. *How to Read Donald Duck: Imperialist Ideology in the Disney Comic*. Trans. David Kunzle. New York: OR Books.
Katz, Elihu, and Tamar Liebes. 1990. "Interacting with 'Dallas': Cross cultural readings of American TV." *Canadian Journal of Communication* 15 (1): 45-66.
Gasher, Mike. 2002. *Hollywood North: The Feature Film Industry in British Columbia*. Vancouver: UBC Press.
Kim, Jeongmee. 2003. "The Funding and Distribution Structure of the British Film Industry in the 1990s: Localization and Commercialization of British Cinema towards a Global Audience." *Media, Culture & Society* 25 (3): 405-413.
Boellstorff, Tom. 2008. "Dubbing culture: Indonesian gay and lesbi subjectivities and ethnography in an already globalized world." *American Ethnologist* 30 (2): 225-242.

between modern gaming and Hollywood (see Chapter 1), it is not unlikely that big games publishers' localization tactics derive historically at least in part from the strategies of prior entertainment giants.

In the games industry, translation and regulatory compliance is often performed by a contractor or secondary branch office located in the target region. Because this work is typically decentralized, I never observed XPG's data operations being used to weigh in on such matters. However, I found that big publishers treated videogames as more than just code, text, and visuals. In meetings and research prospectuses, they described their games primarily as objects of consumer judgment, using words like "brand image," "favorability," "market attitudes," "play drivers," "play barriers," "must-have features," and so on. This dense vocabulary of player opinions suggested to me that publishers paid a great deal of attention to the realm of cultural perception, attempting to grasp and reform the fantasies that surrounded their games. In fact, centralized publishers envisioned their primary task as managing game-related opinions held by their consumer audiences. Even from the earliest stages of a game's conceptualization, big publishers were anxious to ensure that the game resonated positively with the target audience and that it had marketable "unique selling points" (USPs). As concepts moved ahead into nascent products and eventually into launch, publishers deployed droves of peripheral media that attempted to evoke positive opinions and generate popular demand: trailer releases, developer interviews, influencer spotlights, and traditional advertising all influenced the affective realm that surrounded the game itself (see Chapter 4). These multi-channel marketing campaigns were also frequently

Donoghue, Courtney Brannon. 2014. "Sony and Local-Language Productions: Conglomerate Hollywood's Strategy of Flexible Localization for the Global Film Market." *Cinema Journal* 53 (4): 3-27.

localized, adjusted to different regions by applying unique messaging, imagery, and distribution strategies. These were tasks to which consumer data firms like XPG were most finely attuned; large international studies tapped into pools of consumers in multiple markets, demonstrating regional differences in opinion, behavior, and media usage that guided publishers' efforts to adjust their products' perception.

I have already discussed how publishers used consumer data to discern between "representative" and "unrepresentative" consumer opinions (see Chapter 2). This task became even more critical when considering the wide range of opinions available on a transnational scale, where publishers encountered substantial disjunctures in language, geography, and market context. The rhetoric of globalization often refers to a growing ideal of "cosmopolitanism" connected to becoming more mobile, more multi-lingual, and more cognizant of distant world contexts. If any subjects could truly be considered "cosmopolitan," it would be these capitalists who regularly managed transnational operations of opinion-making and demand-shaping. Yet I found that in practice, the members of publishing teams with whom I interacted rarely framed themselves in cosmopolitan terms. On conference calls and in focus group backrooms, I heard American publishers readily admit that they only had a "sketchy" grasp on consumers in important foreign markets like China, Germany, and South Korea. With Chinese publishers, I similarly learned that they felt woefully underinformed about the United States and Europe, describing the vast differences Chinese consumers and "foreign" consumers as daunting. Even for publishers with deep multi-region familiarity, this transnational expertise tended to be fractured across teams who each focused on one region alone. Publishers' perceived knowledge gaps were thus the starting points for transnational, multi-market projects

performed by XPG. In bids for such projects, XPG typically promised that the final report would provide a detailed and "global" understanding of consumers, including both points of international consensus as well as important regional distinctions driven by "market-specific" consumer attitudes, preferences, and behaviors. In other words, the primary utility of XPG's data for publishers was that it acted as a substitute for cosmopolitan subjectivity; they needed not be personally world-encompassing when multi-market data sufficed. Publishers could manage localization by using the report to speak for the region, modulating their approaches and investments based on the differential responses of gamers in different markets.

Thus far I have outlined how large videogame publishers enact transnational capitalism via regional adjustment, hoping to make their games travel by altering some of the components for audiences abroad. Given the longstanding history of localization in the entertainment industry, this practice has cohered into a routine four-step process: 1. *Reproduction* of the original product; 2. *Atomization* of the product into constituent pieces (text, vocals, visuals, content, features, marketing messages, etc.); 3. *Modulation* of some of these pieces; 4. *Reassembly* of the product into a new whole. This four-step process is what I am calling modularization, the process of turning something into a bundle of components in order to tweak, replace, or target them individually. In other words, publishers' localization strategies require treating games as modular products. Below, I show how data analysts at XPG reinforced and augmented modularization by replicating this four-step process in the data itself. As we will see, data work involved not only the production of modular games, but of modular consumers, brands, markets, and more. I have already described data work at XPG as a structured conversation between consumers and

publishers (see Chapter 2), but here I aim to show exactly what kind of structure that consumer research imposes, namely a modular structure. This structure was most clearly articulated in the online consumer survey, the most common methodology used at XPG.

1) Reproduction: When survey-takers answer questions, they are expected to mentally reproduce the object of the question in their heads, consider it carefully, and then respond. I didn't understand the full importance of this first step until I encountered a situation at XPG where survey-takers stopped being diligent reproducers:

> Isabel pumped her first into the air, exclaiming "I knew it!" She looked at me excitedly, then looked back at the computer, circling her mouse around some figures; I had been watching over her shoulder, trying to understand how XPG analysts fixed issues with their survey data. As an experienced research analyst, Isabel already had a hunch about the problem. She explained to me how in a project a few years back, they had discovered a sizable group of survey-takers that they deemed "Yappers." Yappers answered affirmatively on every question, indicated they were interested in everything, and agreed with every statement asked of them. Isabel explained that while it's possible that some "real" Yappers exist—perhaps there are a few people who are just uniformly enthusiastic about everything—this pattern indicated to her that these survey-takers were not really paying attention or doing the reflective work necessary to make "good" data. Instead, Isabel identified Yappers as a mercenary band of professional survey-takers, people who knew that they were much more likely to qualify for a survey (and get paid) if they answered that they owned, liked, and agreed with nearly everything they were shown.
>
> Following the arc of Isabel's mouse cursor, I recognized the pattern she described. She had moved the data file to a section where the survey asked a series of five-point-scale questions in a row, with a data entry of "5" meaning "very interested," "very satisfied," or "strongly agree." There was the line of responses she was talking about: 5, 5, 5, 5, 5, 4, 5, 5, 5, 4, 5. She scrolled down the file and we saw the same pattern appear in roughly 1 in 20 respondents. Isabel whispered to the file, "got you," and she started to highlight the Yappers one-by-one. They would soon be excised from the file, not counted, as if they never existed at all.

The first step of any survey I observed at XPG was to task the survey-taker with considering sets of things—brands, games, game concepts, their own feelings, their past behavior, and so on. Answering such questions required mental effort: the survey-taker had to evaluate the thing, remember their prior experiences, and reflect on their present

thoughts and feelings. Consider a simple question like: "On a scale of 1 to 10, please rate [Product X]." To answer this question, the survey-taker first has to recognize Product X, then remember their experiences with Product X, evaluate those experiences, and finally translate those experiences into a concrete, scalar number. While doing this exercise once may be easy and quick, consumer surveys regularly stack such tasks on top of one another, making them much more demanding. For instance, the prior question might actually be stated as: "On a scale of 1 to 10, please rate each of the following [twelve] products." The survey structure made it easy to multiply tasks in this matter. A question could be altered from one task to twelve tasks or more with the addition of a few extra words. As Isabel later described it, her job was to make sure the "cognitive load" of the survey was enough for her client to get value from the process, but not too much for the respondent to bear. Long, complicated surveys were especially prone to Yapping, as respondents began answering randomly just to get the survey over with as soon as possible.

Isabel's lesson about Yappers helped me understand that there was a social contract between survey-maker and survey-taker. The survey-maker would present questions, provide monetary compensation, and promise that the answers mattered, while the survey-taker would engage in strenuous mental labor. Analysts' catch-all term for survey questions, descriptions, and images was "stimuli," a term that evoked their understanding that surveys were instruments for eliciting mental work. The best description for this labor is as a process of *reproduction*; the survey-taker had to reproduce the object of study within their own consciousness in order to provide answers. A survey question about Game X sent to 10,000 respondents would yield 10,000 versions of Game X. If the next survey question was about Brand Y, it would yield 10,000 versions of Brand Y. And if the next survey

question was about the consumer's own psyche, it would yield 10,000 versions of the consumer psyche. Each new question instigated a new series of reproductions, and survey-takers' responses were the record of this reproductive effort. The problem with Yappers was that they broke the social contract, meaning they could not be counted on to engage in the mental work of reproduction. XPG analysts described Yappers with language that evoked the moral reprobation due to contract-breakers: they were "lazy" respondents, "liars," "cheaters," or "bullshitters." Yappers threated to make the entire survey process meaningless because they revealed the tenuous basis of this contract; analysts had no guarantees that survey-takers would actually carry out the reproductive labor required of them. This is why Yappers had to be excised, to safeguard the useful fiction that every remaining survey-taker was upholding the social contract, and therefore was a diligent mental reproducer of the survey's objects of study.

2) Atomization: If consumer surveys were solely instruments of reproduction, they would rapidly yield unwieldy results. How do you reckon with 10,000 versions of Product X, each unique because they were generated by 10,000 individuals with their own personal recollections and sentiments about Product X? And what information would be gained if you tried to approach and understand each version one-by-one? Such a task seems fruitless, like drawing a map so big that it covers the entire area it describes.[305] For the reproductive effort to be useful, survey-takers' responses have to be collapsible, able to be gathered and chunked into discrete categories so that they can be counted and compared. Consumer surveys at XPG carried out this process of collectivization primarily by asking survey respondents to sort themselves. For example, let's return to the question: "On a

[305] Borges, Jorge Luis. 1946. "Del rigor en la ciencia." *Los Anales de Buenos Aires* 1 (3).

scale of 1 to 10, please rate [Product X]." Scales were a common way of structuring consumer speech in XPG's surveys, ensuring that survey-takers' articulations fell within a well-defined range. The 10-point scale in this question operates as a mechanism of self-sorting; a range of consumer opinions collapses into just ten numeric ratings. With such a scale in place, analysts could explore the numerical relationships entailed: counting responses, finding averages, comparing percentages, testing for statistical significance, and more. They also could readily move on to further collapse consumers into even fewer categories by chunking responses together, perhaps: Detractors (those giving a rating of 1-4), Fence-Sitters (5-6), and Fans (7-10). Scales thus neatly *atomized* consumer opinion, transforming an abundance of unique takes and feelings into a small set of discrete, comparable, countable numbers.

Aside from numeric scales, another way of structuring survey-takers' responses was to offer a list of statements, items, or choices called "stubs" for them to select. Similar to scales, lists atomized the things they described. Product X became a bundle of features, Brand Y became a bundle of descriptors, the consumer's psyche became a bundle of psychological drivers, and so on. Once a thing had been turned into a list of discrete items, survey-takers were asked to select certain items to show which they liked best, or which they agreed with, or which was the most accurate description of their own lives, behaviors, feelings, and so on. Analysts relied on the fact that survey-takers could be savvy selectors when presented with a list. And this was not an unreasonable assumption given that surveys' selection activities mirrored everyday shopping experiences in consumer society. Mirroring was most explicit in "shopping cart" questions that walked survey-takers through an imagined storefront and asked them to pick out items that they would buy, but

every question that asked survey-takers to pick between discrete options implicitly referenced the operation of consumer choice. In other words, list exercises turned survey-takers into ideal consumers, helping reify consumer choice models by conjuring the universe of choices into a single location. By atomizing the marketplace, its products, and its consumers, lists revealed each to be a bundle of somewhat-interchangeable, non-essential parts. Following the logic of consumption, items which were not selected by consumers should be tossed to the wayside, abandoned, replaced.

XPG analysts were avid list-makers and list-tinkerers, confident that anything could be turned into a list with enough effort and experience. As a firm, XPG collected lists of recently released titles, lists of game genres, lists of gaming devices, lists of game features, lists of game studios, lists of game-related media, lists of game-related merchandise, lists of statements about games, lists of brand descriptors, lists of psychological drivers for consumption, and more—all of which were stored on a shared network drive. Creating a survey involved sifting through this dense archive of lists, selecting relevant exemplars, adjusting them, and then programming them into an online platform. Adjusting was often the trickiest task for analysts. I learned from analysts that the ideal list should be both comprehensive and concise. A comprehensive list was able to seamlessly stand in for the original whole, allowing atomization to proceed with minimal contest from clients and stakeholders who were invested in the original. Meanwhile, a concise list enabled survey-takers to easily scan and select items, allowing atomization to proceed with minimal contest from those playing the role of the consumer. In practice, these two conditions regularly conflicted with each other, meaning that XPG analysts had to strike a balance between exhaustive description and impressionistic description. Survey lists were

pragmatic compromises, subject to negotiation between XPG analysts and their clients as they added entries, removed entries, changed wording, and deliberated whether particular list items were redundant, or irrelevant, or missing, or overly broad.

Social scientists Geoffrey Bowker and Susan Leigh Star describe list-making as a central practice of modern information systems, from biomedicine to insurance to state bureaucracy.[306] They argue that lists play a crucial role in coordinating human activity in these systems, leading to conditions of widespread compatibility where the technology just seems to work "like magic."[307] Zip codes allow mail to make it to your doorstep from across the country. International disease databases allow epidemics to be recognized and tracked across different medical systems. Inventory records allow grocery stores to keep a vast array of items perpetually in stock. Similarly, at XPG I saw how survey lists coordinated survey-takers' speech acts, transforming individual opinions into collective consumer demands. The world that surveys disclosed was an atomized world, but atomization was not purely destructive. Surveys certainly excluded certain opinions, aspects, and nuances by design, but they also provoked opinions, decisions, and articulations that may not have existed before. When lists were involved, survey-takers lost their individuality, but they gained compatibility between their voices, enabling their consolidation into the collective voice of the consumer with the force of sheer numbers. While Bowker and Star mostly analyze massive, enduring information infrastructures like the ICD (International Classification of Diseases), XPG's consumer surveys acted as infrastructural technologies that were generally narrowly scoped and short-lived. The result was not enduring

[306] Bowker, Geoffrey and Susan Leigh Star. 1999. *Sorting Things Out: Classification and Its Consequences*. Cambridge: MIT Press.
[307] Ibid.

systematicity, but rather the transformation of a particular market, product, or audience into discrete pieces which could be selected, weighed, and compared individually. Surveys were thus task-oriented infrastructures, making survey-takers' choices briefly compatible so that publishers could create a product, greenlight a feature, select a partnership, or adjust a marketing campaign based on the "voice of the consumer."

3) Calculation: Thus far we have seen XPG analysts follow the basic procedures of localization when designing and administering surveys: first the product is reproduced, then it is atomized into constituent pieces. However, there is a slight divergence on the third step. While localization teams *modulate* the pieces to better fit new audiences, analysts instead go about measuring and *calculating* the numerical relationships between the pieces. Analysts' calculations then feed back into localizers' modulation attempts by establishing hierarchies of value between the pieces, and also by showing how these hierarchies shift for different audiences. I have already described above how the list-based structure of the consumer survey makes data amenable to calculation: survey responses are discrete, collapsible, and countable, meaning that they are calculable. Atomization allows publishers to target, adjust, and replace individual pieces of products, but calculation allows them to prioritize and evaluate these pieces, helping determine the publisher's distribution of resources and attention.

At XPG, sometimes calculation led to simple value hierarchies based on the logic of popular demand; the best things were the things that survey-takers chose the most. For example, in one study a publisher commissioned XPG to figure out the "core" identity of Brand Z, an entertainment brand based on a popular children's toy. XPG analysts approached this task by first atomizing Brand Z into 20 "descriptors"—adjectives like

"relaxing," "adventurous," "helpful," and "creative." Then, they created an exercise where survey-takers selected up to three items from the list that best described Brand Z. After responses were aggregated and tallied, the most-selected descriptors were considered the "core" of the brand's perception, with the implication that future Brand Z products needed to align with these descriptors. In this case, the simple operations of counting and rank-ordering transformed a flat list into a two-tiered demand hierarchy, elevating a handful of items and obviating the rest.

Other times, analysts had to do more work to make the value hierarchy appear. For instance, when survey-takers rated list items using standard 5-point scales, analysts had many options for wrangling the data. Should they calculate and compare average ratings? Should they just count which items received the most 5-point ratings? Or should they add together 4s and 5s to show how many consumers had overall positive views of each item? What about a "net" score that subtracted negative ratings (1s and 2s) from positive ratings (4s and 5s)? In practice, such decisions were often made based on local tradition. XPG analysts asked similar questions across many surveys, and they tended to use the same calculations for the same question types. As an intern analyst at XPG, I was expected to learn which calculations were commonly used for which question types, and then apply them consistently according to these traditions. However, tradition could be overturned when the typical calculative approaches failed to yield clear value hierarchies. More than a few times, my calculations generated "flat" graphs with little distinction between list items, or "spiky" graphs where all the variance was concentrated into only one item, or "noisy" graphs with too much information to absorb. In such cases, an analyst would instruct me to

try alternative calculations and see if a "nicer" distribution emerged, by which they meant a clear hierarchy.

Many prominent social theorists argue that calculations are performative means of reshaping the world (see Chapter 2), but at XPG I realized that this kind of reshaping could only occur when the world was broken into parts, allowing those parts to be ranked. My analysis here builds on philosopher of science Helen Verran, who describes numbers as "materialized relations."[308] Specifically, she approaches the Australian water market as a construct of numbers in the "whole/parts" relation; water only becomes a market totality when it is unitized and differentiated, yielding distinct types of water commodities with their own prices, supplies, and demands.[309] At XPG, the primary utility of the consumer survey was that practically anything could be turned into a whole/parts form, such that its parts could be assigned disparate values. However, I found that the "whole/parts" relation was usually a fragile social achievement. XPG's clients had to be convinced that the whole *really was* the sum of its parts, meaning that the resultant value systems were vulnerable to contestation. Analysts' lists might be judged as bad representations of the whole, survey-takers might be judged as bad consumers, or certain calculations might be judged as bad ways of generating hierarchy. Yet, when clients and analysts could agree that their rankings were legitimate, they often played powerful roles in guiding future business decisions. Anthropologist Jane Guyer describes the increasing hegemony of public rankings in disparate domains of American life like higher education, horse-racing, and the

[308] Verran, Helen. 2010. "Number as an inventive frontier in knowing and working Australia's water resources." *Anthropological Theory* 10 (1-2): 171-178.
[309] Ibid.

accumulation of wealth.[310] Guyer argues that authoritative ordinal calculations have a recursive dimension that augments inequality; high-ranking schools/horses/people receive additional investments and attention simply *because* they are high-ranking, widening the gap between the top-tier and the rest over time. Similarly, at XPG I found that analysts' private survey-based rankings intensified investment loops in certain properties, features or qualities that were already highly rated. This tended to lead big publishers to "safe" outcomes such as reliance on prior hit franchises, brands, and features. XPG analysts' calculations thus enabled publishers to pursue strategies of modular investment by assigning values to the pieces: "good" high-ranked parts could be safeguarded, augmented, or plugged into new products, whereas "bad" low-ranked parts could be targeted for improvement, swapped out, or discarded altogether.

4) Reassembly: The final step in the survey process was to build the report, arranging the calculated value hierarchies to build a coherent, holistic understanding of the study's objects. I have already written about the importance of persuasive storytelling and aesthetics in report creation (see Chapter 2). Here, I briefly add that this was also a process of *reassembly*. Whereas survey-lists divided objects of study into parts and then re-ordered the parts, reports collected these parts and attempted to make them speak for the whole. In this way, successful reports replaced the original objects of study, substituting them with new wholes-made-of-parts. XPG analysts sometimes joked that report-making was like "putting Humpty Dumpty together again." This joke winked at the impossibility of the task analysts faced; one could not fully reconstitute an object once atomized. With each graph,

[310] Guyer, Jane. 2010. "The eruption of tradition? On ordinality and calculation". *Anthropological Theory* 10 (1-2): 123-131.

chart, and table, analysts showed a Humpty Dumpty in pieces, even if the pieces had been arranged nicely. Therefore, reassembly had to be accomplished rhetorically in the slide text, treating the amalgam of data on the slide *as if* it were still the original whole. Yet the rhetorical whole presented in the report was most certainly not the original; the items at the top of the new value hierarchy now dominated the object's definition, whereas earlier the object could have been defined equivalently by any of its parts. Reassembly was thus a transformative step that involved hiding the fact of transformation. The trick was to convince the audience of report-readers that the original whole had been constituted by these pieces all along.

The final product of reassembly was a novel set of modularized capitalist objects—products, product concepts, consumers, brands, markets—that were shippable to corporate stakeholders in distant parts of the company, just as reassembled games were shippable to consumers in distant parts of the world. Such objects could be disassembled again at a moment's notice so that corporate workers could target, adjust, or replace their pieces one-by-one. XPG's survey work thus helped reinforce modularization strategies that publishers were already pursuing. The replication of survey stimuli made survey-takers appear coordinated in their demands. Survey-lists made atomization seem exact. Calculated value hierarchies made some pieces seem unappealing or uninteresting, and thus targetable for modulation. Report text signaled the possibility of reassembling the pieces into a coherent whole, connecting the work of modularization back to real people, places, and things. In other words, the data work carried out by XPG helped make modularization feel consumer-driven, precise, necessary, and feasible to publishers. Consequently, they used XPG's reports to support the overall legitimacy of modular

international strategies, but also to direct others to do the modular work of piece-adjustment.

Multi-market Modularity

Up to now, I have discussed the making of modular products, consumers, and brands in the context of a single survey. We have seen how analysts secure the reproduction, atomization, calculation, and reassembly of the study's objects in a stepwise fashion as they administer the survey, collect responses, generate graphs, and build reports. I have contended that these steps represent a modularization process that mirrors the localization strategies that publishers use to sell media products worldwide. The reader might object here that my description of XPG's survey-making process does not touch at all on international business. How do analysts ensure that their modular lists, value hierarchies, and wholes-made-of-parts apply to all the national markets in which the publisher is interested? By subjecting the survey *itself* to modularization! In multi-market studies I observed at XPG, analysts distributed "localized" versions of their survey to each national market, just as publishers distributed "localized" versions of their games. After the base survey was built, it was: 1) Reproduced for each additional market covered; 2) Atomized into an assembly of questions and stubs, which were; 3) Modulated based on region-specific factors, at which point the survey was; 4) Reassembled and translated into a new whole, a region-specific version. The recursion was in full force here: modularization was *doubled over* each time a new market-specific survey was administered. The multi-market survey was a modular object whose multiple versions each yielded their own modular objects.

The result was not just a single value hierarchy that described consumers' demands, but a multiplicity of value hierarchies, one for each region. Region-specific value hierarchies could then be compared to see which demands were shared across countries, and which were unique to particular countries. For example, consider a question that asks survey-takers to rank their favorite features for Concept X. As this question was replicated across markets, the object of study—Concept X—was repeatedly atomized and reassembled, yielding a new rank-order for each region the survey covered. Perhaps the game's narrative was a top feature in Region A, a middling feature in Region B, and a low-ranking feature in Region C. But perhaps exploring the game world was a top feature in all three regions. When multi-market results were gathered together, complex distinctions immediately started emerging, suggesting the need for publishers to tune their global approaches based on national market specificities. Multi-market studies also demonstrated clearly the modular nature of capitalist objects; the reconfigurability and replaceability of the object was enacted directly as "core" elements shifted from market to market. Visualizing multi-market data on slides, one could literally see the object's pieces get rearranged and revalued region-by-region.

Multi-market studies at XPG were an order of magnitude more difficult for analysts to manage successfully than single-market studies, largely due to the need to consider each region's responses both individually and relative to every other region. Reporting on multi-market studies could be mind-boggling. Analysts would open dozens of files at once—each containing one region's distinct dataset—trying to look across all the numbers to find patterns and outliers. Outliers were relatively easy to find, but also potentially misleading; it was hard to tell when an outlier was indicative of a stable market distinction, and when it

was just an anomaly due to quirks of data collection or translation. To build persuasive narratives about market differences, analysts had to connect threads across the entire survey, finding reinforcing data from other questions that supported analysis using the outliers. Pulling multi-market data into cogent report slides was just as challenging; while analysts believed that charts should always show a clear distribution, holding to this principle became an exercise in creative design when one had to fit three, five, or even ten markets' unique distributions onto a single slide.

Analysts had one more tool at their disposal when approaching multi-market studies: the "global roll-up." This was a mega-file that gathered all survey-takers' responses together regardless of region, applying weighting to these responses based on the relative populations of the target audiences in each region. Using the roll-up file, analysts could calculate "global" averages and response rates for any survey question or task. For instance, the global roll-up would make it possible to arrange the features of Concept X into a single rank-order, showing which had the highest (and lowest) average ratings worldwide. At last, the global consumer had emerged with global demands. But the global consumer here was merely an amalgam, a modular combination of the regional datasets included in the study. And the components of the global consumer—the regional datasets—were themselves modular, representing amalgams of audiences, which were amalgams of survey-takers. Global roll-ups thus revealed the fractal quality of modularity. At any level, capitalist objects could be further atomized or aggregated, yielding new modular composites. Markets were fractally modular because it was possible to merge them or separate them endlessly via calculation. Capitalist products were fractally modular because they could be broken into categories, which could be broken into individual

product forms, which could be broken into features, which could be broken into sub-features, and so on. And survey-takers' responses regarding products at any of these levels could also be collected or divided repeatedly, as was the case with the global roll-up. It was modularity upon modularity all the way down.

For survey-takers' responses to be continually dividable and combinable, they had to be collapsible. I have already described how survey questions at XPG were structured to elicit collapsibility, but this quality was by no means guaranteed when considering more than one survey. It was in practice highly unlikely that response data from two different surveys would be able to be combined into a single file. Collapsibility only resulted from (nearly) exact replication of survey stimuli. At a technical level, the files would be incompatible for the compiling necessary to create a joint roll-up file. At a conceptual level, the responses would be incommensurate because the structure of the conversation was different. Global roll-ups thus required that localized regional surveys replicate each other closely, reaching largely the same audiences, asking the same questions in largely the same ways, and presenting survey-takers with largely the same lists of options to select. Each localized difference in the survey threatened to make compiling the global roll-up file literally impossible. Of course, workarounds could be arranged for regional distinctions, but each exception took additional time and effort to reestablish compatibility. This meant that regional exceptions were kept to a minimum unless deemed absolutely necessary. In other words, multi-market studies were premised on assuming that markets were structurally similar, so that the resultant data could be collapsible and calculable across markets. Moreover, because analysts typically began with the American version of the survey and then performed localization tweaks for other regions, the premise for most multi-market

studies was that other markets were structurally similar to the United States. This was a steep cost to pay for collapsibility, as it meant that the results would be ethnocentric by design, making certain regional differences impossible to detect. The upside was that regional results would be comparable to one another. Not only could parallel datasets be collectivized, but regional distinctions were precisely calculable: the average rating for Concept X in Region A is 15% higher than the global average, the audience of mobile gamers in Region B is larger than Regions C and D combined, Region E is twice as likely to associate Brand Y with "family" than Region F, and so on. Even as the parallel structure of multi-market surveys erased difference, it also generated distinctions, defining the precise distance between regions' attitudes, behaviors, or qualities. These kinds of comparisons could form the building blocks of publishers' international capitalist strategies, enabling modular adjustment of business efforts by region.

For the first several multi-market studies that I observed at XPG, I had difficulty following analysts as they oscillated between a variety of different methods for dividing, combining, and comparing their datasets. I was overwhelmed by the profusion of files, patterns, and potential narratives. The process began to click for me during my third multi-market study, when I asked another analyst named James for his advice. Somewhat quizzically, he told me: "You and I, we're used to living in this small, three-dimensional meat space, but that's not how surveys work. Surveys operate in nine, ten, a hundred dimensions all at once." James went on to show me a dataset for another survey he was working on, in which the goal was to precisely define different types of mobile gamers. He opened the report and showed me a few charts that described these mobile gamers, flipping through slides of bar graphs, scatter plots, and heatmaps. As he paged his way

through the report, he asked me to imagine all of these datapoints clustering simultaneously in the same area. Even though the screen limited us to two-dimensional space, and our bodies inhabited three-dimensional space, James invited me to consider the "n-dimensional space" that survey data occupied. He explained that he recognized each type of gamer as an "n-dimensional shape," extending in as many directions as there were qualities measured by the survey. In the simplest three-question survey, the consumer would be a rectangular prism with three dimensions, each of which gained its measure from survey-takers' responses to the relevant question. James' challenge to think in n-dimensional space was thus a call to consider surveys not just as measuring devices, but as sculpting devices: the more questions asked, the more dimensions the consumer had. In the context of multi-market studies—where the same questions are repeated across regions—each regional consumer becomes the *same kind* of n-dimensional object with exactly the *same dimensions*. The only difference was in the measure of these dimensions. If Region A was a cube, Region B was a near-cube, Region C was a long rectangular prism, and so on.

Multi-market surveys thus *flattened* global distinctions by reducing an infinite number of potential descriptive differences and similarities into a defined, delimited set of scalar dimensions. At the same time, surveys *unrolled* global distinctions along these same scalar dimensions, making descriptive differences appear as if out of thin air. Therefore, it does not make sense to label analysts' calculative work as either reductive or irreductive; it is both at once, a matter of translating difference into scalar, definable, multi-dimensional space. For international games publishers, this meant that foreign consumers were fundamentally the same type of object as their domestic consumers, only with some of their dimensions stretched or shrunk. Because the "us" and the "other" were assumed to have

the same structure, the same dimensionality, it made sense for publishers to adopt the same capitalist strategies everywhere, merely tweaking parts of these strategies up and down by region. The survey's modular consumer called for modular global capitalist approaches.

The two most common approaches I saw at XPG were the "staged" approach and the "global launch" approach. In the staged approach, the publisher first released their game in one region (or a collection of related regions) to gauge its reception, and then invested in launching the same game in additional regions over time. This approach tended to use regional data to compare target consumers in the original region versus those in new regions, helping publishers modify their messaging, target region-specific channels, and coordinate other localization efforts to extend their product's reach with this new audience. In the global launch approach, the publisher released their game near-simultaneously in as many regions as possible. This approach tended to rely more on global roll-up data to help make the game suitable for a "global audience," but it also utilized region-level data to show where each region differed significantly from the global average. In either case, publishers deployed modular understandings of markets and their own products in order to expand their business internationally.

Big games publishers' activities did not fit into the archetype of transnational economic and cultural "imperialism" found in some analyses of global capitalism.[311] Publishers did

[311] Schiller, Herbert. 1971. *Mass Communications and American Empire*. Beacon Press.
Dorfman, Ariel and Armand Mattelart. 1971 [2018]. *How to Read Donald Duck: Imperialist Ideology in the Disney Comic*. Trans. David Kunzle. New York: OR Books.
Guttmann, Allen. 1994. *Games and Empires: Modern Sports and Cultural Imperialism*. Columbia University Press.
Hardt, Michael and Antonio Negri. 2000. *Empire*. Harvard University Press.
Harvey, 2003. *The New Imperialism*. Oxford University Press.
Dyer-Witheford, Nick and Greig de Peuter. 2009. *Games of Empire: Global Capitalism and Video Games*. Minneapolis: University of Minnesota Press.

not aim to alter other regions' consumption habits, nor did they believe that their exports could transform others into cosmopolitans or any other form of model "global citizens." Rather, they tuned their strategies to fit their products to local conditions and demands, attempting to seamlessly incorporate new titles into existing markets and consumption patterns. This modular strategy required that the product be broken down and then rebuilt anew in order to travel transnationally. The fact that media acquired new cultural associations when they traveled was not merely incidental to publishers; it was a key part of their viral capitalist logic in which growth is reliably achieved by adaptation to new conditions. Instead of just indiscriminate cultural exporters, then, publishers used data to attend to regional distinctions and vary their offerings accordingly. The world that publishers engaged with was thus neither one of increasing homogenization, nor one of unbridgeable heterogeneity. Rather, this was a world in which all relevant differences were definable, precisely measurable, and scalar along universal dimensions. In short, the post-global globe was a modular one, a procession of mirrored region forms whose basic architecture is the same, but whose proportions differ from one another. This was a world in which nation-states remained incredibly salient—XPG studies typically defined consumer regions using national boundaries—but also one in which regional definitions were not rooted in any immutable characteristics. Rather, consumer research showed regional markets morphing from one shape to another non-teleologically, requiring continual reinvestment in studies that would redefine their dimensions anew, measure their proportions, create fresh comparisons, and suggest the proper tailored approaches.

Zones of modularity

> It was late spring in LA, and the city was already in the grips of a hot spell. I could feel sweat pricks begin to form on my arms as I sat in a cramped living room with a respondent named Trent, a fellow XPG analyst, and two clients who had traveled from China for this project. Our task was to drive around LA and perform in-home interviews in a variety of neighborhoods, asking respondents about what games they were playing, how they felt about spending on games, what role gaming played in their lives, and so on. Trent would be our sixth respondent in two days, and our team had settled into a routine by this point; the respondent would greet us, show us around their living area, point out their gaming systems, and then we'd sit for about ninety minutes of discussion. Ostensibly, the goal was to understand how to optimize in-game spending options for free-to-play games, but the deeper objective was for the client—a Chinese publisher—to develop firsthand familiarity with "American" gamers: their life situations, their attitudes, their gaming experiences, and so on.
>
> As we talked to Trent, a burly student-athlete who was into *Fortnite* and *Madden NFL*, a slight breeze drifted in each time his younger siblings and cousins entered or exited the house. Trent explained that he felt *Fortnite* was the top game at the moment, and that the game managed to feel "fresh" by continually adding trendy in-game references to pop-culture dances, shows, and memes he enjoys. I could see one of the clients, Jack, frown slightly at this comment, but the conversation had already moved on to the *Fortnite*-playing YouTubers who the respondent watched. At the end of the interview, Jack asked for more explanation about *Fortnite*'s "freshness," and Trent gave some examples: the Carlton dance, the World Cup outfits in the store, and so on. Jack seemed not entirely satisfied, but he nodded at Trent's answer and had no further follow-up questions, signaling the end of the interview.
>
> Because my XPG colleague was driving us to our next interview site, we had some time to debrief in the back seat of the car. Jack's anxiety had grown to the point where it was almost palpable. He let out a short groan and exclaimed: "I feel like we have so much work to do. Americans are so different. I don't know if our developers will ever get it." All weekend he had been ruminating on what made the North American gaming context distinct from China. While most of these differences seemed intelligible, Trent's invocation of *Fortnite*'s pop-culture hipness brought to the fore a new problem: Trent was steeped in a totally different media environment, one in which Jack's company had little direct experience, but which now seemed critical to grasp if they wanted their game to feel similarly "relevant." Jack lamented that each time they ran a project in the United States, they unearthed issues like these, seemingly leading them to more questions than answers.

For those of us living within zones of modularization, international capitalist products often seem as if they are made just for us. They adopt our language, mesh with our habits, reference our popular culture, and address our needs. The tailoring process is so common

and subtle that it may go unnoticed in everyday life. It is only when modularization fails that attention is drawn to the distance between producers and consumers—and this distance can be great indeed when it comes to international capitalism. If the globalist dream is to connect the world and increase the speed of exchange, the modular dream has somewhat different ends: to make us forget distance by slotting products' features and fantasies seamlessly into our lived environments. To accomplish this end, modularization employs parallel multiplication: teams work separately on individual pieces of the whole and then combine them at a late stage to form a modular product that can be tuned differently for each audience the company is trying to reach. The world that modular companies are enacting is a siloed world, one in which separate regions receive separate product variants worked on and sold by separate teams. But it is also an interlinked world, one where people in many regions enjoy largely the "same" products owned by the "same" parent companies, meaning that we can identify with each other through mutual recognition of shared characters, fantasy worlds, and brands (see Chapter 4). This linkage aids large companies because they rely on markets' structural similarities to pick up their operations from one locale and redeploy them in another, albeit with some tweaking and adjusting. Zones of modularization thus look increasingly similar even as they remain apart. Although regions across the globe are becoming populated with the "same" sets of products, modular companies' region-specific approaches ensure that these products will in fact operate and be received differently in different places. The result is that the product, the company, and the consumer are reimagined as endlessly reconfigurable, an amalgam with no essence. Modular businesses are radically agnostic regarding what their products represent, what benefits they provide, and who they reach: there are no absolute consumer

values, only relative values defined by popular demands whose hierarchies reshuffle as soon as you cut or combine them into different groupings.

If globalization's guiding principle is singularity, modularization's is reconfigurability: products, consumers, and markets are all seen as inherently multiple and flexible. Anthropologists and others have identified "flexible capitalism" as an important cultural zeitgeist in Western business, leading to the proliferation of flexible production chains, flexible workplaces, flexible products, and flexible workers—where flexibility entails the willingness to change rapidly and often.[312] The flexible environment described by these scholars certainly applies to the work practices of big Western videogame publishers, who are capable of adapting their products and approaches dramatically in order to achieve success in different markets. In the videogame industry, this readiness to adapt is rooted in decades of mutating entertainment formulas and fantasies to appeal to new audiences (see Chapter 1). This chapter shows that big publishers not only mutate their products across time, but across space as well. XPG analysts helped formalize the mutation process, isolating pieces of the whole and evaluating which ones would be desirable to change *for which audiences*. In this sense, modularity might be considered to be a reworked version of flexibility, redefining the meaning of change itself. Some pieces are kept and merely copied over (inflexible), while other pieces are tweaked, swapped out, or reprioritized (flexible). Modular business practices atomize flexibility, reconsidering products, markets, and businesses as amalgams of more or less flexible parts whose value is given by its place in

[312] Martin, Emily. 1994. *Flexible bodies: Tracking immunity in American culture from the days of polio to the age of AIDS.* Boston: Beacon Press.
Ong, Aihwa. 1999. *Flexible Citizenship: The Cultural Logics of Transnationality*. Duke University Press.
Thrift, Nigel. 2005. *Knowing Capitalism*. Sage Publications.
Sennett, Richard. 2007. *The Culture of the New Capitalism*. Yale University Press.
Ho, Karen. 2009. *Liquidated: an ethnography of Wall Street.* Duke University Press.

consumers' present value hierarchies. Zones of modularity are thus zones of consumer-driven reconfigurability. If we want products to stay the same (or at least if we want their next iteration to keep certain favorite features or principles), we have to hope that the parts we like are popular and well-received by other people around us. Otherwise, these parts can be easily crushed and forgotten beneath the wheel of constant corporate reconfiguration.

To the extent that large companies perceive markets in terms of modular pieces, their business strategies are increasingly designed to engage at the modular level, i.e. operating on isolable pieces of products, consumer psychology, or market segments. In the videogame industry, one prevalent modular strategy consists of packing a huge variety of features into a single title, hoping to meet many different types of players' needs at once. Since games are already seen as modular bundles, it is not so difficult to ramp up investment and add more and more items to the bundle—especially if the potential return is hooking new players who would be particularly interested in these new features. And since the product is shipped internationally to regional markets with varying value hierarchies, it makes sense to cast a wide net in game design and then deploy modular marketing to communicate just the top-ranked features to players in each region. Game critics have identified this trend as "bloat"[313] or "feature creep,"[314] characterizing this tendency as a counter-productive drive to include unnecessary add-ons, shoddily made side activities, or superfluous features that bog down the gameplay experience.[315] On the other hand, proponents of this trend argue that so-called bloated games provide great

[313] PC Gamer Staff. 2018. "When games are too bloated." *PCGamer.com*: January 16.
[314] Owen, Phil. 2015. "Some Games Should Have Fewer Features." *Kotaku.com*: July 3.
[315] Super Bunnyhop. 2015. "How Design Trends Ruin Great Games." *YouTube.com*: February 5.

value, offer a wealth of content, and have "something for everyone." The common gamer aphorism to describe these games is that they are "wide as an ocean and deep as a puddle." *Fallout 4 (2015)* is a prime example of feature bloat: the game includes a vast open world, branching conversation trees, first- and third-person shooter gameplay, a leveling system, a crafting system, a base-building system, a weapon modification system, a companion app to display the Pip-Boy screen on your phone, mod support, and plenty of side quests and content, not to mention additional downloadable content (DLC) available for purchase soon after launch. At the same time, the game was widely criticized at launch because many of these components were dull, shallow, or bug-ridden.[316] While feature-cramming is not the only strategy one might pursue to appeal to massive international audiences, it is symptomatic of a modularized world where the options appear to revolve around endlessly adding features, reordering features, updating features, and swapping features based on changing value hierarchies.

The great utility of modularity is that it theoretically can be applied to any person, thing, or group. In practice, however, it takes work to modularize things because their components—including their relative values and measures—are not at all self-evident. The work of modularization imposes pragmatic costs on companies: firms like XPG must be paid to calculate modular differences, choices must be made about which consumers to address, teams must be assembled to create new product variants, and conclusions regarding modular differences must be accepted and incorporated by these teams. In other

[316] Gies, Arthur. "Fallout 4 Review." *Polygon.com*: November 9.
Dingman, Hayden. 2015. "Fallout 4 review: Won't set the world on fire, but might start a (tiny) flame in your heart." *PCWorld.com*: November 9.
AngryJoeShow. 2015. "Fallout 4 Angry Review." *YouTube.com*: November 19.
Joseph Anderson. 2015. "Fallout 4 Analysis." *YouTube.com*: November 28.

words, modular understandings of the world are not all-powerful; there are significant logistical, cultural, and semiotic limitations involved. Zones of modularity are finite, thin, fragile, and spotty. Whenever companies engage in modular business, they enact a pragmatic calculus tallying up the potential costs and benefits of extending the modular zone. The prices add up for each new region engaged: there are more respondents to pay, more analyst hours to bill, and more localization teams to hire, meaning that modularization only occurs when the company can expect a return. As a result, each company maintains its own peculiar zones of modularity in which it operates. Company A regularly seeks out consumer research on Region B (its primary market), only sometimes studies Regions C and D (secondary markets), but never studies regions E through Z (tertiary markets, or not markets at all). Modularity entails an uneven global landscape where some receive highly tailored products, and others do not.

In the ethnographic vignette above, Jack's company was in the midst of becoming a modular operation. Whereas before they had mainly concerned themselves with a single region, China, now they were increasingly prioritizing other regions like North America not only as a way to grow their player base, but to escape the pervasive uncertainty caused by 2018's regulatory freeze in China. Jack's anxiety betrayed what a risky endeavor this was for the company; if this research did not produce "actionable" findings that his team could understand and use to successfully court American gamers, it was not only a wasted investment, but also a potential disaster for his company because they were banking on this modular strategy. In the car ride between respondents' homes, the thinness and fragility of consumer research immediately became obvious to Jack. We had talked to a handful of people in one city for a couple hours at a time on a shoestring budget, yet in a

few days he had to produce a distilled set of findings about "American" consumers as a whole that would guide business decisions, at least until follow-up research could be performed. Additionally, Jack faced the high start-up costs of extending the modular network to a new place for the first time: translation, atomization, and interpretation would all be more intensely contested because the relevant stakeholders had never been convinced to think this way before. When Trent brought up the importance of the Carlton dance, the World Cup, or YouTubers he watched, he spoke to a holistic sense of being immersed in his environment. This was an issue for Jack because it highlighted the basic imperfections in the modular approach. Trent was not a mirror version of the Chinese consumer with some of his traits and behaviors tweaked up or down; he was a person with a full, rich set of life experiences that he could only fleetingly reference in his brief interview. The modular picture of Trent was a flat one; with more time, more money, and more effort, Jack could continue to add more dimensions to this picture, but it would never reach the fullness of Trent in himself.

For each company, there are many *silent zones* betwixt and outside their zones of modularity. In these silent spaces, people's voices are not heard, and the company operates with little-to-no information, or else refuses to operate altogether. Geographically, silent zones include any nation that companies consider not to be a "significant" market, and therefore exclude from research. For the videogame industry, this typically means most of Africa, South America, the Middle East, and Eastern Europe. Even if some of these places may receive localized versions of games, their voices are not elicited, gathered, or calculated in the "global" average for the product's desirable traits, attributes, and features. Companies also typically exclude a variety of "close enough" locales, usually smaller

regions which are assumed to be similar to a larger region already being studied, and therefore not worth the investment to research separately. At XPG, for instance, it was common to exclude Canada because the United States was considered a good proxy for the Canadian games market. Small markets like Ireland, Portugal, Belgium, Australia, and Taiwan were regularly left out of corporate research agendas using this same line of thinking. For qualitative studies, it was typical to pick just a couple large cities to run focus groups in, meaning that smaller cities and rural areas became silent zones, spoken for by larger urban areas. In other words, big publishers are essentially deaf to those who do not live within their familiar zones of modularity; modular business practices impose stark geographic divides between those whose voices are elicited and counted, and those whose voices are never sought out in the first place.

Silent zones are not merely spatial; they are also temporal. It takes time to gather responses, calculate them, and reassemble them into reports. Each consumer research project at XPG presented a "snapshot" of a market, but markets were always in motion as people aged, new products released, and current events unfolded. Consequently, the validity of any particular finding based on consumer data declined with every passing day. In XPG analysts' lingo, datasets grew "stale" over time, decaying as the world continuously diverged from its prior states. The present was a silent zone for modular companies, which always operated slightly on the back foot. Modular corporate strategies were therefore more likely to be reactive than proactive, responding to trends only after they could be defined and measured. If big videogame publishers seem "out of touch" to some gamers, this is perhaps the biggest reason why this is the case. When publishers lean on modular approaches, they are living in the past, even when designing new games for the future.

Modular approaches are fragile yet potent, limited yet transnational, imperfect yet still useful to companies. Modularity also seems here to stay. If the world is not converging according to the globalist dream, the modular alternative has already arrived as we find ourselves in a world of mirrored variants. Some of the consequences are anticipated by large corporations, such as smoother pickup of their products abroad, and growing international recognition of their brands. But other consequences are unanticipated as people take advantage of the opportunities that modular duplication entails. A streamer shuffles between characters' vocal dubs in order to find audio that suits him.[317] A videogame speedrunner tests out different game versions to see translated scripts which might shave seconds off her record times.[318] An avid fan pores over multiple regional trailers to try and catch details not featured in her home region.[319] A modder reskins his favorite game to look like an entirely new world.[320] These scenes speak to the unexpected possibilities of living in zones of modularity, where consumers too might break down products into reusable, replaceable components. The following chapter follows up on this thread by diving deeper into what it's like to live in zones of modularity. While this chapter highlighted how companies attended to the modular distinctions between mirror regions, the next chapter focuses on the connective tissues that link people across the world who consume the "same" media products, leading to shared affinities, interests, experiences, and expectations.

[317] Leffen. 2019. "Leffen Explains how to get Japanese Voices in Ultimate." Clipped by sekretagentman. *Twitch.tv/Leffen*: December 15.
[318] Alexandra, Heather. 2017. "Why Some Zelda Speedruns Use German And Others Use Japanese." *Kotaku.com*: November 28.
[319] u/UpvotesFeedMyFamily. 2016. "(SPOILERS) Japanese trailer confirms customization." *Reddit.com/r/Pokemon*: May 10.
[320] BigBizkit. 2019. "A three dimensional interview - mathy79." *Nexusmods.com/skyrim*: August 2.

CHAPTER 4: WALKING THE VIRAL PATHWAY

Crowd Consumption

When *Pokémon Go (2016)* first launched in the summer of 2016, it took XPG's LA office by storm. Within the span of a few days, I saw more and more analysts opening their phones periodically, pacing around, and swiping at their screens to capture digital Pidgeys, Geodudes, and other fantasy creatures popping up nearby. Several Pokéstops were within easy walking distance of the office, so a small group would go on regular excursions during breaks to hit these locales, collecting the resources necessary to keep catching more Pokémon. I soon found myself downloading the game as well, tugged by my own nostalgic connections with the series. I recalled playing *Pokémon Blue (1993)* as I commuted to and from elementary school, whiling away the minutes exploring the 8-bit world of Kanto as the physical world passed me by. When I looked up, I sometimes imagined that these creatures were running beside the car, or hiding among the trees, just waiting for me to make friends with them. Opening *Pokémon Go (2016)* for the first time was like seeing my childhood imagination come to life. Pokémon were everywhere—on my street, in the park, at the office—and I found myself making excuses to walk the neighborhood in the evenings just to see which ones I might stumble upon.

Enthusiasm for the game was not limited to myself and my informants; it was an international sensation. The media ran stories describing the game's rise as the return of "Pokémania,"[321] detailing how national parks were swamped with players,[322] how the game was bringing new foot traffic to local businesses and houses of worship,[323] and how players were being injured in traffic accidents or falls because they were too engrossed in their screens.[324] Everywhere I went that summer, I saw people playing the game, tapping their phones and meeting in areas deemed important by its algorithms. At work, my informants swapped stories about the strange social experiences they were having in these congregations of strangers, joined only by their copresence in Los Angeles and their passion for catching Pokémon.

News outlets tended to treat *Pokémon Go (2016)* as a cultural fad, a rare occasion when a videogame formed a mass movement that touched the lives of many. But entertainment media is full of such tales—from the "moral panic" over *Dungeons &*

[321] Isaac, Mike. 2016. "Times Reporter Descends Into Pokémania." *The New York Times*, Reporter's Notebook: July 12.
Davison, John. 2016. "How Pokemania Broke 'Pokemon Go." *Rolling Stone*: July 12.
[322] Carlton, Jim. 2016. "'Pokémon Go' Gives Boost to National Parks." *Wall Street Journal*: July 14.
National Park Service (@NatlParkService). 2016. Tweet at 12:35 PM, July 12. *Twitter.com*.
[323] Etherington, Darrell. "Pokémon Go is doing what few apps can – driving real-world traffic." *TechCrunch.com*: July 11.
[324] Tsukayama, Hayley. 2016. "Pokemon Go's unexpected side effect: injuries." *The Washington Post*: July 10.

> *Dragons* in the 1980s,[325] to the original "Pokémon fever" of the 1990s,[326] to the *World of Warcraft* "addiction" epidemic of the 2000s.[327] *Pokémon Go (2016)* simply provided a remarkably visible example of the world-warping, rapidly gathered, tenuously connected crowds that games publishers are trying to incite all the time—a realization that dawned on me throughout the summer of *Pokémon Go (2016)* as I observed publishers in action. In each study I witnessed at XPG, I saw publishers attempting to build mass movements around their games, gathering data to show them how large groups of people felt, thought, and behaved so that they could activate these groups to consider, discuss, get attached to, and ultimately play their games—all at once, all together. The only novelty of *Pokémon Go (2016)* was that the effects of this process were tangible and conspicuous because gameplay occurred in everyday, public spaces. It required little imagination to see the crowd assembled by the game when all one had to do was look around your own streets, plazas, and parks. The connectivity of entertainment media typically goes under the radar because audiences are temporary and dispersed, a crowd divided into so many private spaces, linked from the comfort of their own private spheres. This linkage is occurring around us continually, every hour of every day, slipping by unnoticed until a conversation with a friend reveals that you both watched the same movie last weekend, or a corporate sales report reveals that millions of copies of their hit game sold overnight, or you look up from your phone and see dozens gathered in the local park, catching fictional creatures they somehow all recognize, desire, and love.

In his influential text *Imagined Communities*, historian Benedict Anderson describes the emergence of "print-capitalism" in Europe between the fifteenth and nineteenth centuries as a momentous pivot point in how people recognized their relations to each other.[328] Namely, Anderson writes that the mass production of novels, newspapers, and other print media set the conditions under which nations could form; print publications encouraged readers who would never meet personally to imagine themselves as part of a shared context, as a community of fellow citizens who were connected, lived out their lives together, and shared similar spirits, ideals, and fates. This "imagined political community"

[325] Waldron, David. 2016. "Role-Playing Games and the Christian Right: Community Formation in Response to a Moral Panic." *Journal of Religion and Popular Culture* 9 (1): 3.
[326] Tobin, Joseph. 2004. *Pikachu's Global Adventure: The Rise and Fall of Pokémon.* Durham: Duke University Press.
[327] Reimer, Jeremy. 2006. "Doctor claims 40 percent of World of Warcraft players are addicted." *ArsTechnica.com*: August 9.
[328] Anderson, Benedict. 1983 [2006]. *Imagined Communities.* London: Verso.

was then directly enacted by the simultaneous "ceremony" of reading the same publications in homes, streets, and cafés across the country.[329] Likewise, in this ethnography I have described how entertainment capitalists in Los Angeles and elsewhere pursued the mass production of a different kind of media creation—the blockbuster videogame—which is also consumed en masse in homes and other spaces around the world. Might entertainment-media-capitalism, i.e. viral capitalism, enable new social forms of its own, distinct from the national imaginaries of print?

It is striking how quickly new social groupings emerge around mass-market videogames. A hit game launches, and almost overnight there is a vast crowd linked by their shared experiences of that game, amounting to a small shift in any individual's life, yet potentially yielding large impacts when you align all these shifts together—a phenomenon which the breakout success of *Pokémon Go (2016)* conspicuously displayed. Yet from the standpoint of big publishers and XPG analysts, such rapid crowd-drawing did not occur instantaneously or automatically. Rather, there was an incredible amount of preparatory work involved in producing a successful launch; in the months or sometimes years before launch, significant time, effort, and money was invested into finding potential audiences for the new title, exciting them about the title's future release, and tailoring the game itself to these audiences. Consumer data from firms like XPG was vital to this practice, as analysts "tested" and "optimized" launch conditions ahead of time, informing publishers' strategies in shaping the unreleased title's design and marketing. One consequence of this practice was that—to publishers—consumer crowds existed long before the product launched, at least in a sort of liminal, potential state, as crowds-in-waiting. The goal for publishers was

[329] Ibid.

to translate crowds-in-waiting into active crowds, creating what industry veterans called the "path to purchase." This chapter is about how publishers build these viral pathways, creating the conditions for popular demand to morph into a viral state of high intensity, social connectivity, and rapid activation. I argue that the resultant social form is quite unlike Anderson's "imagined community," requiring new reckonings of how we relate to media and to each other through media.

The best present-day analogue to Anderson's "imagined community" is found in the various "virtual communities"[330] of online games, forums, and social media networks. Such communities often involve active socialization, a sense of group identity, and conscious deliberation over the community's purpose, values, or boundaries.[331] While much ethnographic research on videogames has focused on active player communities,[332] my interlocutors considered such communities to represent only a minority of any game's audience (see Chapter 2). As XPG studies demonstrated to publishers, game-linked *consumer crowds* included many who did not engage in communal socialization within or around the title, who only recognized other players as "strangers," and who would not consider their engagement with the title to constitute an identity. More importantly, crowds drawn together by any one title were necessarily short-lived; the crowd's dispersal

[330] Rheingold, Howard. 1993 [2000]. *The virtual community: Homesteading on the electronic frontier*. MIT Press.
[331] Wilson, Samuel M. and Leighton C. Peterson. 2002. "The Anthropology of Online Communities." *Annual Review of Anthropology* 31: 449-467.
[332] Cherny, Lynn. 1999. *Conversation and Community: Chat in a Virtual World*. Cambridge University Press.
Pearce, Celia. 2009. *Communities of play: Emergent cultures in multiplayer games and virtual worlds.* MIT Press.
Golub, Alex. 2010. "Being in the World (of Warcraft): Raiding, realism, and knowledge production in a massively multiplayer online game." *Anthropological Quarterly* 83(1): 17-45.
Taylor, T. L. 2012. *Raising the Stakes: E-sports and the Professionalization of Computer Gaming.* Cambridge: MIT Press.
Hamilton, William, Oliver Garretson, and Andruid Kerne. 2014. "Streaming on twitch: fostering participatory communities of play within live mixed media." *Proceedings of the 32nd annual ACM conference on Human factors in computing systems.* ACM.

began the moment the first player stopped engaging with the game, meaning that the crowd's full scope was soon only detectable through inferential statistics. Contrasted against the regular social activities of communities, crowds spent almost all of their time in a dormant state, as crowds-dispersed or crowds-in-waiting. In other words, crowds were typically characterized by lack of identity, lack of conscious attention, and lack of regular activity—the exact opposite of a mediated community.

This vision of entertainment audiences as latent, non-conscious, activatable crowds calls for a different theory of media engagement than the one implicit in Anderson's formulation of the "imagined community"—specifically one that unsettles the apparent primacy of conscious interpretation and deliberation. The alternative that I am suggesting here is something akin to that proposed by affect studies. In a seminal text of affect studies, Brian Massumi both opens and closes his argument by meditating on what happens to people's bodies when they watch television programs, shorts, and commercials.[333] By focusing on these brief moments of engagement, he is able to show how viewers' responses to televisual media are non-concordant: our skin, breathing, heartrate, and subjective understandings of an experience may all contradict with one another. Massumi then elaborates this contradiction as evidence that "image reception is multi-leveled, or at least bi-level."[334] One level is that of "qualification," which includes consciousness, semantic meaning, emotion, narrative, expectation, and subjective reflection. Another level is that of "affect," which includes a host of non-conscious, non-linear, non-subjective embodied reactions which only later get narrowed into particular emotions or thoughts.[335] Although

[333] Massumi, Brian. 1995. "The Autonomy of Affect." *Cultural Critique* 31: 83-109. University of Minnesota Press.
[334] Ibid.
[335] Ibid.

affect studies as a rule shuns precise definitions,[336] in general its adherents focus on moments of "emergence" when people encounter other humans and non-humans—positing that these moments continually exceed or precede our consciousness.[337]

Although my interlocutors were not familiar with affect studies as a scholarly sub-discipline, their corporate research methodologies similarly assumed that conscious action and attention was only a small part of mediated experience. Namely, XPG studies prompted participants to articulate feelings, sentiments, and opinions surrounding entertainment media which may not have been previously expressed, attended to, or consciously recognized. Although participants' stated responses entered the arena of "qualification," analysts understood this to be a necessary limitation of their work—their true aim with such activities was to understand how and why people were automatically drawn towards certain kinds of experiences or fantasies, seeing this as a vital, pre-reflective first step that consumers take before moving on to conscious consideration and evaluation of these experiences.

If affect studies is primarily interested in embodied responses before and during encounters, my interlocutors concerned themselves with a wholly different time frame. Namely, they were keen to discover what remained *after* conscious attention to a piece of media had faded, at which point the player might be left with a relatively vague, incoherent, yet persistent set of affinities and associations. Hidden resonances were considered to reside within all consumers who had experienced certain entertainment media properties,

[336] Gregg, Melissa and Gregory Seigworth. 2010. "Introduction" in *The Affect Theory Reader*: 1-28. Duke University Press.
[337] Hemmings, Clare. 2005. "Invoking Affect: Cultural theory and the ontological turn." *Cultural Studies* 19 (5): 548-567.

and they might be summoned back to consciousness under the right conditions, when exposed to related prompts, advertisements, trailers, or gameplay experiences. XPG analysts' studies thus revealed the subtle domain of what I am calling *after-affects*: resonances, feelings, and connections elicited by entertainment media that linger on beyond the scope of a single affective encounter, becoming deeply embodied within us. After-affects are not memories, as they need not be rooted in any particular event, nor organized into a linear narrative of the self. One might say that after-affects are distinct from memories in the same way that affect is distinct from qualification. In this chapter, I argue that that after-affects are a useful way to understand the thickness of our entertainment media environment that ties the present to the past and the future. Whereas affect theory risks presenting thin accounts of "becoming" in the present, attending to after-affects shows how emergence is always informed and shaped by the past because the body itself is a dense, multi-layered habitat for all sorts of hidden affinities and sentiments. Furthermore, because the entertainment industry is in the business of mass-producing experiences, this chapter explores the extent to which certain embodied affinities are widely distributed, exceeding the scope of any individual encounter. As present affects give way to lingering after-affects, whole crowds come to share something like a collective history, a history which big publishers are continually seeking to uncover, reactivate, and convert into new value in the present.

As XPG analysts designed tests and questions that might reveal the aftermath of media encounters, they also showed how consumers' after-affects were relativistic, meaning that different accounts of the very same experience might surface depending on what prompt was used, what other salient events had recently occurred in the participant's life, and what

other experiences served as the comparative set. In other words, after-affects did not inhabit a fully rational or objective domain, instead sharing with affect the qualities of multiplicity and nonlinearity. Because XPG's datasets yielded a fixed set of responses, they would always be insufficient to fully capture the nimbus of after-affects surrounding any entertainment property. Consequently, analysts tended to treat the fixed response data they gathered as starting points for publishers—suggesting strategies for publishers that took advantage of the malleability of after-affects to play up positive attributes and dampen negative ones. After-affects themselves were thus subjects of modularization (see Chapter 3), allowing analysts to rank and identify "core" pieces of an entertainment property's identity that might be reliably evoke the same positive associations in future products.

While I adopt XPG analysts' concern with the residue of various encounters between consumers and entertainment properties, my approach leads me in a slightly different direction than theirs. XPG analysts were fixated on the pragmatic task of uncovering affective connections that could be turned into active demands for new products, helping build the viral pathway on the foundation of a given crowd's widely held, strongly felt after-affects. This meant that analysts attended more to certain kinds of after-affects than others. My aim in this chapter is to broaden this perspective, looking at entertainment-media-capitalism as a source for the proliferation of all sorts of after-affects, yielding a pop cultural landscape that is crisscrossed with shared experiences. Furthermore, I argue that this landscape is a fertile terrain for further capitalist work as producers weave affective hooks into their products, attempting to draw and re-draw their crowds again and again. In the first section, I take a close look at how XPG's market research found and targeted crowds-in-waiting by measuring after-affects and testing conditions that might encourage

them to resurface, typically in the early stages of product development. In the next section, I describe how publishers attempted to activate the audiences found in research beyond the limited scope of XPG's studies, using teasers, trailers, and other releases to create an affective atmosphere of viral demand known colloquially as hype. I end the chapter by meditating on the continual production of after-affects by the entertainment industry, which accumulate and layer one on top of the other throughout our lives, yielding a thickly affective landscape that both connects and separates us.

One caveat before continuing. I do not intend to argue that videogames alone are causing deep-seated after-affects, as if people and things interact here in a deterministic fashion. Big videogame companies not only frame their products *as* fantasy experiences, but they also seek to own and iterate on these fantasies repeatedly, a tactic that lines up with decades of Hollywood entertainment capitalism (see Chapter 1). After-affects may thus be considered a byproduct of a cyclical system of capitalist experience-production where the same franchises, characters, worlds, and properties are used again and again. This reliance on iteration trains players to recall prior connections with game-properties, judge them against each other, and consider these connections as reasons to buy the sequel, the reboot, the remake, the spin-off, or the spiritual successor. The affective nature of blockbuster videogames should therefore be considered with respect to the wider cultural milieu of entertainment-media-capitalism; videogames embedded in other social systems may well lead to other ends.

Finding the audience

> Sitting at a desk across from my own at XPG, Claire grumbled quietly and asked me to take a look at the "field report" for an active online survey that her team was

managing. Following her instructions, I opened up the web page hosting the report, clicking a few widgets to bring up the fielding metrics. Even at a glance, I could see Claire's issue: the rate of data gathering was much lower and slower than anticipated. Looking across the last several days of fielding, I saw the number of qualified respondents—called "completes" because they had completed the survey—ticking up by twenty, then ten, and yesterday just two, when the team needed at least 100 completes daily. At this rate, the project's timeline would be shot.

Claire asked me to "dig in" to the data gathered so far and see if I could figure out the issue. As I opened up the file, I was faced with a stark reality: thousands of survey-takers were being dropped before they reached the end of the survey. I could see their responses in tidy rows of figures just up until the moment I couldn't, the rest of the survey data showing as blank after blank. Wedged in between the profusion of blank entries, completes were the proverbial needles in the haystack. I made little progress initially, so I continued to discuss the problem over lunch with Claire. Her response was to remind me that completes were more than just survey-takers: they represented the *audience* the publisher imagined for their product. With that in mind, she outlined two possibilities. First, it was possible that the audience was much smaller than the publisher anticipated—a scenario which meant that nothing was wrong with the survey, and the abysmal rate of completion simply represented the legitimately tiny chance of a consumer being part of the target audience. Claire described this as a "really bad" outcome, because it meant that XPG would soon have to bear the ill news that their client was sorely mistaken in their audience projections. The other possible scenario was that there was a technical or processual error somewhere, meaning that the survey wasn't reliably reaching or recognizing audience members, depressing the rate of completion and making the audience seem smaller than it really was. Claire was hoping for the latter scenario, which she described as "still bad," but fixable.

In the end, the issue turned out to be a programming error: the survey logic had accidentally been set up in such a way that it was dropping a large number of legitimate respondents. With the issue fixed, completes started to flow smoothly once more through the survey, and the project came back on track. Yet from that point on, I could no longer look at XPG's survey data in quite the same way again. Whereas before, I had only considered the final dataset, now I realized that each study produced a ghostly multitude of people whose responses were not recorded, dropped from the survey because they didn't fit the criteria of the publisher's intended audience. Even the loosest gaming study criteria yielded completion rates of around 25 to 40 percent, meaning that most people were left out of the equation, their responses only showing as a series of blanks in a file soon forgotten.

Following the tenets of viral capitalism that I outlined earlier (see Chapter 1), one might expect that big publishers would want everyone to play their games. After all, the ideal viral product is one that spreads widely, without end. However, in practice I found that

publishers who worked with XPG tended to have specific audiences in mind for their games. From the earliest moments of a mass-market game's production, publishers were already hypothesizing, debating, and imagining about the game's future audience. Publishers conveyed their conjectures to firms like XPG in calls for proposals, email chains, conference calls, and face-to-face meetings, allowing analysts to actualize publishers' ideas into specific research questions about the audience. As the game's development continued, early definitions of the audience typically concretized and became taken for granted. This meant that publishers' questions about *who* represented the game's projected audience were gradually replaced by questions about *what* the audience thought, felt, or wanted from the game. Many of XPG's studies focused on the audience's response to game-prototypes; respondents would be confidentially exposed to unannounced game concepts, art assets, early builds, or characters, and asked to give feedback so that the game could be tuned toward their preferences. To the extent that mass-market games were shaped by such studies, they could be said to be made *exclusively for* these projected audiences.

Because future game audiences were defined a priori according to specific criteria, large numbers of survey-takers were routinely excluded from publishers' consideration. Indeed, respondent selectivity was a fundamental pillar of XPG's methodologies. Every data-gathering effort at XPG—whether quantitative or qualitative—began with a "screener," a battery of questions designed to test whether the potential respondent was "qualified" according to the publisher's criteria. These might include factors such as: age, gender, hours of videogames played weekly, videogame devices owned, videogame genres played, specific titles played, brand affinity, and so on. Unqualified respondents were "terminated," a word that aptly captured the finality of the procedure, as well as the silences it created—

by design, those who were terminated could no longer give responses. The remaining "completes" thus represented the publisher's audience, a crowd-in-waiting which could be queried in detail for its opinions and preferences. It was only when procedures of selectivity went overboard, and the crowd shrank into nothingness, that the screening process was reevaluated (as in the vignette above). A low rate of response was normal. This is why several days passed before Claire noticed there was an issue with her survey. And it took a truly abysmal response rate for her to consider negotiating with the publisher to redefine the audience (a step which she dreaded and was glad she didn't have to take in the end). In short, the "voice of the consumer" emerging from XPG's data work did not represent just any generic consumer, but rather stood for a specific slice of the population that publishers hoped would become their future players.

The selectivity of publishers' chosen crowds suggests a key trait of viral capitalism, namely that mass contagion is designed to begin with a relatively limited seed group whose common experiences might make them susceptible to desiring the product. In the ideal scenario for publishers, this seed group of targeted gamers would open up vectors for further contagion as these gamers played, discussed, and shared content about the title, creating a snowball effect where the game eventually gained momentum with the general public. Once a crowd formed, it tended to draw more members to its ranks. This explained why publishers spent so much effort seeking the counsel of projected audiences in consumer studies: they were understood to represent the pivotal decision-makers for whether a future game would become a viral sensation or not. Data indicating that the projected audience were unmoved or dissatisfied with the game-prototype stood as grave warnings to publishers, signifying that either the game had to change, or its chosen crowd

had to change. Projected audiences were thus the proverbial canary in the coal mine for the game's broader success. This is not to say that target crowds-in-waiting represented tiny groups; when XPG sized them up for publishers, they usually counted in the millions. These moderate figures represented a typical tradeoff that publishers faced between expected crowd size and enthusiasm. Publishers hoped to find crowds-in-waiting that were small enough to yield specific, strong desires that could be incorporated into the product, yet big enough to make the product profitable and prestigious once the crowd picked it up.

How were crowds-in-waiting defined? While exact procedures varied across projects that I observed at XPG, they nearly all followed one simple principle: new crowds could be drawn at the intersections of past crowds. As publishers looked for intersecting audiences that were novel, large, and compatible enough to justify big budget investment, they often asked XPG to test mix-and-match style game-prototypes: *Grand Theft Auto* plus competitive eSports; rhythm gameplay mechanics plus *Call of Cthulu*; old-school *Banjo-Kazooie* characters in a new racing game; a survival horror game based on *The Martian (2015)* movie; and so on. All of these are entirely hypothetical concepts—in fact, I chose combinations which would be fairly unlikely—yet they represent the *kinds* of products that publishers were regularly considering. Sometimes, XPG studies were designed to determine the optimal combination from a range of possibilities: if not *Call of Cthulu* plus rhythm mechanics, perhaps *Call of Cthulu* plus shooting, or puzzle, or role-playing mechanics. Other times, the combination was fixed, and XPG's role was merely to determine the size, enthusiasm, and relevant attributes of the crowd-in-waiting. In any case, the critical first step for XPG analysts was to locate individuals with similar prior experiences of relevant entertainment media that were innately linked with the new game-

prototype: whether that linkage derived from familiar game mechanics, familiar characters, familiar settings, or a familiar franchise. Individuals who shared relevant media experiences were assumed to be a collective group with shared desires, associations, and outlooks, meaning they could be aggregated into an addressable audience for the product.

In other words, members of crowds-in-waiting were connected with one another primarily by virtue of sharing similar *after-affects* related to given media products. Because games publishers aimed to trigger existing after-affects with new entertainment offerings, they first had to locate and describe these after-effects among a general population of players, and then filter down to the subset who shared measurably similar after-affects. XPG screeners measured after-affects in two ways. First, screeners measured the *depth* of respondents' after-affects. A sample question of this type might look like:

> Please select the statement that best reflects your engagement with ***The Martian.***
> - I have never heard of it before
> - I have heard of it, but never watched it
> - I have watched it

Follow-up questions might also be devised to gauge how recently the respondent watched the movie, how many times they watched it, whether they watched in theaters or at home, whether they bought the DVD, and so on. More recent, frequent, and sustained engagement were assumed to mean the respondent had deeper after-affects, and thus might be more likely to engage with a related product in the future. Second, screeners measured the *valence* of respondents' after-affects. A sample question of this type might look like:

> Please select the word that best reflects your opinion of ***The Martian***.
> - Terrible
> - Bad
> - Okay
> - Good
> - Great

Follow-up questions might be devised to gauge how the respondent's opinion of the movie compared to other movies, what other words they might use to describe the movie, and so on. Associations with a positive valence were assumed to mean the respondent had favorable after-affects, and thus might be moved to spend on a related product in the future. Once respondents' relevant after-affects had been measured for depth and valence, they could then be grouped accordingly and arranged into different projected audiences (or non-audiences) for the future product. Publishers typically considered those with the deepest, most positive after-affects of related properties to be their "primary audience," while those with shallower or milder after-affects were seen as the "secondary audience." Those with no after-affects, or with negative after-affects, were usually screened out and thus not considered.

Wherever such screener questions were applied, they divided an undifferentiated mass of people into two groups: the audience and the non-audience remainder. The same questions could then be parsed to further define sub-audiences whose after-affects were even more granularly alike in terms of depth and valence. For each game title, movie, genre, franchise, or entertainment property presented to respondents, a unique line could be traced through individuals carrying similar after-affects, showing how complete strangers could be unknowingly connected by their shared media experiences. While these connections remained abstract in the aggregate realm of quantitative data, analysts' reports used catchy graphics to concretize and compare different crowds-in-waiting, making them speak directly to publishers about what the group felt or desired as a whole (see Chapter 2). This sense of pervasive, diffuse, interpersonal connectivity between crowd members was further reinforced in XPG's qualitative studies, where time and again I saw

such connections play out in real time as participants who had been recruited based on the same screening criteria revealed deep commonalities. Focus group waiting rooms were often filled with buzzing conversation as participants chatted and discovered how much they had in common, swapping stories about specific game-related moments, situations, and preferences that they were relatable and mutually recognizable. Several times, participants ended up giving out their gamer tags to each other, translating their implicit experiential connections into an active social one.

In such moments, it was as if the fog lifted and a vast territory was revealed to be crisscrossed with trails and roads stretching across it, linking people from here to there. This was the affective territory in which publishers' viral capitalist strategies played out, as they envisioned their products spreading and generating new after-affects across the populace, forging new contagious pathways that endured and could be measured and exploited in the future. Well-worn pathways could be extended into new arenas, separate pathways could be joined together, and dormant pathways could be retreaded and reactivated. This geographic analogy was only explicit when analysts framed their screener results as representing the consumer "landscape," but it describes well how my interlocutors implicitly understood crowds-in-waiting: a dispersed mass which had moved along shared entertainment pathways in the past, and might do so again. Geography also mattered when audiences crossed national boundaries, as analysts and publishers looked for different lines of connection—different pathways—that might emerge in different regions, calling for regionally tailored strategies (see Chapter 3).

Borne of viral capitalism, consumer crowds only existed to the extent that something was travelling across them, or had travelled across them in the past, or would travel across

them in the future: namely, the entertainment property, i.e. the appealing mass fantasy (see Chapter 1). The full breadth of the crowd was impossible to detect until that crowd was prompted to act and the viral product moved across it—either within the experimental confines of a consumer study, or in the actual world by the product's release. Linked by common after-affects, mass-market entertainment audiences were understood to be dispersed across space in a probabilistic, spidery pattern. Mediated crowds were connected by chains of friends, family, and acquaintances, but they were ultimately fuzzy-edged and filled with gaps because it was easy for an individual to miss having a direct experience of any particular entertainment property. The role of the screener was to identify whether individuals constituted part of the publisher's chosen crowd, but one glance at the data logs it generated was enough to see the wide gaps involved; the gaps literally appeared as rows of blanks between complete strings of data, respectively representing qualified crowd members and the terminated remainder. Of course, such gaps were usually excised by the time that publishers saw the audience's data in the report, so that the crowd appeared as a solid singular group, but nevertheless there was still a general understanding that entertainment crowds were more likely to transgress existing social group boundaries than to fit within them.

To certain readers, it may seem that my analysis of entertainment crowds invites old, debunked models of mediation, the crowd appearing to represent an undifferentiated mass of passive consumers: slack-jawed, uncritical, and basically manipulable by capitalist forces. Indeed, anthropologists have grounded the ethnographic study of media in their rejection of such a caricature. Across an astounding variety of media forms—state

television,[338] "indigenous" video,[339] cassette tapes,[340] local radio,[341] digital news media,[342] social media,[343] and more[344]—anthropologists have shown how people actively deploy, circulate, situate, and interpret media to various ends. According to this approach, so-called media "consumers" are quite capable of turning existing media to new, unanticipated ends, making media channels into live sites of ongoing social struggles over identities, values, and inter-group relations. Similarly, researchers of popular culture have used studies of niche fandoms—"Trekkies,"[345] "Potterheads,"[346] *Twilight* fans,[347] Japanophile "otaku,"[348] and so forth—to show how certain communities actively and creatively engage with mass-media. In the process, fandoms fashion new group identities by appropriating mass-media for themselves, a practice that sometimes puts them at odds with the legal owners of said media properties. More recently, researchers in this field have argued that being a fan is simply a commonplace way of partaking in consumer culture—breaking down the old distinction between the passive "mainstream" consumers and active "fringe" fans by

[338] Abu-Lughod, Lila. 2005. *Dramas of Nationhood: The Politics of Television in Egypt*. Chicago: Chicago University Press.
[339] Turner, Terence. 1992. "Defiant images: the Kayapo approporation of video." *Anthropology Today* 8 (6): 5-16. Michaels, Eric. 1987 [1993]. "For a Cultural Future: Francis Jupurrurla Makes TV at Yuendumu" in *Bad Aboriginal Art*: 98-124. University of Minnesota Press.
[340] Hirschkind, Charles. 2009. *The Ethical Soundscape: Cassette Sermons and Islamic Counterpublics.* New York: Columbia University Press.
[341] Spitulnik, Debra. 1992. "Radio Time Sharing and the Negotiation of Linguistic Pluralism in Zambia." *Pragmatics* 2 (3): 335-354.
[342] Boyer, Dominic. *The Life Informatic: Newsmaking in the digital era.* Ithaca: Cornell University Press.
[343] Miller, Daniel. 2011. *Tales from Facebook.* Polity.
boyd, danah. 2014. *It's Complicated: the social lives of networked teens.* Yale University Press.
[344] Yurchak, Alexei. 2006. "Dead Irony: Necroaesthetics, "Stiob," and the *Anekdot*," in Everything *Was Forever, Until It Was No More: The Last Soviet Generation*: 238-281. Princeton University Press.
[345] Amesley, Cassandra. 1989. "How to watch *Star Trek*." *Cultural Studies* 3 (3): 323-339.
[346] Frankel, Valerie Estelle, Ed. 2019. *Fan Phenomena: Harry Potter*. Intellect Ltd.
[347] Hills, Matt. 2016. "'Twilight' Fans Represented in Commercial Paratexts and Inter-Fandoms: Resisting and Repurposing Negative Fan Stereotypes," *in Genre, Reception, and Adaptation in the 'Twilight' Series*: 129-146. Routledge.
[348] Ito, Mizuko, Daisuke Okabe, and Izumi Tsuji, Eds. 2012. *Fandom unbound: Otaku culture in a connected world.* Yale University Press.

declaring everyone to now be members of the latter category.[349] In this vein, Henry Jenkins, danah boyd, and Mizuko Ito describe the proliferation of "participatory culture" online, where people regularly post, react, share, mod, and creatively produce content in ways that shape their shared social context.[350] Considering such approaches, my insistent focus on diffuse, un-self-conscious, largely inactive crowds might seem retrograde at best.

Yet my goal in this chapter is not to revive the tired divide between the mainstream and the fringe. Indeed, publishers' affect-laden crowds were neither mainstream *nor* fringe; my interlocutors tended to ignore such designations altogether. Crowds-in-waiting *cut across* the mainstream-to-fringe spectrum, with common after-affects describing new groups linked by embodied affinities rather than discrete social activities or identities. Furthermore, while I affirm the importance of studying active media engagement—including creative subversion and redeployment of media—my time with XPG analysts gave me a better appreciation for the subtle, unspoken, embodied levels at which people also engage with mass entertainment media. I argue that this type of engagement is not passive or uncritical, even when it does not rise to the level of conscious reflection or socialization. Instead, I reframe the distinction between inactive and active media engagement as primarily a *temporal* matter rather than a marker of different "types" of consumers. For my interlocutors, studying after-affects meant recognizing that conscious, attentive engagement was merely a short window in any entertainment product's lifespan; audience members' relationship with media products endured long beyond this window in

[349] Sandvoss, Cornel, Jonathan Gray, and C. Lee Harrington. 2017. "Introduction: Why Still Study Fans?" in *Fandom, Second Edition: Identities and Communities in a Mediated World*: 1-28. New York University Press. Jenkins, Henry. 2007. "Afterword: The Future of Fandom," in *Fandom: Identities and Communities in a Mediated World*: 357-364. New York University Press.
[350] Jenkins, Henry, Mizuko It, and danah boyd. 2016. *Participatory Culture in a Networked Era: A Conversation on Youth, Learning, Commerce, and Politics*. Polity.

a latent state, which could be periodically incited back to activity before returning once more to dormancy. It's not that certain entertainment consumers are passive while others are active; it's that audiences as a whole oscillate between inactivity and activity, moving from crowds-in-waiting to activated crowds to crowds-dispersed. The next section follows this temporal sequence by describing the activities of publishers in the lead-up to game launch, showing how they provided their audiences with planned, polished first glimpses of their games in efforts to translate mediated crowds' latent after-affects into active, viral, popular demand for new games.

Activating the audience

Consumers almost never experience a mass-market game completely fresh, without an inkling or expectation of what the game might be like. Thus far, I have discussed how after-affects arise in the aftermath of gameplay experiences, but it is important to note that most players already have impressions of the games they play before they ever press start. In the words of games studies scholar Mia Consalvo, videogames are surrounded by a "paratextual industry"[351] of gaming magazines, guides, videos, websites, reviews, and forums. To this list, researchers have more recently added new paratextual mediums such as digital fanart,[352] Let's Play videos on YouTube,[353] and live streams on sites like Twitch.[354] Such paratexts regularly expose players to gameplay content, footage, expert judgments, and social discourse about noteworthy titles, yielding a dense affective environment that

[351] Consalvo, Mia. 2007. *Cheating: Gaining Advantage in Videogames.* Cambridge: MIT Press.
[352] Finn, Kavita Mudan. 2017. "Conversations in the margins: Fannish paratexts and their premodern roots." *The Journal of Fandom Studies* 5.2: 157-174.
[353] Burwell, Catherine, and Thomas Miller. 2016. "Let's Play: Exploring literacy practices in an emerging videogame paratext." *E-Learning and Digital Media* 13.3-4: 109-125.
[354] Taylor, T.L. 2018. *Watch me Play: Twitch and the Rise of Game Live Streaming*. Princeton University Press.

may shape how players experience gameplay itself. What's more, these paratexts typically precede the release of big-budget titles, circulating anticipatory snippets of game content and attendant takeaways for months or even years before launch. In this environment, certain games are crowned as major, unmissable experiences well in advance of their public consumption and receive outsize attention, whereas others fall out of the conversation altogether. In this section, I focus on the critical pre-launch period, looking at how potential audience members, paratextual authors, and big games publishers work in tandem to create popular demand for upcoming games. When this dynamic is working properly—from the perspective of publishers—everyone is jointly involved in the production of "hype," an emic term in videogaming that denotes an overwhelming, collective sense of excitement and anticipation for a future title, which is only satisfied by finally playing the game on release. Furthermore, I show how publishers anticipate and seek to incite hype by working with data firms like XPG, aiming to predict and optimize the amount of "buzz" they can generate with early game trailers, advertisements, and other feature reveals.

No game epitomizes the collective production of hype better than *No Man's Sky (2016)*. From the moment of its first debut at the Spike Video Game Awards show in 2013,[355] the game started building a following. Its original trailer reportedly "stole the show,"[356] featuring quick glimpses at varied landscapes and promising players a nearly infinite universe to explore with billions of star systems where "EVERY PLANET [IS] UNIQUE."[357]

[355] Polygon Staff. "VGX 2013: All the news from Spike's video game awards." *Polygon.com*: December 7.
[356] Matulef, Jeffrey. 2013. "Hello Games debuts first-person action adventure No Man's Sky." *Eurogamer.net*: December 9.
[357] HelloGamesTube. 2013. "No Man's Sky." *YouTube.com*: December 8.

When developer Hello Games released a new trailer for E3 2014,[358] the game looked gorgeous: brontosaurus-like creatures swayed their necks under a green sky as spaceships passed by, and then the camera entered a ship of its own and blasted seamlessly through the atmosphere and into space, only to touch down seconds later on a totally different planet. A panel of game critics rated it the "Best Original Game" of E3 2014.[359] The following year, voting gamers crowned *No Man's Sky* the "Most Anticipated Game" of 2015 in the Video Game Awards.[360] By this time, Sony had already announced their full backing of the Hello Games title, pledging aid with marketing, giving the game prime position in their E3 2015 lineup, and making it a timed PlayStation 4 exclusive.[361] This deal helped catapult *No Man's Sky (2016)* into the paratextual limelight, at which point the game's creator and spokesperson Sean Murray engaged in a rapid series of interviews to answer questions and show off demos of the game: CNBC,[362] the BBC,[363] Stephen Colbert,[364] The Atlantic,[365] VentureBeat,[366] IGN,[367] Game Informer,[368] Gamespot,[369] Eurogamer,[370] and more. As I performed preliminary fieldwork in the summer of 2016, the hype had gotten so intense on Reddit—and at XPG's office—that a counter-hype backlash movement started,

[358] HelloGamesTube. 2014. "No Man's Sky gameplay E3 2014." *YouTube.com*: June 9.
[359] Amini, Tina. 2014. "Evolve Wins 'Best of Show' At E3 2014." *Kotaku.com*: July 1.
[360] Sarkar, Samit. 2015. "Here are the winners of The Game Awards 2015." *Polygon.com*: December 3.
[361] Makuch, Eddie. 2015. "Sony Treating PS4 No Man's Sky Like a First-Party Game." *Gamespot.com*: May 14.
[362] Kharpal, Arjun. 2016. "'No Man's Sky': Would you play a game that takes 584 billion years to explore?" *CNBC.com*: August 10.
[363] THTDI Inc. 2019. "BBC's Interview With Sean Murray On No Man's Sky – July 2016." *YouTube.com*: April 11.
[364] The Late Show with Stephen Colbert. 2015. "Sean Murray May Have Replaced Morgan Freeman As God." *YouTube.com*: October 3.
[365] Morin, Roc. 2016. "Inside the Artificial Universe That Creates Itself." *The Atlantic*: February 18.
[366] Takahashi, Dean. 2015. "How No Man's Sky creator is using clever tech to build a truly indie game universe." *VentureBeat*: June 21.
[367] IGN. 2015. "No Man's Sky: 18 Minute Gameplay Demo - IGN First." *YouTube.com*: July 6.
[368] Game Informer. 2014. "70 Rapid-Fire Questions About No Man's Sky." *YouTube.com*: December 13.
[369] Crossley, Rob and Alexa Ray Corriea. 2016. "No Man's Sky Interview: 'People Want Crazy, Innovative Games.'" *Gamespot.com*: March 3.
[370] Eurogamer. 2016. "No Man's Sky Interview: Five minutes with Sean Murray." *YouTube.com*: March 6.

with some commenters doomsaying that the release couldn't possibly live up to players' sky-high hopes.[371]

Up to this point, *No Man's Sky (2016)* had traveled along a trajectory that many publishers would consider ideal. Moving from relative obscurity to the height of public attention, the game's launch was set to be a huge spectacle in its own right. Hello Games and Sony had been dripping out gameplay footage, feature descriptions, and other *No Man's Sky* tidbits to paratextual outlets for years. For their part, the paratextual industry was happy to provide ongoing coverage, with several media organizations touting their access to Sean Murray and the details he provided.[372] Whether through trailers, media interviews, forum discussions, or just chatting with friends, more and more potential audience members began forming opinions about the game over time. Audience hype now had its own momentum, with commenters on sites like Reddit compiling information, debating the future of the game, and creating speculative threads about what they hoped it might include or exclude.[373] This dynamic—whereby the potential audience's demands get

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[371] Damise. 2016. Comment in "No Man's Sky is now the #1 top seller on Steam at the moment!" *Reddit.com/r/NoMansSkyTheGame*: July 8. https://redd.it/4ruy6y
HeyKid_HelpComputer. 2016. Comment in "The picture we've all been waiting for. Hello Games has officially completed No Man's Sky." *Reddit.com/r/Gaming*: July 7. https://redd.it/4rr2zm
BiggestManEver. 2016. Comment in "No Man's Sky UK release date pushed up from August 12th to August 10th." *Reddit.com/r/Games*: June 3. https://redd.it/4mcqpu
[372] Game Informer. 2014. "A Behind-The-Scenes Tour Of No Man's Sky's Technology." *YouTube.com*: December 5.
IGN. 2015. "No Man's Sky: 18 Minute Gameplay Demo - IGN First." *YouTube.com*: July 6.
IGN. 2016. "No Man's Sky: 21 Minutes of New Gameplay - IGN First." *YouTube.com*: April 11.
[373] Kyrbi9.2016. "What happenes if you fly in the other direction?" *Reddit.com/r/NoMansSkyTheGame*: February 14. https://redd.it/45pcec
Kmarler58. 2016. "No Man's Sky Journal Entries?" *Reddit.com/r/NoMansSkyTheGame*: March 11. https://redd.it/49yfvc
TheSeaOfThySoul. 2016. "'What do you do in No Man's Sky?' and other questions – Answered." *Reddit.com/r/NoMansSkyTheGame*: April 5. https://redd.it/4didkh
Assassin4571. "I think we're underestimating just how dangerous this game will be." *Reddit.com/r/NoMansSkyTheGame*: May 12. https://redd.it/4j2snf
TrevorxTravesty. 2016. "Cthulu-sized Creatures?" *Reddit.com/r/NoMansSkyTheGame*: July 30. https://redd.it/4vdi4g

ratcheted higher and higher before the climax of the game's release—is not unique to *No Man's Sky (2016)*. In fact, this can be understood as a kind of cyclical ritual that is repeated again and again in mass-market videogaming. A game company releases some new bit of information about an upcoming title, the paratextual industry covers it, the potential audience reacts to it, and then the company releases a new bit of information to start the cycle over again. Hype occurs when the intensity ratchets up with each cycle, creating a spiral of rising enthusiasm, but this outcome is not a forgone conclusion. Sometimes, the potential audience expresses distaste or apathy, or the paratextual industry cannot be persuaded to provide coverage, or the videogame company stops putting out new or interesting information. In such cases, the cycle collapses, the potential audience disperses, and the company's attempts to seed the audience's environment with positivity seems either phony or misaligned. Hype-making requires active investment and participation from all parties. To use a popular phrase from gaming discourse, there comes a critical moment in every mass-market game's life where everyone decides whether they want to board "the hype train"[374] and speed along together to its destination—or to get off and stay put.

When *No Man's Sky (2016)* finally launched in August 2016, the game rapidly flew to the top of the sales charts, leading PlayStation game sales for August in both North America and Europe.[375] Enthusiasm soured quickly once players tried the title themselves: Metacritic users rated the game a pitiful 2.1/10, and only 35% of user reviews on Steam

Sr_Mendoza. 2016. "The [minimal] radius of the Galaxy." *Reddit.com/r/NoMansSkyTheGame*: July 30. https://redd.it/4vdig5

[374] DeLand, Adam. 2013. "Hype Train." *Knowyourmeme.com*.

[375] Kuchera, Ben. "No Man's Sky was a PR disaster wrapped in huge sales." *Polygon.com*: September 16.

were positive.[376] The dam officially burst when two Twitch streamers devised a nearly-impossible plan to meet each other's avatar in a universe of 18 quintillion planets, and miraculously succeeded in arriving at the exact same spot—only to realize that they could neither see each other's avatar nor impact each other in any way.[377] Players soon looked into the source code and found that it did not even contain a completed model of the player-character, meaning that there was no way Hello Games ever intended for the player-character to be visible to others on launch.[378] Reporters described the game's sub-Reddit as in a state of full "meltdown" as players flung accusations of deceit, hubris, and greed at Sean Murray.[379] In past interviews, he had suggested that multiplayer was possible but "incredibly rare" due to the scale of the universe,[380] yet this chance 'meeting' demonstrated that there was actually no multiplayer functionality at all. Tensions ramped up as a popular thread emerged detailing a litany of the "missing" features that Sean Murray had promised.[381] Meme videos garnered millions of views by poking fun at the shoddy in-game experience compared to the first reveal trailers.[382] Players began seeking refunds for their

[376] Rationalcomment. 2016. "On Exploration and No Man's Sky: Why No Man's Sky failed to engage and moving forward." *Reddit.com/r/NoMansSkyTheGame*: September 20.
[377] Frank, Allegra. 2016. "No Man's Sky players travel the exact same planet without ever crossing paths (update)." *Polygon.com*: August 10.
[378] TheGalacticCactus. 2016. "I'm About to Meet Another Player! (Seriously)" *Reddit.com/r/NoMansSkyTheGame*: August 9.
[379] Schreier, Jason. 2016. "*No Man's Sky* Fans Are Having A Meltdown Over Leaked Copies." *Kotaku.com*: August 1.
[380] JeuxVideo.com. 2016. "No man's Sky – Sean Murray talks about Multiplayer – Interview." *YouTube.com*: March 10.
[381] Cymen. 2016. "Where's the No Man's Sky we were sold on? A BIG list of things that are missing with sources, links and quotes. Also, dubious advertisement (x-post from r/nomansskythegame)." *Reddit.com/r/Games*: August 16.
[382] LeiluMultipass. 2016. "No Man's Sky Release Trailer." *YouTube.com*: August 13.
Carda1972. 2016. "No Man's Sky players push for returns outside of Steam and Sony's official policy." *YouTube.com*: August 25.
NeilBeale. "One Man's Lie (Sean Murray Lie Compilation)." *YouTube.com*: August 23.

game copies en masse.[383] In the midst of the backlash, Sean Murray's Twitter feed went radio silent.[384] The active player base had cratered, reportedly reaching as low as an estimated 900 concurrent players on Steam by late September, or just 0.4% of its peak (no public player counts exist for PlayStation 4 titles).[385] Most had simply moved on. Despite the high hopes of those going into the game, a consensus emerged that the experience was a massive disappointment.

For better and for worse, *No Man's Sky (2016)* represents how the affective social environment surrounding a game can become incredibly dense and highly charged, such that it's hard to imagine any experience of the game as truly individual or isolated from it. The spectacular failure of the title's launch also reveals a sneaking suspicion implicit in hype: that collective enthusiasm may eventually turn out to be unfounded. Potential audience members were not unwitting dupes in the hype ritual of *No Man's Sky (2016)*; in the years leading up to release, many expressed skepticism that Hello Games could deliver even as they continued to ratchet up their hopes.[386] Participating in the hype ritual requires one to adopt a kind of "I want to believe"[387] attitude, bracketing suspicions for the purpose of joining the movement, but not banishing them altogether. When highly anticipated titles release to general acclaim, declarations like "the hype is real"[388] suggest that crowd

[383] Kuchera, Ben. 2016. "No Man's Sky players push for returns outside of Steam and Sony's official policy." *Polygon.com*: August 29.
[384] BaRKy1911. 2016. "90 Days of silence from Hello Games about their game. Sean Murray, we've come to bargain." *Reddit.com/r/NoMansSkytheGame*: November 16.
[385] Rasputin1942. "Less than 950 playing right now.. :'(" *Reddit.com/r/NoMansSkytheGame*: September 21.
[386] RyanMacG. 2016. "No Man's Sky Release Date Is June 21." *Reddit.com/r/games*: March 3.
Alkein. 2016. "Spore is the worst thing to happen to NMS." *Reddit.com/r/NoMansSkytheGame*: March 4.
Itsherbirthday. 2016. "Some facts about No Man's Sky." *Reddit.com/r/gaming*: March 23.
[387] Sterling. 2014. "I_want_to_believe_nms.png." *Giantbomb.com*: June 11.
Peckham, Matt. 2014. "Here's Hoping No Man's Sky Isn't the Next Elder Scrolls: Arena." *Time.com*: July 11.
[388] Baka_shinji17. 2017. Comment in "Quick Look: The Legend of Zelda: Breath of the Wild." *Giantbomb*.com: March 2.
Ranton. 2018. "Red Dead Redemption 2 Review - HYPE IS REAL." *YouTube.com*: November 4.

members understand that the hype *could have* been fake. After all, it is no secret that game companies sometimes try to manufacture hype by exaggerating certain features, or by releasing gameplay footage and screen captures that are digitally retouched, carefully orchestrated, or otherwise not representative of the actual game. The paratextual industry has even given a name to these bogus images: "bullshots."[389]

Yet if audience members generally understand that their hype may be unfounded, why was there such outrage when *No Man's Sky (2016)* launched? When read as a social ritual, it becomes clear that players were not upset simply because the game failed to meet their loftiest expectations; this was always an expected potential outcome. Rather, I suggest that players became upset primarily because Sean Murray failed to approach the audience as a collaborator in hype-making, thus violating the norms of the hype ritual itself. The most cynical version of events reads Murray as a conman out to make a quick profit by scamming the audience, meaning that the audience was treated as a mere object to manipulate. The most generous reading—the one Murray himself proposes[390]—portrays him as a naïve fool in way over his head, implying that Murray was altogether ignorant of the audience's role in hype-production. Because publishers are typically quite careful about the information and footage they release, audience members have built up confidence in the hyping process—understanding that features revealed before launch constitute an implicit promise that they will exist in the final game, even if they are not quite as captivating or complex as players initially imagined. Murray's comments frequently went beyond hype-fueled exaggeration and into downright falsehoods, making him an unreliable collaborator

[389] Davenport, James. 2016. "The worst bullshots in PC gaming." *PCGamer.com*: September 30.
Juba, Joe. 2015. "Top 10 Video Game Bullshots." *Gameinformer.com*: June 5.
[390] Robinson, Martin. 2018. "The big Sean Murray interview." *Eurogamer.net*: July 20.

even in the puffed-up domain of hype. Consequently, players were left feeling betrayed. Their efforts to work with Sean Murray and hype up the game to themselves and others had seemingly gone to waste.

While the saga of *No Man's Sky (2016)* aptly portrays the cyclical production of social hype—as well as its potential for implosion when elements of the hype ritual are ignored—most games' trajectories that I observed at XPG were less overtly dramatic. When XPG analysts were consulted in the months leading up to any game's launch, the task was typically to measure and interpret the quiet hype not necessarily reflected in outlets like Reddit, Twitch, or Twitter, but potentially still present in audience members' minds, in their personal social circles, and in their offline environments. This kind of hype might build more slowly, and more intermittently, but publishers still hoped that their efforts were creating positive, enduring demands that audience members would share with others, and that could be activated upon the game's release and translated into sales. Additionally, most established publishers were less focused on hyping up entirely novel audiences, instead beginning with prior audiences and hoping to incite their enthusiasm partly on the strength of their materials and game concept, but also partly resting on the audience's prior attachments to the game franchise, genre, or characters. In practice, this meant that big publishers were more focused on reactivating lingering after-affects, aiming to generate feelings of familiarity alongside freshness. As hype production continued, the new game's trailers, advertisements, and other content snippets created after-affects of their own which layered on top of lingering after-affects from old titles, ideally bringing the crowd to a state of heightened sensitivity and activity when launch arrived.

The main research methodology that big publishers deployed in attempts to cultivate hype was the "asset test," which attempted to predict the crowd-in-waiting's response to unreleased trailers, game descriptions, game package covers, or key art. The basic procedure involved placing materials in front of a curated group of participants who stood in for the game's future audience. By recording participants' responses, XPG analysts hoped to recognize which materials triggered the most positive after-affects, the extent to which these after-affects translated into demands for the product, and whether certain modifications might make these materials even more impactful. In keeping with big publishers' focus on reactivating crowds-dispersed, a typical question asked of respondents was whether these materials "fit" with their former perception of the franchise, brand, or character involved. Fit was important because publishers generally wanted to avoid large disjunctures between the audience's lingering after-affects and the new after-affects generated by pre-release materials, as big gaps created risks of rejection and dissolution of hype. When XPG carried out studies to measure asset performance and fitness, it became a laboratory of hype, creating a controlled test environment for demand-production whose outcomes publishers later tried to replicate (if the test succeeded) or avoid (if the test failed) when their materials went "live" to their potential audiences. XPG's asset tests reveal how publishers envision marketing materials as viral goods in their own right, designed to reliably incite positive after-affects, travel along social networks, and establish hyped relations of demand with consumer crowds.

Considering viral entertainment capitalism as a system that runs on social hype, we arrive at a quite different picture of consumer motivation than that posited by traditional

Western philosophies of desire. Marshall Sahlins[391] traces the Western genealogy of human wants back to Augustine of Hippo and his theological adherents in the Catholic Church who considered humans to be inherently fallible, and our insatiable Earthly desires to be evidence of our sinful nature.[392] Sahlins then shows how this picture of cosmological determinism gradually morphed into biological determinism. Working from Renaissance writers like Lorenzo Valla[393] and Bernardino Telesio,[394] to Enlightenment thinkers like Thomas Hobbes[395] and Adam Smith,[396] and finally to modern scholars like Sigmund Freud[397] and Michel Foucault,[398] Sahlins argues that each posits their own version of a basic thesis: that pleasure-seeking desires stem from our inherent nature, a state of being with which we are continually struggling or surrendering.[399] In another article, David Graeber[400] finesses this argument by extending the genealogy of desire to the philosophies of Georg Hegel[401] and Jacques Lacan[402]—pointing out that desire is understood here as a personal absence, lack, or wanting that can never truly be fulfilled. When applied to economic goods, a coherent philosophy of consumer desire emerges: it is inherent, individual, based on the fundamental deficiencies of our being, and ultimately insatiable. Such an approach often reads consumers as passive victims of their desires, ready to be

[391] Sahlins, Marshall. 1996. "The Sadness of Sweetness: The Native Anthropology of Western Cosmology." *Current Anthropology* 37 (3): 395-428.
[392] Augustine of Hippo. 400 [2002]. *The Confessions of Saint Augustine*. Trans. E. B. Pusey. Project Gutenberg.
[393] Valla, Lorenzo. 1431 [1977]. *On pleasure*. Trans. A. Kent Hieatt and Maristella Lorch. New York: Abaris Books.
[394] Telesio, Barnardino. 1586. *De rerum natura juxta propria principia libri IX*. Horatius Salvianus.
[395] Hobbes, Thomas. 1651 [2009]. *Leviathan*. Project Gutenberg.
[396] Smith, Adam. 1776 [2009]. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Project Gutenberg.
[397] Freud, Sigmund. 1920 [1922]. *Beyond the Pleasure Principle*. Trans. C.J. M. Hubback. London: The International Psycho-analytical Press.
[398] Foucault, Michel. 1980. *Power/knowledge*. Ed. Colin Gordon. New York: Pantheon Books.
[399] Sahlins, Marshall. 1996. "The Sadness of Sweetness: The Native Anthropology of Western Cosmology." *Current Anthropology* 37 (3): 395-428.
[400] Graeber, David. 2011. "Consumption." *Current Anthropology* 52 (4): 489-511.
[401] Hegel, Georg Wilhelm Friedrich. 1807 [1998]. *Phenomenology of spirit*. Trans. A. V. Miller. Oxford: Clarendon.
[402] Lacan, Jacques. 1966 [1977]. *Écrits: a selection.* Trans. Alan Sheridan. New York: Norton.

manipulated by advertising and goods that make impossible promises to satisfy them. What's striking about gaming hype is that it fits almost none of these descriptions. Whereas consumer desire is individual, hype is collective; whereas desire is inherent, hype is purposefully manufactured; whereas desire supposes that consumers are passive, hype requires them to be active; whereas desire is insatiable and interminable, hype has a built-in expiration date (when the game launches). The only similarity between the two is that hype also involves a lack or absence, namely the fact that one does not yet possess the game itself. However, this absence is transposed into active speculation and discussion rather than mere aimless yearning.

The prevalence of hype forces us consider that there may be alternative models of consumer desire that do not fit the traditional Western conception of inherent, individual wants. This recognition itself is not particularly novel; anthropologists have long analyzed apparently economic motivations as emerging from social conditions rather than biology, and as aimed towards social ends rather than hedonistic personal desires.[403] The difference here is that I found major Western corporations themselves recognized such alternatives. Publishers were continually attempting to cultivate an expressly social form of desire in order to sell their games. This meant that a large part of big games publishers' marketing efforts did not go towards traditional advertising goals like convincing consumers that they had some personal deficiency that might be solved by their goods. Instead, publishers endeavored to create a market environment unburdened by the rhetoric of individual

[403] Mauss, Marcel. 1925 [2002]. *The gift*. Routledge.
Polanyi, Karl. 1944 [1957]. *The Great transformation*. Boston: Beacon Press.
Malinowski, Bronislav. 1944. "The Functional Theory," in *A Scientific Theory of Culture and Other Essays*: 147-176. Chapel Hill: University of North Carolina Press.

deficiency and utility, where game experiences could be considered exciting or valuable in their own terms. And unlike the unidirectional model of traditional advertising, hype was considered to be dialectic, a shared spectacle wherein publishers responded to the crowd and the crowd responded to publishers. This dialogue was multilocal, variously occurring in the controlled test scenarios of XPG's studies, in paratextual outlets, and in crowd members' everyday lives. If we are to understand and critique the actions of such companies, we must recognize that they are doing more than simply responding to consumers' wants (as economists tend to think) or else creating these wants wholesale (as anthropologists tend to think)—publishers do both of these things in the course of the hype ritual, but it is the oscillation between the two that really matters. This oscillation enables hype to cycle upwards as the game is gradually revealed, and positive after-affect layers on positive after-affect.

The hype paradigm also envisions a different role for data. Whereas contemporary critiques of corporate data collection tend focus on the insidious potential of individually targeted advertisements, hype-based marketing campaigns use data primarily to measure collective responses to their materials, meaning that data acts as a medium of dialogue and representation (see Chapter 2). This certainly does not mean that hype-making is beyond reproach. In this very section, I have covered some emerging critiques of this process—how publishers may betray or misrecognize their role, how paratextual outlets may be biased towards favorable coverage, and how the crowd's hype may ultimately prove unfounded, among other issues. As hype rituals have become integral to mass-market gaming, some players have chosen to reject them either partially or fully. The effort to be

"spoiler free"[404] is one such example, where hyping is reconsidered as an activity that detracts from one's eventual enjoyment of the game, rather than augmenting it. Another example is so-called "patient gamers,"[405] a self-defined group that criticizes hype as economically illogical. Patient gamers may wait months or years after a game's release before they buy it, counting on the price dropping and the hype dying down, allowing purchase judgments to be made with less influence from marketing materials or social pressure. In any case, such groups may represent the exception that proves the rule, showing how important hype has become for our engagement with entertainment media.

In this section, I have focused on the time leading up to launch, but not every game-making company that worked with XPG devised their strategy solely around this period. As discussed previously (see Chapter 1), many publishers appear to be moving to a service-oriented business model that replaces or supplements serial releases. While I was performing fieldwork, publishers of live service games also sought consumer research from XPG and similar firms, primarily funding "tracking studies" that polled players on a regular schedule to understand how their views, demands, and desires were changing over time. Publishers additionally monitored in-game engagement data—among other metrics—to help guide further development. While pre-launch hype strategies typically attempted to reactivate dormant viral pathways, this cycle was much compressed in the case of live service games. The goal was no longer to activate the crowd once every few years to play and purchase, but to activate them on a daily basis, where each play session represented another opportunity to spend money on the game. In other words, live service business

[404] Arlo. 2017. "Breath of the Wild: The Struggle to Be Spoiler-Free." *YouTube.com*: February 13.
[405] Thielmeyer, Max. 2018. "Patient Gaming Will Save You Time And Money." *Forbes.com*: April 25.

models do not signal the death of videogame hype, but its prolongation beyond the launch date and towards an unknown horizon. Typically, this is accomplished via a relentless schedule of post-release content updates, many of which are teased to players ahead of time in order to generate hype, *as if* they were new game releases. The player base thereby becomes a permanent crowd-in-waiting, always anticipating the next patch, expansion, or content drop. In fact, after the spectacular launch fiasco of *No Man's Sky (2016)*, Hello Games adopted this very strategy. Two years after the game's launch, Sean Murray reached out once more to give several media interviews and tease further substantial content updates to the game.[406] Most notably, the *No Man's Sky (2016)* Next Update added the single feature whose absence landed them in such controversy at launch: multiplayer gameplay.[407] On August 8, 2019, Hello Games dropped the *No Man's Sky* Beyond Update trailer to considerable hype,[408] reprising the original reveal trailer and showing off a bevy of brand-new features that the update would bring.[409] The Beyond Update went live six days later. Rebuking the doom-and-gloom attitude of the launch period, Murray has recently indicated that the game still retains a sizable player base, which he describes as having a "nice vibe" of positivity.[410] The paratextual industry began framing *No Man's Sky* as a turnaround success story.[411] For his part, Sean Murray indicates that he's learned his

[406] Klepek, Patrick and Austin Walker. 2018. "We Spent an Hour Talking to Hello Games About Everything 'No Man's Sky'." *Vice.com*: July 20.
MacDonald, Keza. 2018. "No Man's Sky developer Sean Murray: 'It was as bad as things can get'." *The Guardian*: July 20.
Robinson, Martin. 2018. "The big Sean Murray interview." *Eurogamer.net*: July 20.
Wood, Austin. 2019. "Sean Murray explains why he'd rather update No Man's Sky than make a sequel." *Games Radar*: June 26.
[407] Hello Games. "Release Log." *NoMansSky.com*.
[408] Murray, Sean (@NoMansSky). 2018. Tweet at 2:28 PM, July 18. *Twitter.com*.
[409] HelloGamesTube. 2019. "No Man's Sky BEYOND Launch Trailer." *YouTube.com*: August 8.
[410] Webster, Andrew. 2019. "Hello Games' Sean Murray: 'I think there's positivity around No Man's Sky'." *The Verge*: April 2.
[411] MZK. 2019. "Why YOU Should Play No Man's Sky in 2019." *YouTube.com*: April 21.

lessons: he's listening more to his players, not making promises he can't keep, and purposefully shortening the window between a feature's announcement and its inclusion in the game.[412] In other words, Sean Murray is not retreating from hype altogether, but trying to embrace it responsibly. This appears to be a necessity for mass-market games; whether in the pre-release or post-release period, games companies rely on crowds developing positive after-affects based on the content they release, getting hyped together, and looking forward to a bright and better future.

Conclusion: The affective landscape

Taken as a whole, the entertainment industry is perpetually mass-producing new experiences that layer on top of old ones, yielding a thickly affective social landscape. This insight echoes anthropologist Hortense Powdermaker's framing of Hollywood as the "dream factory,"[413] a mantle which big videogame publishers have picked up, churning out fantastic shared experiences that draw people across the world together, but also create dividing lines and gaps. Most of the time, media-based after-affects are not part of our consciousness, but the ability of simple prompts to evoke them at a moment's notice shows that they persist within us, nevertheless. Master Chief's helmet. The Final Fantasy victory tune. The Sonic ring sound. Skyrim's open vistas. The Batman signal. Thanos' scowling face.

Shepard Gaming. 2019. "NO MAN'S SKY | A GAMING COMEBACK OF THE GENERATION! Why NMS (2019) Has Gone Above & Beyond The Rest!" *YouTube.com*: August 12.
Gameranx. 2019. "No Man's Sky Beyond - Before You Buy." *YouTube.com*: August 15.
Jackson, Gita. 2019. "*No Man's Sky*'s Beyond Update Reveals the Game's Real Potential." *Kotaku.com*: August 21.
Cooper, Daniel. 2019. "'Beyond' delivers the 'No Man's Sky' experience I was waiting for." *Engadget.com*: August 23.
Stuart, Keith. 2019. "No Man's Sky Beyond – a childhood fantasy realised." *The Guardian*: September 12.
[412] Batchelor, James. 2019. "Sean Murray on No Man's Sky: 'I thought we were making a niche game'." *GamesIndustry.biz*: June 26.
[413] Powdermaker, Hortense. 1950. *Hollywood, the dream factory: An anthropologist looks at the movie makers.* Boston: Little, Brown.

All it takes is a few letters, some notes, or an image presented to the relevant audience, and sentiments, thoughts, desires, or recollections begin to surface. XPG's work shows how these after-affects are not simply random or individual, but instead are relatively predictable, widely distributed, and socially shared. After-affects may also change over time, undergoing a subtle alchemy whereby a crowd's associations with a given experience may sour or sweeten, strengthen or fade. Nostalgia is a prime example of an after-affect with a long maturation period, and it should come as no surprise that as the industry and its players age, gaming companies are increasingly catering to nostalgia as a business tactic. The ongoing evolution of after-affects gave data firms like XPG a reason to cultivate long-term relationships with publishers and repeat their study methodologies over time: while the audience might have had *these* after-affects a year ago, who knows what *those* after-affects might be like now, given all the events have intervened between the two?

Following the research performed by XPG—a veritable test lab for after-affects—this chapter has shown how the production of strong lingering sentiments, connections, and associations with videogame properties is not a spontaneous feature of the medium, but an *intended consequence* that publishers actively studied, incited, and managed. Publishers' attempts to control and profit from after-affects were guided partly by data, and partly by internal debates about the company's "vision" for the brand, character, game, or world. In both cases, publishers always looked back in order to look ahead. Publishers premised their work on existing games, franchises, or genres, using these as starting points whose affective strengths might be redeployed in new, related game titles. I have previously discussed how publishers' strategies typically involved a mutational logic of iterating on past products (see Chapter 1), but this chapter clarifies how mutation operates at the

embodied level of after-affects. Such efforts are not unlike what anthropologist Anna Tsing refers to as "salvage accumulation."[414] Tsing uses salvage accumulation to describe how capitalist processes incorporate and extract value from non-capitalist lifeways. The market for matsutake mushrooms is a prime example that Tsing gives of capitalist salvage, detailing how it is conditioned on the peculiar ecology of the forests where such mushrooms grow, as well as the particular social conditions that produce and sustain mushroom pickers, neither of which capitalists control directly.[415] Using this analytic, the videogame industry might be considered a key site of *cultural salvage*, accumulating and incorporating old cultural goods into order to produce new ones. This accumulation may be quite direct, such as when giant publishers like EA, Activision, Disney, and Warner Bros. buy up smaller companies in order to obtain exclusive legal rights to use their intellectual properties. In other cases, accumulation is indirect, such as when publishers remix genre tropes, successful gameplay mechanics, or aesthetics from past titles. Either way, publishers are doing more than just taking inspiration or ideas from prior works; they are taking advantage of the after-affects left by these works and claiming ownership to a piece of them, hoping to hook into the viral pathways that have been blazed by others and activate them once more.

Like the capitalist organizations Tsing describes, big games publishers rely on extracting value from life processes partially outside of their control: the experiences generated by games when they are played, the social activity surrounding games, and the after-affects that endure as players pick up and discard games over time. In other words,

[414] Tsing, Anna. 2015. *The mushroom at the end of the world: on the possibility of life in capitalist ruins.* Princeton University Press.
[415] Ibid.

publishers are experts at salvaging from the process of consumption itself, which remains unruly and uncertain despite their best attempts to manage and control it. Game series are great examples of salvage in action, as crowds-dispersed repeatedly become crowds-in-waiting for the next entry in the series. With each new release, game companies attempt to salvage positive after-affects from the crowd, which judges the game according to how successful this salvage operation has been in staying "true" to the franchise while also "improving" the formula. Anthropological studies of consumption tend to highlight the social dynamics of this process, showing how capitalist goods transform, attain new meanings, and help forge new social relationships once they are purchased by households or communities.[416] While the analytic of salvage does not repudiate this understanding, it does complicate it by showing how companies remain an attentive and active presence long after goods pass into the so-called "social sphere." In other words, attending to salvage allows us to understand consumption not as a terminus for capitalism, but as a productive field for potentially endless cycles of accumulation and value extraction. Especially in the case of the entertainment industry—whose goods are fantastic worlds, characters, and experiences that do not degrade or get used up like material goods—products almost never fully exit the capitalist scene, for they may always be salvaged, reincarnated, and given life once more.

[416] Kopytoff, Igor. 1986. "The cultural biography of things: commoditization as process," in *The Social Life of Things*: 64-91. Ed. Arjun Appadurai. Cambridge University Press.
Belk, Russell. 1988. "Possessions and the extended self." *Journal of consumer research* 15 (2): 139-168.
Douglas, Mary and Baron Isherwood, Eds. 1996. *The World of Goods: Towards an Anthropology of Consumption*. Psychology Press.
Carrier, James. 1997. *Meanings of the market: the free market in Western culture*. Berg Publishers.
Miller, Daniel. 2002. *Consumption and its consequences*. Malden: Polity.

The salvage strategy is not limited to the repurposing of game experiences. Many big-budget games salvage characters, stories, or branding from other entertainment media, including popular films, comics, television shows, and books. More broadly, whenever a publisher makes a game featuring pirates, or ninjas, or zombies, or the military, or the American Revolution, or a Tolkienesque fantasy world, or people with super powers, or outer space, they are extracting value from affective pathways that have been tread and retread in popular culture for decades. These pathways are so frequently used that they have become part and parcel of popular culture, unmoored from any particular instantiation, product, or copyright, and thus able to be redeployed by anyone without the need for expensive licensing agreements. Most big-budget videogames hook up with at least one or two broad viral pathways. *Far Cry 5 (2018)* taps into the public's fascination with rural American cults, *Battlefield 1 (2016)* reprises the history of World War I, *NBA 2K19 (2019)* uses the likenesses of professional basketball players, *God of War (2018)* mixes Norse mythology with Greek mythology, and so on. These titles also happen to represent new installments in ongoing franchises, so they additionally salvage liberally from their direct predecessors. In time, these games will themselves become (are already becoming) salvage material for future titles. As the resultant mediated crowds layer on top of each other, each branching out in a slightly different way, more and more people will have shared an experience of what *Far Cry*, or *Battlefield*, or *NBA 2K*, or *God of War* is, creating a diffuse but enduring social group without the need for active socialization, a group identity, or even conscious acknowledgement by its members. I end this chapter by meditating on two recent salvage operations in videogames, which show how salvage work can both deepen and broaden existing after-affects held by consumer crowds.

Spider-Man (2018) is a videogame that makes you "feel like Spider-Man."[417] This phrase was repeated again[418] and again[419] by reviewers[420] when the hit title released in September 2018, and for many this feeling was what drove the game to receive widespread acclaim and quickly become a top-selling title of the year.[421] Such phrasing echoes the language surrounding earlier superhero games like the *Batman Arkham* series, for which the claim that the series makes "you really feel like Batman" was repeated so often that it became a bit of a running joke.[422] The widely shared acknowledgement that one could "feel like" Batman, Spider-Man, or any other superhero speaks to the dense layers of embodied after-affects that undergird these modern mythic figures—from comics to television to multiple movie iterations to merchandise, theme parks, and more. By some counts, *Spider-Man (2018)* is the thirty-fourth videogame to feature the web-slinging hero's name in its title,[423] and of course there are many more that include Spider-Man as a playable character. Spider-Man's viral pathway has been scored deep by repeated use, each time presenting a slightly different version of the hero, drawing together a slightly different crowd. A number of questions immediately arise: Which Spider-Man does the game make you feel like? How do you know if you are really feeling like Spider-Man when there are so many versions to choose between? The creative director of the game, Bryan Intihar, divulged some of his strategy in an E3 interview: "We don't want to go so far left-field that you can't understand

[417] Leslie, Matt. 2018. "They made that one videogame again but this time it's called Spider-Man." *Medium.com*: September 16.
[418] Dornbush, Jonathon. 2018. "Marvel's Spider-Man PS4 Review." *IGN.com*: September 4.
[419] Williams, Mike. 2019. "Marvel's Spider-Man Review." *USGamer.net*: January 16.
[420] Minotti, Mike. 2018. "Marvel's Spider-Man review — Spidey's best game yet." *VentureBeat.com*: September 4.
[421] Grubb, Jeff. 2019. "NPD 2018: The 20 best-selling games of the year." *VentureBeat.com*: January 22.
Game Maker's Toolkit. "Does Spidey's Web-Swinging 'Make You Feel Like Spider-Man'? | Game Maker's Toolkit." *YouTube.com*: October 3.
[422] Videogamedunkey. 2017. "Game Critics." *YouTube.com*: July 8.
[423] "Spider-man in video games." 2019. *Wikipedia*: October 3.

who the character is. But at the same time, it's something a little different that you haven't seen."[424] Intihar pointed to this philosophy as evident in their redesign of classic Spider-Man villain Electro, replacing his hokey, star-shaped lightning mask with a subtly star-shaped facial scar.[425] With this example, Intihar outlines the studio's salvage-based approach, whereby *Spider-Man (2018)* becomes realizable as a pastiche of familiar elements from the past that might trigger fond recognition but are refreshed to keep the game new and exciting. Along these lines, in other interviews Intihar relates how the studio purposefully chose not to place the game in any existing Spider-Man storyline, instead creating an original story that borrowed aesthetics from recent movies but revised certain character choices and plot points.[426] *Spider-Man (2018)* thus reveals how Spider-Man is no longer just a character, or a set of powers, or a storyline; it is a field of latent after-affects that can be picked over and pieced together in endless combinations—the "feeling" of Spider-Man. Like any affective constellation, this feeling is elusive, ambiguous, and potentially even logically contradictory on deeper reflection, but it also seems self-evident to those who play the game. Perhaps this is because different aspects of the game evoke the feeling of Spider-Man for different people, but that is the power of successful cultural salvage: finding a way to bring together manifold life experiences and reactivate them across social networks, forging them into a fresh, enjoyable, and ultimately valuable new product.

[424] Frederiksen, Eric. 2018. "Interview: Spider-Man will be fresh, fun and accessible on PS4 this fall." *Technobuffalo.com*: June 22.
[425] Ibid.
[426] Douglas, Brad. 2018. "Podcast #526 PS4 Spider-Man Insomniac Creative Director Bryan Intihar Interview." *Spidermancrawlspace.com*: November 4.

While *Spider-Man (2018)* treads a specific, well-worn viral pathway, *League of Legends (2009)* represents a more wide-ranging approach to salvage, whereby practically any common cultural good could be incorporated into source material for the game. The main vehicle for salvage in *League of Legends (2009)* is "skins," cosmetic overhauls of playable characters that are individually purchasable in the game's store. While retaining the requisite distance to be considered legally distinct, most champion skins indirectly reference other entertainment media, themes, and genres from popular culture. For example, consider the following skins for the champion Kog'Maw, an insect-like alien creature from the abyssal Void who spews acid at foes: Jurassic Kog'Maw reimagines him as a skeletal T-Rex escaping from a museum; Lion Dance Kog'Maw dresses him up as a festive Chinese lion belching fireworks; Reindeer Kog'Maw adorns him in a bright red nose and antlers; Deep Sea Kog'Maw gives him an angler fish's lure and toothy maw; and Pug'Maw turns him into an adorable slobbery dog.[427] With each skin, the champion is playfully reimagined in a kind of alternate universe from League of Legend's original lore, but these universes tend to be familiar ones that have been successfully presented many times before in other media. In a 2018 interview with Skins and Events Product Manager Anna Donlon, she relates that her team looks for things like: "What thematic is really hot in pop culture right now that we should be paying attention to? What movies do our players watch?"[428] Donlon here describes a salvage-based approach to skins, which involves tapping into extrinsic viral pathways while they are still "hot,"[429] encouraging players to

[427] "Kog'Maw/Skins." 2019 *LeagueofLegends.Fandom.com*: September 28.
[428] Gafford, Travis. 2018. "Anna Donlon: Head of Skins and Events for League of Legends | Play Makers Episode 7." *YouTube.com*: August 30.
[429] Ibid.

link these positive associations directly with *League of Legends (2009)* characters. Practically any prior cultural good could be incorporated into the game, as long as it evokes a positive after-affect shared by enough members of the player base and can be feasibly related to an existing champion.

The skins store of *League of Legends (2009)* thus offers a succinct image of life in the viral society: a shifting landscape of shared affinities that surround, connect, and divide us, resurfacing across entertainment mediums as companies cash in on fashionable themes and topics. This living landscape redefines the very relationship between supply and demand—not as an abstract, mechanical equation, but as a situated dynamic that unfolds over long stretches of time as particular goods, people, and companies shape one another. Therefore, viral salvage capitalism is not just about selling things that people want, but about selling things that people will recognize, take up, absorb, share, and be moved by. Because this process alternately involves appropriating hot pathways and reactivating cold pathways, viral capitalism yields dynamic ebbs and flows in the experiential milieu that not only define trends in the entertainment market, but represent common affective tracks along which we live our lives, creating conditions for mutual recognition, discussion, fellow feeling, and relation. The narrative of popular demand reveals a final wrinkle: giving the people what they want means recognizing a common world built in tandem by companies and consumers, and then proposing to reform a piece of that world together, again, and again, and again.